



67th National Annual Conference of
INDIAN PUBLIC HEALTH ASSOCIATION

PRE CONFERENCE WORKSHOP

6th April 2023

CONFERENCE

7th – 9th April, 2023

Biswa Bangla Convention Centre, Kolkata

Hosted by

IPHA West Bengal State Branch



SOUVENIR



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67th Annual National Conference of Indian Public Health Association

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67th Annual National Conference of Indian Public Health Association

Press Secretary
to the Governor of West Bengal



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dt. 31/3/23

MESSAGE

His Excellency the Governor of West Bengal is delighted to learn that Indian Public Health Association (IPHA), Calcutta is going to bring out a Souvenir on the occasion of 67th National Conference.

He appreciates the initiatives taken by the Association for the wellbeing of the people of the society.

The Hon'ble Governor of West Bengal extends his good wishes to all the members of Indian Public Health Association (IPHA).


(Sekhar Banerjee)

DR. Surajit Ghosh
Organising Chairperson
IPHACON2023



67th Annual National Conference of Indian Public Health Association

THE WEST BENGAL UNIVERSITY OF HEALTH SCIENCES



Prof. (Dr.) Suhrita Paul
Vice-Chancellor

Memo No. Message/PA-VC/WBUHS/2022-2023/0050

Date : 28/03/2023



Message

It is my great pleasure to note that 67th National Conference of India Public Health Association (IPHA) will be held from 7th April to 9th April 2023 at Biswa Bangla Convention Centre, Newtown, Kolkata.

I admire the efforts made by members and patron of the committee in organising this memorable event.

I am happy to know that a souvenir will be published to commemorate this auspicious occasion.

I extend my warmest wishes for a grand success of the event.

S Paul
28/3/23
Prof. (Dr.) Suhrita Paul
Vice Chancellor

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67th Annual National Conference of Indian Public Health Association

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Director of Medical Education
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Ref. No. DME/Spl. Convns./2023/68

Date 31/03/2023

MESSAGE

I am very glad to know that the West Bengal State Branch of Indian Public Health Association is going to organize their 67th National Conference from 7th April to 9th April, 2023 (with Pre-Conference Workshop on 6th April, 2023) at Biswa Bangla Convention Centre, Newtown, Kolkata. I am also happy to note that to commemorate the grand event they are going to publish a souvenir.

Indian Public Health Association is the oldest and largest organization of medical doctors as well as public health personnel working for the cause of Public Health in India. The Association is best known for its time-honored glorious services towards enriching the professional welfare of its members as well as public at large. The main focus of the Conference is to promote the highest professional and ethical standards of constantly advancing medical sciences. Eminent doctors and public health personnel from premier National Institutes would come up with their new ideas, concepts and executions and thus to create a platform for the education and training of medical students to a level of specialization and maintain continuing professional development.

I hope the Conference will provide a forum to exchange thoughts, ideas, views of experiences & recent awareness among the participants. This conference would provide ample opportunities to the members of the Association to keep up their unity as well as their socio-medico commitment. I express my heartiest congratulations and best wishes to all the participants in this Conference and wish it a grand success.

Dr 31/03/2023
Prof. (DR) Debasis Bhattacharyya

To
Dr. Sanjib Bandyopadhyay
Organising Secretary
IPHACON 2023



67th Annual National Conference of Indian Public Health Association



Message from President, IPHA WB State Branch

We express our sincere thanks to IPHA HQ for giving us the opportunity to organize such a mega event at Biswa Bangla Convention Centre. Hope you all enjoy the entire events both cultural and academic fest will great pleasure. Kolkata is the birth place of IPHA. It is also a great moment for us that after long years West Bengal has got the opportunity to have a President from this state and that to a lady national president Dr. Sanghamitra Ghosh. The pan India structure of IPHA will take the organization miles ahead for the greater interest of sufficient humanity and remarkable advancement in Public Health.

Again I welcome you all in this IPHACON 2023. Long live IPHA, Jai Hind.

Dr. Surajit Ghosh
President, IPHA WB State Branch
& Organising Chairperson, IPHACON 2023



67th Annual National Conference of Indian Public Health Association



Presidential speech delivered by Dr Sanghamitra Ghosh, President IPHA

His excellency, The Governor of West Bengal Dr C V Anand Bose
Honorable Guest Dr Debashish Bhattacharya, Director Medical education
Dr Surjit Ghosh, Organizing chairperson
Dr Sanjib Bandyopadhyay, organizing Secretary
Dr Kaushik Mitra, Secretary General, IPHA
Dr Sanjay Rai, Immediate past President IPHA

All the dignitaries Off the dais and my beloved member and respected seniors
it is my pleasure to welcome you to the 67th IPHACON 2023, the Annual National Conference of Indian Public Health Association. This year we are proud to host this conference at Biswa Bangla Conference, Kolkata. I on behalf of IPHA family is convey our sincere thanks to His excellency for consenting to be the chief Guest of this Inauguration Programme.

On this auspicious occasion, it will be unfair not to say a few words about the professional society about which its is all about, yes, Indian Public Health Association. If you look at the birth of the Association, this was intricately linked to the first attempts to institutionalize Public Health in India, with the setting up of All India Institute of Hygiene and Public Health in Kolkata. Though there were rough times but this association, after going through some hurdles was finally born in 1956.

The landmark event in Public Health movement in India was probably the report by Sir Joseph Bore, on Health, for the first time, considered for all the citizens, irrespective of their color, creed and caste. Not surprisingly, India, though has passed around 70 years of Independence, still considers the mission for Health for All as a topmost priority for its Citizens. The recent Universal Health Coverage agenda is only a continuation of that motto, which has been embraced by the Government of India. The primary tool for the UHC is National Health Mission and the ambitious Ayushman Bharat program, which envisages to complete the vision shown by our predecessors in harmony with the Sustainable Development Goals.

You may ask me what the exact position of our Association in this movement is. I would answer by saying that this association is poised to take the center stage in this movement, with its experience, wisdom, capabilities. As India is marching towards the “Holy Grail” of a developed nation soon in its future, we will



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increasingly need Public Health Practitioners to collaborate, network, generate evidence and build capacities to deliver the outcomes. We will require huge number of professionals from interdisciplinary fields like Medicine, Nursing, Management, Social Sciences, Biostatistics, to all come under a common umbrella, not as a shelter but as a platform to shake hands together. The free flow of ideas, free exchange of innovations, will create the ideal A La Carte where the white hairs of wisdom will meet the exuberance of youth. And IPHA can provide one of the main drivers of this diffusion as it has always done. Lead by a mix of professionals from all over India, of various technical expertise, IPHA promises to poise itself as a facilitator of the process.

While looking back, it feels satisfying remembering about the numerous capacity building activities it has done over the last few years like workshops on new age topics like Health Economics, GIS in Public Health, Qualitative Research methods. It has done symposiums on topics like Occupational health, World Population day, Neglected Tropical Diseases and many more. It has served marginal populations in slums, truck drivers who are at high risk of contracting HIV, orphanages. It has collaborated with numerous government and non-government agencies for the same. And it has done all these with inclusive efforts from experts from all over India. Now the time is ripe to upscale these activities to different parts of India. What we lacked was a funded research project, for which we have the infrastructure. We shall be happy if members come forward with proposals of collaborative activities with us like research projects, capacity building, care provision, and we also expect to tap grant agencies to help us.

It would not be just if we did not mention a few words about our governance, which has walked from its infancy to maturity over the last few years. With Digitization of processes, in accordance with the agenda of the Government of India. Things have become Swach/ transparent and accountable, including voting, membership registration, registering for capacity building activities.

Congratulations to the Conference organizers for arranging such a beautiful conference at this state of art venue with excellent scientific programme.

Thus the past has been glorious and the future is exciting for IPHA, where we want to play a pivotal role in the change management. We again ask all of you to actively get involved with IPHA, irrespective of their backgrounds, as IPHA believes in inclusion, provided you are a stakeholder in Public Health. With active support from the government we wish to make our dreams a reality for the country and for the association as they are anyway interlinked. We wish to end with the words, “Swach Bharat hi Susthya Bharat Hain” which we embrace as our motto.

Thank you

Long live IPHA

Dr. Sanghamitra Ghosh
President (Elect)
Indian Public Health Association



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Message from Secretary General, IPHA

Dear esteemed members of the Indian Public Health Association,

On behalf of the Indian Public Health Association, it is my utmost pleasure to extend a warm welcome to all of you for our 67th annual Conference, which will be held from 7th to 9th April 2023 at the prestigious Biswa Bangla Convention Centre in the vibrant city of Kolkata.

This year, our conference revolves around the theme "Building a Better Community: A Public Health Commitment." We aim to bring together experts, professionals, researchers, and policymakers from various disciplines to collectively contribute towards creating healthier communities and addressing the pressing challenges faced by our society.

We are delighted to highlight that your esteemed presence and active participation are highly regarded, as you have been entrusted with the important role of Treasurer for this conference. Your expertise and dedication to the field of public health will undoubtedly enrich our discussions and contribute to the success of this grand event.

Throughout the conference, we will have an exciting lineup of keynote speeches, panel discussions, workshops, and poster presentations focused on the most pertinent issues in the field of public health. This platform will provide ample opportunities for networking, knowledge exchange, and collaboration, fostering a spirit of synergy among all attendees.

Moreover, as our conference will take place in the culturally rich city of Kolkata, you will have the opportunity to immerse yourself in its vibrant heritage, art, cuisine, and architecture. We hope that your stay in Kolkata will not only be educationally enriching but also culturally rewarding.

Once again, I extend my heartfelt welcome to you all. We look forward to your active engagement and contribution, as together we work towards building a better community and fulfilling our public health commitments.

Best wishes for a productive and memorable conference!

Warm regards,

Dr. Kaushik Mitra
Central Council Member (IPHA)
Secretary General (Elect), Indian Public Health Association



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Message from Organising Secretary, IPHACON 2023

His Excellency, Hon'ble Governor of WB, Dr. CV Ananda Bose, the chief guest and mangatator of this inagural ceremony, our guest of honour Prof. (Dr.) Debasish Bhattacharya, Director of Medical Education, WB, Prof. (Dr.) Sanjay Rai, Past President, IPHA, Dr. Sanghamitra Ghosh, newly elected Presedent; Dr. Kaushik Mitra, newly elected Secretary General; Dr. Surajit Ghosh, Organising President of the conference, respected Office Bearers, Members of IPHA, our most valued invited guests.

Ladies and gentleman,

A very good evening to all. As William Arthur Ward once said "Feeling gratitude and not expressing it is like wrapping a present and not giving it". So I deem it a great honour and privilege to be asked to extend vote of thanks on this historic occasion.

This day will be remembered as a milestone in the history of IPHA as it is amongst the very few occasions, if any at all, when the Hon'ble Governor of any state of this great country has graced this important event. The very presence of Hon'ble Governor in today's programme inspite of his extremely busy schedule is a reflection of the importance that is attached to his commitment to avality argumentation of public health of this country.

Your excellency, indeed, your words have inspired us a lot.

I, on behalf of our entire organising committee, extend to your Excellency a very heartfelt vote of thanks for grocing the function and sharing with this august gathering your uniaus vision for our country.

I would like to take this opportunity to express our sinciere thanks to our beloved DME Sir for his gracious presence in this function. You offered your deep and unique insights revealed certain interesting facts. We are extremely thankful to Prof. (Dr.) Sanjay Rai, Dr. Surajit Ghosh for their unstinted support and guidance. Next, I would like to thank the torch bearer of this very own, Dr. Sanghamitra Ghosh, who has been our leader, our friend and our guidup light for the last 6 years and hopefully long in future too.

I also wish to express my gratitude to Dr. Kaushik Mitra for his minute to minute guidance and support and for providing encouragement at every point of time in this great event.

We are very much thanks to all our patrons, Vice Presidents, Joint Secretaries, Chairpersons and co-chairs, conveners and members of different sub-committees for their continuous encouragement and valuable inputs.

Conducting this event would have been impossible without the zealous efforts of our Office Assistants, Event Managers, Web Developers, AV Managers who have devoted a lot of time and energy for this conference.



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I would also like to express our sincere thanks to all the media persons for giving excellent coverage to this conference.

But above all, I take this opportunity to extend our most sincere thanks to all our esteemed delegates who have come over here from different corners of this country. Your support and solidarity have made this event a truly memorable one.

An event of this dimension can not happen overnight. The wheel started rolling months in advance. It remains multicolours planning and execution and an eye for details. I have been fortunate enough to be backed by a team of very motivated and dedicated colleagues who know their job and result oriented. But before I conclude, I must thank everyone for the involvement they have shown and the willingness they have expressed to take on the completion of the task beyond their comfort zone. Thank you very much all.

Long live IPHA. Jai Hind. Thank you.

Dr. Sanjib Bandypadhyay
Secretary, IPHA WB State Branch
Central Council Member, IPHA
Organising Secretary, IPHACON 2023



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About IPHA

Indian Public Health Association, established in the year of 1956, is a dedicated organization having the goals like promotion and advancement of public health and allied sciences in India, protection and promotion of health of the people of the country, and promotion of co-operation and fellowship among the members of the association. Since its inception, the headquarters of the association has been placed at the All India Institute Of Hygiene And Public Health, Kolkata.

It is also one of the founder-member country association of World Federation Public Health Associations. IPHA always encourages and invites the discussion on recent public health related issues to modify existing program and to help in policy making.

About Biswa Bangla Convention Centre

Biswa Bangla Convention Centre is a convention centre in New Town, West Bengal, India. It was built by West Bengal Housing Infrastructure Development Corporation (HIDCO) and opened in the year 2017. It was built to attract meetings, incentives, conferences and exhibitions (MICE) tourism in the city. The convention centre is spread over a 40,470 square metres (435,600 sq ft) area, with total built up area of 56,932 square metres (612,810 sq ft) which includes parking spaces, roads and service areas.





67th Annual National Conference of Indian Public Health Association

Organizing Committee



Dr. Surajit Ghosh
Org Chairperson



Dr. Sanghamitra Ghosh
Chief Advisor



Dr. Dipika Sur
Vice Chairperson



Dr. Mausumi Basu
Vice Chairperson



Dr. Sanjib Bandyopadhyar
Org Secretary



Dr. Kaushik Mitra
Org. Treasurer



Dr. Somnath Naskar
Joint Org. Secretary



Dr. Rivu Basu
Joint Org. Secretary



Dr. Ayan Ghosh
Joint Org. Secretary



Dr. Anirban Dalui
Joint Org. Secretary



67th Annual National Conference of Indian Public Health Association

Organizing Committee

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Dr. Rajesh Kumar
Dr. Subhash Dodwad
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Dr. T S R Sai
Dr. Thomas Mathews
Dr. Zile Singh
Dr. Sanjay P Zodpey
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Dr. K. K. Dutta
Dr. Sanjeev Kumar
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Dr. D H Ashwath Narayana
Dr. Shashi Kant
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67th Annual National Conference of Indian Public Health Association

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Ms. Manisha Ghosh
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Dr. Sinjita Dutta
Dr. Alapan Bandyopadhyay
Dr. Nairita Dalui
Dr Adwitiya Das
Lt Col Vandana Vats Jha

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Co-chairpersons

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Dr. Dipankar Maji

Convener

Dr. Md Samsuzzaman

Members

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Dr. Pramitasri Bhattacharyya
Dr. Partha Dey
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Dr. Indranil Das
Dr. Azharuddin Mollah



67th Annual National Conference of Indian Public Health Association

Pre-conference Workshops

67th Annual National Conference of Indian Public Health Association
Blaise Mangla Convention Centre, Kolkata
Hosted By IPHA WB Chapter
7th to 9th April, 2023
Pre-conference workshop - 6th April 2023

AETCOM TEACHING MADE EASY

Hurry!! Limited seats

At the end of the session, a participant shall be able to:

- Explain the concept of AETCOM module.
- Enumerate the modules in each phase of MBBS.
- Prepare a lesson plan for AETCOM module.
- Describe various TL methods for AETCOM sessions.
- Discuss on assessment of AETCOM activities.
- Plan and design a logbook for documentation of AETCOM activities.

Highlights
Interactive
Case studies
Videos & Movie clips
Assessment hands-on
Participatory techniques
Relevant resources list
Group activities
Networking
Open house

Convener
DR ANIMESH JAIN
Professor
Community Medicine
Kasturba Medical College, Mangalore

DR KAVITA VASUDEVAN
Professor & HOD
Community Medicine
IGMC & RL, Pudukcherry

#CBME Q&A #AETCOM

Thursday, 6th April 2023, 1.30 to 5 PM
Registration
https://iphacon23kolkata.com/reg_preconf.php

established healthcare institution known for its contributions to public health. The response to the workshops was overwhelmingly positive, with attendees expressing their satisfaction and appreciation for the content and delivery. Such positive feedback is a testament to the organizers' efforts in curating relevant and insightful workshops that catered to the needs and interests of the participants.

The success of these pre-conference workshops indicates the potential for a fruitful and engaging main conference at IPHACON 2023. Attendees can look forward to further discussions, keynote lectures, presentations,

IPHACON 2023 successfully conducted **five pre-conference workshops** on April 6th. These workshops were led by renowned public health professionals from various parts of the country.

The pre-conference workshops aimed to address contemporary topics related to modern public health technology and services. This indicates the organizers' commitment to stay updated with the latest developments in the field and provide valuable insights to the attendees.

The workshops took place in **Belegkata ID Hospital**, located in Kolkata. This choice of venue further reflects the significance of the event, as Belegkata ID Hospital is a well-

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GIS and Remote Sensing Applications in Public Health (Basic)

Pre-Conference Workshop:

This course has been designed for public health researchers and related fields to get an idea on geospatial technologies in public health. Participants will learn how to create GIS data, how to find and use data available in the public domain and satellite imageries, how to design an effective map, and how to filter data and analyze spatial relationships. Participants will be encouraged to take-up "mini projects" of their interest in hands-on-practice.

By the end of this course, learners will gain the knowledge and skills to:

- Familiar with GIS-Remote Sensing tools, and Software
- Creation of Base Maps, Shape files
- Data Discovery and Project Building
- Data Acquisition, Integration of public health data: NFHS, LASI, etc. with GIS
- Spatial Analysis (LISA, Hotspot identification, etc.)
- Report and present the results of a spatial-analysis.

*QGIS, GeoDA and R will be used for the working exercises. Exercises can also be completed in ARCGIS (on request).

Course Convener:

DR BIJAYA KUMAR PADHI
Assistant Professor
Dept. of Community Medicine
& SPH, PGIMER, Chandigarh

Post-Conference Support:

Three evening sessions will be organized through Googlemeet to clarify any doubts and hand-holding for completion of participant's project.

Contact bkpadhi@gmail.com +91-8763766300





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and networking opportunities during the main event.

It is an exciting prospect for those involved in the field of public health as they can expand their knowledge, exchange ideas, and collaborate with like-minded professionals.

Annual National Conference of INDIAN PUBLIC HEALTH ASSOCIATION
Organized by IPHA West Bengal State Branch
7-9 April 2023

Pre-conference CME: One day workshop (06 Apr 2023)
Regression Analysis including checking of assumptions using "R"
Website: https://phacon23kolkata.com/reg_preconf.php

KEY HIGHLIGHTS OF THE WORKSHOP

- ❖ The basics of regression analysis.
- ❖ Checking for model assumptions
- ❖ Hands on sessions using R and RStudio:
- ✓ Simple and multiple linear regression models
- ✓ Generalized linear models (GLMs)
- ✓ Generalized Additive Models (GAMs)
- ✓ Spatial Regression Models (SRMs)

RESOURCE PERSONS

 Col (Dr.) Anil K Yadav Professor, Armed Forces Medical Services anilyadav1978@gmail.com	 Wg Cdr (Dr.) Gurpreet Singh Assistant Professor, Armed Forces Medical Services drgurpreet.nig@afmc@gmail.com	 Dr. Arun Mitra Reddibetty Research Scholar (DST Fellow), SCTMGT, Tiruvandur dcarumitra@gmail.com
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Limited seats available!!

PHACON 2023
KOLKATA
APRIL 06-09
Building a better community, a public health commitment

PLAGIARISM AND USE OF REFERENCE CITATION MANAGERS

Workshop aims to sensitize the participants on 'Issues related to Plagiarism' and how the power of reference manager can be used in their research activities.

Who Should Attend?
Postgraduates and Young Researchers

Facilitators

- Dr. Varun Vijay Galki
- Dr. Archisman Mohapatra

Co-Facilitators

- Dr. Ritika Mukherjee
- Dr. Divita Sharma
- Dr., Priyanka Pawar

Preconference workshop
Plagiarism and Use of Reference Citation Managers

Visit to register

6th April 2023
9.00 am to 5.00 pm
For more details visit <https://phacon23kolkata.com>

PHACON 2023
KOLKATA
APRIL 06-09
Building a better community, a public health commitment

67th Annual National Conference of INDIAN PUBLIC HEALTH ASSOCIATION
Organized by IPHA West Bengal State Branch
7th-9th April 2023

The Preconference Workshop on 6th April, 2023
Website: <https://phacon23kolkata.com/> Email: iphacon2023@gmail.com

Workshop on EFFECTIVE COMMUNITY ENGAGEMENT: What? Why? When? and How?

What are you waiting for? The conference has been designed to provide an opportunity to public health workers to attend to public health workers to understand the importance of "what, why, when, and how" of community engagement in setting up effective, evidence-based and collaborative approach to the public health.

KEY HIGHLIGHTS OF THE WORKSHOP:

- Concept of Community engagement, community needs assessment & Principles of Community engagement.
- Assessment of Community participation and Hands on exercise on assessing community participation
- Skills required for effective community engagement
- Open forum: videos/case studies with discussions
- Effective community engagement in various context.
- Communication Skills for effective community engagement
- Group Activity on Effective Community Engagement

RESOURCE PERSONS:

 DR. HIRAKSHREE BHATTACHARYYA ASSOCIATE PROFESSOR AIMS GUWAHATI Phone: 9436083386 hirakshreebhattacharyya@gmail.com	 DR. RASHMI AGGARWALA ASSISTANT PROFESSOR AIMS GUWAHATI rashmi.aggarwal@gmail.com	 DR. MD. MUNEEM ANSARI ASSOCIATE PROFESSOR SUC MEDICAL COLLEGE, GULSHANKA muneem_ansari@rediffmail.com
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Outcome of the workshop: At the end of the workshop participants will be able to understand the principles of effective community engagement and will learn the skills required for the same.

Date: 6th April 2023, Half day workshop
Register here: https://phacon23kolkata.com/reg_preconf.php





67th Annual National Conference of Indian Public Health Association

Public Health Masterclass Series

As an integral component of IPHACON 2023, the organizers have orchestrated a captivating array of masterclasses, available in both online and offline mode. These masterclasses were skillfully facilitated by esteemed public health experts, creating an atmosphere of knowledge and inspiration. Unquestionably, these masterclasses have earned resounding success among the community of public health researchers and aspiring students alike.

PUBLIC HEALTH MASTER CLASS WORKSHOP SERIES AS A PART OF "PRECONFERENCE WORKSHOP OF IPHACON 2023"

Indian Public Health Association
IPHACON West Bengal Branch in collaboration with IPHA, West Quarter

ONLINE WORKSHOP ON QUALITY RESEARCH PUBLICATIONS IN ACADEMIA: HOW TO SAFEGUARD FROM PREDATORY JOURNALS

**03rd DECEMBER 2022
06:00 PM TO 09:00 PM**

COURSE OVERVIEW

Academic publishing has changed tremendously with the spread of open-access journals and the shift to online publishing. There are now more journals for authors to publish their work than ever before. This benefits the author by providing more avenues for publication but also puts greater responsibility on them to avoid the serious threat of publishing in a predatory fake/Cloned journal.

PATRONS


DR. SURAJIT GHOSH
Member, IPHA
West Bengal Branch


DR. SANCHAMITRA CHOSH
Secretary General, IPHA


DR. SANDE BANDYOPADHYAY
Associate Professor
Community Medicine
Burdwan Medical College

COURSE COORDINATORS


DR. KAUSHIK MITRA
Associate Professor
Community Medicine
Burdwan Medical College
Purba Bardhaman


DR. SHAILI VYAS
Professor, Community
Medicine, Sikkim,
Delhi


DR. RIVU BASU
Associate Professor
Community Medicine, ICMCH,
Bardhaman


DR. ANIRBAN DATTA
Assistant Professor,
Community Medicine
Burdwan Medical College

COURSE INSTRUCTOR


DR. SUMIT NARULA
Deputy Dean Research
(Publications and Citations)
Andhra University, Coeditor, MJA
Director/Head of Institution,
Andhra School of Communication

WORKSHOP HIGHLIGHTS

- This online workshop will discuss
- Research ethics and academic integrity issues
- How to select a reputable journal for publication?
- How to spot a predatory journal?
- How predatory journals are different from open-access journals?
- How to catch cloned journals?
- How to catch fake/misleading impact factors?
- How to search literature on PubMed?
- How to catch Plagiarism, cite articles and do reference management?

WHO SHOULD APPLY?

Post Graduate, Entry and mid-level Academic Faculty, Researchers
 IPHA Members: 500
 Non-Members: 800
 For payment, kindly check the Google form

INTERESTED CANDIDATES CAN APPLY USING THE LINK:

www.bit.ly/iphaworkshop-dec2022

IN CASE OF ANY QUERY, CONTACT:
MR. SOUVIK DAS GUPTA-
+917439157943

The overwhelming response to these workshops was reflected in the multitude of online registrations and positive feedback received by IPHA. Although the conference has concluded, the visionary organizers, together with the dedicated IPHA office bearers, are contemplating the possibility of arranging similar series in response to the amplified demand for these invaluable classes.





67th Annual National Conference of Indian Public Health Association

Cultural Events: Day 1

Cultural extravaganzas add a captivating and enthralling dimension to any esteemed conference, providing a much-needed respite and rejuvenation for its attendees. In line with this sentiment, the highly anticipated **IPHACON 2023** promises an array of enchanting cultural events that are set to captivate the senses and uplift the spirits of its delegates.

To kickstart this remarkable conference, a spellbinding display of the traditional Bengali **Chaau Dance** has been meticulously choreographed and will be performed by a troupe of highly skilled artists hailing from the culturally rich region of Purulia. This exquisite performance promises to transport the audience into a world of sheer beauty, grace, and cultural richness, leaving them mesmerized.



As the first day of the conference came to a close, attendees were treated to a truly captivating musical extravaganza. The stage was graced by the esteemed Bengali vocalist, **Sri Raghav Chatterjee**,



whose celestial voice and emotive renditions had garnered immense admiration and adulation in the realm of music. The audience was swept away by his impeccable delivery, soul-stirring melodies, and a mesmerizing performance that infused the auditorium with an undeniable aura of delight and joy.

With these extraordinary cultural events, IPHA conference 2023 ensures that not only will the

minds of its attendees be nourished with knowledge and expertise but their spirits will also be invigorated and uplifted through the mesmerizing power of these exceptional performances.

Cultural Events: Day 2

On the second day of the conference, a prestigious gala dinner banquet took place at Nicco Park's south gate. The evening witnessed a series of exceptional musical performances that left the audience enthralled. **Mr. Gaurav Sarkar**, a young and proficient singer, set the stage on fire with his outstanding musical talents, uplifting the spirits of everyone present.

Following his remarkable performance, the auditorium experienced a significant transformation as



one of the most acclaimed names in the Indian music industry, none other than **Mrs. Usha Uthup**, took the stage. With her captivating performances lasting over an hour, she completely transformed the atmosphere of the auditorium. The presence of such a renowned artist left the delegates feeling refreshed and energized, deeply moved by the mastery of **Mrs. Usha Uthup's** musical renditions.





67th Annual National Conference of Indian Public Health Association

Governor's Award

It is indeed a momentous occasion at the 67th annual national conference of IPHA as **Professor Jayapralash Muliylil** has been conferred with a prestigious award for his exceptional contributions in the field of public health. The honorable governor of West Bengal, **Sri C.V. Anand Bose**, had the honor of presenting the award to **Professor Muliylil** during the inauguration programme. This recognition highlights the remarkable work and dedication that Professor Muliylil has exhibited at the ground level in the field of public health. His tireless efforts and outstanding contributions have significantly impacted the lives of countless individuals, making a tangible difference in the community. The organizers of **IPHACON 2023** feel immensely honored to have witnessed this award being conferred on their event. It serves as a testament to the caliber and significance of the conference, further solidifying its position as a platform that celebrates and recognizes excellence in public health. The presence of the honorable governor and the acknowledgment of Professor Muliylil's achievements further add to the prestige and importance of the conference.

Prof. Muliylil (MD, MPH, DrPH, Professor Of Community Medicine & Consultant, Division Of Gastrointestinal Sciences, Christian Medical College, Vellore, Tn, India) is an epidemiologist and public health physician who has been involved in training of medical staff and faculty in public health and epidemiology for a long time.





67th Annual National Conference of Indian Public Health Association

Governor's Award to IPHA

The esteemed Governor of West Bengal **C. V. Anand Bose**, presented the **Governor's Excellence Award** to the Association for our pivotal contributions in the realm of Public Health nationwide.

This recognition is a testament to their longstanding presence and significant impact as one of the oldest professional associations in the field of public health.





67th Annual National Conference of Indian Public Health Association

Awards given by IPHA

Dr. I.C. Tiwari Memorial Life Time Achievement Award 2023

Dr. DCS Reddy, former National Professional Officer, awarded to WHO Professor & HD (Retd.) Institute of Medical Sciences, Banaras Hindu University, Varanasi has been conferred with the Prestigious **Dr. I.C. Tiwari Memorial Life Time Achievement Award 2023**.



Sri. R.N. Roy Best Paper Award 2022

The award was won by **Dr. Ramachandra Kamath**, Professor & HOD, Department of Community Medicine, Kodagu Institute of Medical Sciences, Karnataka for his original article titled "**Assessment of Health Status and Impact of Pollution from Thermal Power Plant on Population and Environmental Health of Plant Surroundings in Udupi District, Karnataka**" published in the Indian Journal of Public Health, Vol. 66, issue 2, 2022.



Distinguished experts, **Dr. Jugal Kishore** (Director Professor & Head of Department-Community Medicine, VMMC & Safdarjung Hospital, New Delhi) and **Dr. Khyati Aroskar** (World Health Organization, India) assessed every original articles published in IJPH journal, Vol.66 (2022).

Dr. P.C. Sen Best Paper Award on Rural Health Practice 2023

Dr. Ratul Kumar Bysack (PGT, Community Medicine, IPGME&R, Kolkata), has won the Dr. P.C. Sen Best Paper Award for his original article titled "**Occupational Health Hazards and Morbidity among Nurserymen in a Rural Area of West Bengal**".

Dr. S.D. Gour Best Paper Award on Environmental Health Practice 2023

Dr. Rivu Basu (Associate Professor, Community Medicine, Bankura Sammilani Medical College) has won the Dr. S.D. Gour Best Paper Award for his original article titled "**An analytical observational study on patients with chronic kidney disease of unknown etiology at a rural tertiary care centre in West Bengal**".

Both papers were reviewed by respected **Dr. Rajib Dasgupta** (Professor and Head Centre of Social Medicine and Community Health, Jawaharlal Nehru University, New Delhi) and **Dr. Sanjay Chaturvedi** (Professor and Head, Community Medicine University College of Medical Sciences Delhi).



67th Annual National Conference of Indian Public Health Association

QUEST 2023

Dr. Deoki Nandan Memorial Public Health Quiz “**QUEST 2023**” for Post Graduate students held at Kolkata during 67th Annual National Conference has been conducted by IPHA HQ. A national team of coordinators has been formed with following members who managed the whole show during pre-conference and physically during the conference. A rolling trophy instituted by **Dr. Pankaja Raghav**, Prof., HOD CMFM Department, AIIMS Jodhpur will be conferred to the winners of Dr. Deoki Nandan Public Health Quiz.

This year the team of **Dr. Mythry Ravichandran** and **Dr. Debkumar Pal** from **AIIMS Bhubaneswar** placed first rank and won the rolling trophy.

Second position was bagged by the team of **Dr. Chandan Kumar Panigrahi** and **Dr. Robinson V. Thomas** of AFMC Pune.

Winners and runners-up were awarded medals and certificates by the IPHA headquarters and prize money from the conference organizers.



Name of the Quizmasters (2023)

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> • Dr. Abhishek De • Dr. Kaushik Mitra • Dr. Sanjib Bandyopadhyay • Dr. Rivu Basu • Dr. Waseem Ansari | <ul style="list-style-type: none"> • Dr. Malatesh Undi • Dr. Shibaji Gupta • Dr. Somnath Naskar • Dr. Surajit Ghosh • Dr. Debdutta Halder | <ul style="list-style-type: none"> • Dr. Debayan Poddar • Dr. Sohanjan Chakraborty • Dr. Varun Vijay Gaiki • Dr. Shaili Vyas • Dr. Neha Sharma |
|--|--|---|

Marauder’s Map event’s Team (2023)

Dr. Abhishek De, Dr. Waseem Ansari, Dr. Malatesh Undi, Dr. Varun Vijay Gaiki
 Dr. Akhil Dhanesh Goel, Dr. Shibaji Gupta, Dr. Debayan Poddar, Dr. Debdutta Halder,
 Dr. Sohanjan Chakraborty, Dr. Varun Wani, Dr. Sanjib Bandyopadhyay, Dr. Kaushik Mitra, Dr. Rivu Basu



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



Date & slot:	07.04.2023 (10:00 hrs – 10:45 hrs)
Title of the Scientific Session sponsored by Care India for Sustainable Development:	From Evidence to action: The evolution of knowledge management & learning
Type of the Session:	Plenary
Name of the Panelists:	Topic: “Concurrent questioning the Theory of Change to improve Public Health Services: an Evolution” Dr. Aboli Gore National Programme Specialist (Health), CARE India Solutions for Sustainable Development Dr. Prabir Ranjan Moharana National Technical Specialist (Health) & Improvement Advisor CARE India Dr. Aritra Das Expert Epidemiologist Bihar Technical Support Program CARE India
Name of the Speaker/s:	Topic: “Data as an intervention: the journey of evidence to knowledge” Dr. Tanmay Mahapatra Head, Research and Learning, Knowledge Management Center, CARE India Solutions for Sustainable Development
Name of the Chairperson/s:	Dr. Sanghamitra Pati Director, ICMR-RMRC, Bhubaneswar Dr. Ranjan Das Director, All India Institute of Hygiene & Public Health, Kolkata



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



Date & slot:	07.04.2023 (11:45 hrs – 12:30 hrs)
Title of the Scientific Session sponsored by NHSRC :	Health System Strengthening: Financing & HR
Type of the Session:	Plenary
Name of the Speaker/s:	Topic: “Implementation research & Health Systems Strengthening : Linking research to practice” Dr. Neha Dumka Lead Consultant, Knowledge Management Division National Health Systems Resource Centre Topic: “Health Financing: A Reflection on Health Systems” Dr. Sandeep Sharma Lead consultant of Healthcare Financing Division, NHSRC
Name of the Chairperson/s:	Dr. Najam Khalique Professor Department of Community Medicine JN Medical College AMU, Aligarh Dr. Mona Gupta Advisor Human Resource for Health/HPIP division, NHSRC



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



Date & slot:	07.04.2023 (12:30 hrs – 13:30 hrs)
Title of the Scientific Session sponsored by ICMR-NICED Kolkata:	Prevention and Control of influenza and other respiratory viruses
Type of the Session:	Plenary
Name of the Speaker/s:	<p>Topic: “Influenza Burden among elderly & other high-risk groups in India” Dr. Aslesh Prabhakaran Public Health Specialist (Surveillance), US Centers for Disease Control and Prevention, India office.</p> <p>Topic: “Addressing influenza vaccine hesitancy among health care workers” Dr. Rakesh Kumar Additional Professor Centre for Community Medicine, AIIMS, New Delhi</p> <p>Topic: “A public health approach for seasonal influenza in India” Dr. Siddhartha Saha Director, Influenza Program, CDS-India</p> <p>Topic: “A public health approach for seasonal influenza in India” Dr. Anand Krishnan Professor, Centre for Community Medicine AIIMS, New Delhi</p>
Name of the Chairperson/s:	<p>Dr. Suman Kanungo Indian Council of Medical Research, National Institute of Cholera and Enteric Diseases, Kolkata</p> <p>Dr. Shanta Dutta Director & Scientist G ICMR-National Institute of Cholera and Enteric Diseases Department of Health Research, Ministry of Health and Family Welfare, Government of India</p>



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



Date & slot:	07.04.2023 (14:30 hrs -15:15 hrs)
Title of the Scientific Session sponsored by Serum Institute of India Private Ltd. :	HPV Vaccination Program: Global and Indian Perspective
Type of the Session:	Parallel
Name of the Speaker/s:	Topic: “Burden of Cervical Cancer in India” Dr. Anupam Prashar Professor & Head Department of Community & Family Medicine AIIMS Bilaspur (Himachal Pradesh) Topic: “Changing the HPV Landscape with Indigenous Vaccine” Dr Shivani Desai Serum Institute of India Pvt. Ltd., Pune Topic: “HPV vaccination program in India: Punjab Experience” Dr. Madhu Gupta Professor DCM&SPH, PGIMER, Chandigarh. Topic: “Global Scenario of Human Papilloma Virus Vaccination Program” Dr. Dipanwita Banerjee Dept of Obstetrics and Gynaecology, All India Institute of Medical Sciences, Delhi
Name of the Chairperson/s:	Dr. Hitt Sharma Serum Institute of India Pvt. Ltd, Pune (India) Dr. Debasis Dutt Director Professor & Dean (Public Health) and Head, Dept Public Health Administration All India Institute of Hygiene and Public Health (AIH&PH), Kolkata



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



शरीरमाद्यं खलु धर्मसाधनम्



Date & slot:	07.04.2023 (14:30 – 15:15 hrs)
Title of the Scientific Session sponsored by AIIMS New Delhi:	Anemia Mukt Bharat
Type of the Session:	Parallel
Name of the Speaker/s:	Dr. Kapil Yadav Professor Centre for Community Medicine (CCM) All India Institute of Medical Sciences (AIIMS) New Delhi
Name of the Chairperson/s:	Dr. C.S. Pandav Past National President, Indian Public Health Association Dr. Sanjay K Rai President Indian Public Health Association



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



Date & slot:	07.04.2023 (14:30 hrs – 15:15 hrs)
Title of the Scientific Session sponsored by ICMR New Delhi:	Implementation of ICMR -STWs for improving population health - An Approach to UHC
Type of the Session:	Parallel
Name of the Speaker/s:	Topic: “Implications of ICMR-Standard Treatment Workflows in Public Healthcare System” Dr. Ashoo Grover Scientist 'F', Indian Council of Medical Research, New Delhi Topic: “Current Status of Assistive Technology among persons with Disabilities” Dr. Ravinder Singh Scientist ICMR Hqrs, New Delhi Prof. (Dr) Anku Moni Saikia Principal, Dhubri Medical College Dhubri, Assam Topic: “Provisioning of Assistive Technology among Elderly” Dr. Paramita Sengupta Professor & HOD, Department of Community Medicine, AIIMS Kalyani
Name of the Chairperson/s:	Dr. Dibakar Halder Professor & HOD Department of Community Medicine Nil Ratan Sircar Medical College and Hospital Kolkata, West Bengal Dr. Lina Bandyopadhyay Advisor Public Health (SAG) Professor, Department of PSM AIH&PH, Kolkata



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



Date & slot:	07.04.2023 (15:15 hrs – 16:00 hrs)
Title of the Scientific Session sponsored by ICMR - RMRCBB:	Catalyzing Rural Health Research using Model Rural Health Research Unit Platform
Type of the Session:	Parallel
Name of the Panellist:	Dr. Aparna Mukherjee Senior scientist at Indian Council of Medical Research and is In-charge, Clinical Studies & Trials Unit, ICMR , Delhi Dr. Subrata Kumar Palo Scientist D & Nodal Officer Model Rural Health Research Unit, Tigiria, Cuttack. Prof. (Dr.) Sachidanand Mohanty Director of Medical Education & Training, Dept. of Health & Family Welfare, Govt. of Odisha. Dr. Sandipana Pati Joint Director, Department of Health & Family Welfare ICMR, Odisha.
Name of the Participant/s:	Dr. Sanghamitra Pati Director, ICMR-Regional Medical Research Centre-Bhubaneswar (RMRC), Department of Health Research, Ministry of Health and Family Welfare, Government of India.
Name of the Moderator:	Dr. Pranab Mohapatra Associate Professor, Psychiatry, Mental Health & Public Health



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Collaborative programmes during IPACON 2023



Date & slot:	08.04.2023 (15:15 hrs – 16:00 hrs)
Title of the Scientific Session sponsored by USAID & Jhpiego :	Catalyzing Community Actions for Better Health Outcomes
Type of the Session:	Plenary
Name of the Speaker/s:	Topic: “Community empowerment for improving quality primary health care: The NISHTHA Experience” Dr. Pallavi Kumar Advisor RMNCH+A, NISHTHA Jhpiego Topic: “Convergence at the level of community for addressing social determinants of health” Dr. Roshni Dilbagi State Program Officer, NISHTHA Jhpiego Topic: “Collective community engagement for TB Elimination” Dr. Debajyoti Mohapatra State Program Manager, NISHTHA Jhpiego
Name of the Chairperson/s:	Col Arun Kumar Yadav Professor, Armed Forces Medical Services Dr. Anuradha Jain Senior Advisor, Health System Strengthening USAID India American Embassy Chanakyapuri, New Delhi



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



World Health Organization



Date & slot:	08.04.2023 (12:30 hrs – 13:30 hrs)
Title of the Scientific Session sponsored by World Health Organization:	Role of public health professionals in implementing the National Action Plan on Anti-Microbial Resistance
Type of the Session:	Plenary
Name of the Speaker/s:	Topic: “Public Health perspective on AMR containment in India” Dr. Anand Krishnan Professor, Centre for Community Medicine, AIIMS, New Delhi Topic: “India’s National Action Plan on Antimicrobial Resistance and its implementation” Dr. Lata Kapoor NCDC, New Delhi Topic: “Global and WHO perspective on Antimicrobial Resistance” Dr. Anuj Sharma Senior Technical Officer – AMR WHO, New Delhi
Name of the Chairperson/s:	Dr. Suneela Garg Director Professor & Head Community Medicine, Maulana Azad Medical College & Associated Hospitals New Delhi Dr. Rajib Dasgupta Professor Centre of Social Medicine & Community Health Jawaharlal Nehru University, New Delhi



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



Date & slot:	09.04.2023 (11:00 hrs – 11:45 hrs)
Title of the Scientific Session sponsored by AIIMS Jodhpur & ICMR:	Innovation, Research and fostering strong enabling environment to achieve Malaria Elimination
Type of the Session:	Plenary
Name of the Speaker/s:	<p>Topic: “Investing in malaria elimination : Essential towards achieving SDGs” Prof Pankaja Raghav Professor & Head, Dept. of Com. Med. & Family Medicine AIIMS, Jodhpur</p> <p>Topic: “Malaria Elimination in India: Science and Implementation” Dr. Praveen K. Bhart Scientist 'E' ICMR- National Institute of Malaria Research (ICMR-NIMR), New Delhi</p> <p>Topic: “Building enabling environment towards achieving malaria elimination” Dr. Neeti Rustagi Additional Professor Department of Community Medicine and Family Medicine, AIIMS Jodhpur</p> <p>Topic: “Challenges toward ensuring access to malaria prevention , diagnosis and treatment” Dr. Prasanna Thirunavukkarasu Associate Professor Dept. of Community Medicine & Family Medicine, AIIMS Jodhpur</p>
Name of the Chairperson/s:	<p>Dr. Sonu Hangma Subba Professor and HOD Dept of Community Medicine and Family Medicine AIIMS Bhubaneswar</p> <p>Dr. Rambabu Ayurveda Chief Entomologist, Greater Hyderabad Municipal Corporation</p>



67th Annual National Conference of Indian Public Health Association

Collaborative programmes during IPACON 2023



Date & slot:	09.04.2023 (11:45 hrs – 12:45 hrs)
Title of the Scientific Session sponsored by Care India Solutions for Sustainable Development & Asian Development Research institute:	Climate Change and Health-- vulnerabilities, coping, mitigation and way forward
Type of the Session:	Parallel
Name of the Speaker/s:	Dr. Aritra Das Expert Epidemiologist Bihar Technical Support Program CARE India Dr. Tanmay Mahapatra Head, Research and Learning, Knowledge Management Center, CARE India Solutions for Sustainable Development Dr. Sanchita Mahapatra Epidemiologist
Name of the Chairperson/s:	Dr. Girish N Rao Professor, Department of Epidemiology, NIMHANS



67th Annual National Conference of Indian Public Health Association

Details of other Parallel Scientific Sessions during IPHACON 2023

Name of the Session: **Dr B.C Dasgupta Memorial Oration**

Date & slot: 07.04.2023 (10:00 hrs – 11:45 hrs)

Orator

Dr. Thomas Mathews

Chairpersons

Dr. Samir Dasgupta

Dr. J. Ravi Kumar

Name of the Session: **Geriatric Health Session**

Date & slot: 07.04.2023 (14:30 hrs – 15:15 hrs)

Speaker

Dr. Arunansu Talukdar

Chairpersons

Dr. Nabanita Bhattacharya

Dr. Sonali Kar

Name of the Session: **HIV Control**

Date & slot: 07.04.2023 (16:00 hrs – 16:30 hrs)

Speaker

Dr. D. C. S. Reddy

Chairpersons

Dr. Dipendra Narayan Goswami

Dr. Sima Roy

Name of the Session: **A talk with IJPH**

Date & slot: 07.04.2023 (16:00 hrs – 16:30 hrs)

Speaker

Dr Rajib Dasgupta

Dr. Sanjay Chaturvedi

Dr. Pritam Roy

Name of the Session: **Dr K. N Rao Memorial Oration**

Date & slot: 08.04.2023 (10:00 hrs – 11:00 hrs)

Orator

Dr. Prakash Doke

Chairpersons

Dr Prasad Waingekar

Dr. Raghunath Misra

Name of the Session: **Dr.J.P.Muliyil**

Date & slot: 08.04.2023 (11:00 hrs – 11:45 hrs)



67th Annual National Conference of Indian Public Health Association

Name of the Session: **Dr J.E Park Memorial Oration**

Date & slot: 09.04.2023 (10:00 hrs – 11:00 hrs)

Orator

Dr. Sonu Goel

Chairpersons

Dr. Aparajita Dasgupta
Dr Suneela Garg

Name of the Session: **Public Health Approach to Frailty Prevention on Elderly**

Date & slot: 09.04.2023 (11:45 hrs – 12:45 hrs)

Speaker

Prof (Dr) Anku Moni Saikia

Chairpersons

Dr. Pranita Taraphdar
Dr. Ranabir Pal

Name of the Session: **Perspective of Gen 2.0 Basal: Initiation to Up titration – Translating Science into Practice**

Date & slot: 09.04.2023 (11:45 hrs – 12:45 hrs)

Speaker

Dr. Somnath Naskar

Chairpersons

Dr. Mausumi Basu
Dr. Tutul Chatterjee

Name of the Session: **Is silence between partners comfortable?**

Date & slot: 09.04.2023 (11:45 hrs – 12:45 hrs)

Panelists

Dr. Ranjan Bhattacharyya
Dr. Nilanjana Ghosh
Dr. Shamima Yasmin
Dr. Poushali Das



67th Annual National Conference of Indian Public Health Association

IPHACON 2023: Scientific Sessions Matrix

07.04.2023

Timing	Hall A	Hall B	Hall C	Hall D	Hall E
9:00-10:00	World Health Day	Best Paper Award	Free Oral Paper	Free Oral Paper	Free Oral Paper
10:00-10:45	From Evidence to action: The evolution of knowledge management & learning (Care India Solutions)	X	X	X	X
10:45-11:45	Dr B.C Dasgupta Memorial Oration (Dr. Thomas Mathew)	X	X	X	X
11:45-12:30	Catalyzing Community Actions for Better Health Outcomes (USAID & JHPIEGO)	X	X	X	X
12:30-13:30	Prevention and Control of influenza and other respiratory viruses (ICMR-NICED, Kolkata)	X	X	X	X
13:30-14:30	LUNCH BREAK				
14:30-15:15	HPV Vaccination Program: Global and Indian Perspective (Serum Institute of India Private Ltd.)	Anemia Mukh Bharat (AIIMS, New Delhi)	Implementation of ICMR -STWs for improving population health - An Approach to UHC (ICMR, New Delhi)	Quiz Prelims	Geriatric Health Session
15:15-16:00	Catalyzing Rural Health Research using Model Rural Health Research Unit Platform (ICMR-RMRC, Bhubaneswar)	Free Oral Paper	Free Oral Paper	Free Oral Paper	Free Oral Paper
16:00-16:30	HIV Control (Dr. DCS Reddy)	Free Oral Paper	Free Oral Paper	Free Oral Paper	A talk with IJPH
16:30-17:30	Annual General Body Meeting @ Hall A				
18:00-20:00	Cultural Events @ Hall A – Chhau dance of Purulia followed by Raghab Chatterjee (eminent Singer and Composer)				
20:00-21:30	GALA DINNER				

08.04.2023

Timing	Hall A	Hall B	Hall C	Hall D	Hall E
09:00-10:00	Free Oral Paper	Free Oral Paper	Free Oral Paper	Free Oral Paper	Free Oral Paper
10:00-11:00	Dr K. N Rao Memorial Oration (Dr. Prakash Doke)	X	X	X	X
11:00-11:45	Key Note Address (Dr.J.P.Muliyil)	X	X	X	X
11:45-12:30	Catalyzing Community Actions for Better Health Outcomes (USAID & JHPIEGO)	X	X	X	X
12:30-13:30	Role of Public Health Professionals in implementing the National Action Plan on Anti Microbial Resistance (WHO)	X	X	X	X
13:30-14:30	LUNCH				
14:30-15:00		Mentorship Program	Mentorship Program	Mentorship Program	Mentorship Program
15:00-16:00	Inauguration Program				
16:00-18:00	Prof. Deokinandan Memorial Public health Quiz	X	X	X	X
18:30-22:00	BANQUET DINNER @ NICCO PARK, EAST SIDE HALL Cultural Events by Gourab Sarkar (1 st runner-up SaReGaMaPa 2019) followed by Usha Uthup (Needs No Introduction)				



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IPHACON 2023: Scientific Sessions Matrix

07.04.2023

Timing	Hall A	Hall B	Hall C	Hall D	Hall E
09:00-10:00	Free Oral Paper	Free Oral Paper	Free Oral Paper	Free Oral Paper	Free Oral Paper
10:00-11:00	Dr J.E Park Memorial Oration (Dr. Sonu Goel)	X	X	X	X
11:00-11:45	Innovation, Research and fostering strong enabling environment to achieve Malaria Elimination (AIIMS, Jodhpur & ICMR MERA)	X	X	X	X
11:45-12:45	Climate Change and Health--vulnerabilities, coping, mitigation and way forward Care India Solutions & Asian Development Research institute Public Health Approach to Frailty Prevention on Elderly	IPHA GEN Y : A Platform for Youth	Perspective of Gen 2.0 Basal: Initiation to Up titration – Translating Science into Practice Is silence between partners comfortable?	Free Oral Paper	Free Oral Paper
12:45-13:30	VALEDICTORY SESSION				
13:30-14:30	LUNCH BREAK				



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Orations

Dr. B. C. Dasgupta Memorial Oration 2023



Name of the Orator

Dr. Thomas Mathews

Principal, Government Medical College
Trivandrum, Kerala

Topic: **"One Goal: Health for All: Post-COVID
Public Health Initiatives"**

Dr. K. N. Rao Memorial Oration 2023

Name of the Orator

Dr. Prakash Doke

Professor, BVDU Medical College, Pune

Topic: **"Chronic Respiratory Diseases: A Rapidly Emerging
Public Health Menace"**



Dr. J. E. Park Memorial Oration 2023



Name of the Orator

Dr. Sonu Goel

Professor, Department of Community Medicine
& School of Public Health PGIMER Chandigarh

Topic: **"Public Health Leadership "Transformation
of Dreams to Reality"**



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Accepted
abstracts
for
Oral & Poster
presentations





Abstracts for Oral Presentations

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❖ **Title: A cross-sectional study to determine prevalence of adverse pregnancy outcomes in consanguineous and non-consanguineous marriage couples in an urban slum.**

Mode of presentation: Oral; **Theme:** Reproductive & Maternal Health

Presenting author:

Dr. Priya Varun Wani, Senior resident, MBBS MD, Department of Community Medicine, LTMMC and GH Sion, Mumbai.

Co-authors:

▪ **Dr. Abhiram M. Kasbe**, Professor, Department of Community Medicine, TNMC and B.Y.L Nair Hospital, Mumbai

Introduction: Consanguineous marriage refers to the union between two people who share blood or a common ancestor. Marriages among relatives is preferred in some groups because of traditional beliefs. As majority of the country's population resides in the rural areas followed by the slums with a low educational background, awareness of risks in consanguineous marriages is not known.

Objectives: To study the pregnancy outcomes of consanguineous married couples as compared to the non-consanguineous marriage couples.

Materials and Methods: A cross-sectional study was conducted in an Urban slum. By stratified random sampling, 150 participants in consanguineous union and 150 in non-consanguineous union were selected. Total sample size was 300. A prestructured questionnaire was prepared and validated by the faculty of the Department of Community Medicine. Ethics Committee approval was also taken.

Results: We analysed the data of 300 complete interviews. A highly significant statistical association was seen between number of abortions and category of marriage. There was a highly statistically significant association between stillbirths and category of marriage. A statistically significant association was found between the NICU admissions and the category of marriage. A statistically significant association was found between low birth weight being the reason for NICU admission and the category of marriage. There was a statistically significant association between the history of medical/surgical/congenital disorders in the child and the category of marriage.

Conclusion: Consanguineous marriage has shown significant association with multiple adverse pregnancy outcomes, thus highlighting the fact that there is need to focus on such population to improve the health and well-being of the new-born thus reducing the burden of congenital disorders. This will assist in uplifting the quality of life of the future generations.

Keywords: Cerebral palsy, stillbirth, low birth weight, abortion

❖ **Title: A Mixed Method Study to Assess Notification of Tuberculosis Patients by Private Practitioners in New Delhi, India**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Prof. Rambha Pathak, Dean, & Prof. & Head, Community Medicine, Government Institute of Medical Sciences, Noida, Uttar Pradesh

Co-authors:

▪ **Rashmi Agarwalla**, Assistant Professor, Department of Community and Family Medicine, All India Institute of Medical Sciences, Guwahati, Assam



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- **Faheem Ahmed** : Associate Professor, Department of Public Health, King Khalid University Abha, Kingdom of Saudi Arabia
- **Farzana Islam** : Professor and Head, Department of Community Medicine, Hamdard Institute of Medical Sciences and Research, New Delhi
- **Varun Kashyap**: Assistant Professor, Department of Community Medicine, Hamdard Institute of Medical Sciences and Research, New Delhi

Introduction: A staggering one million tuberculosis (TB) cases are missing from notification, most of them being diagnosed and treated in the private sector. To curb this issue, the Government of India declared TB as a notifiable disease and NIKSHAY was launched in 2012. However, even after years of implementation, as per the report published by TB India 2020, the proportion of private case notification of total TB cases is very low.

Objectives: The objectives of the study were to assess the current practices related to TB Notification being followed by private practitioners of Delhi and to explore the enablers and barriers to TB notification among private-sector treatment providers.

Materials and Methods: This cross-sectional study was done from January 2019 to January 2020. Six hundred doctors were line listed under the chosen TB unit, 375 gave consent and in depth interview was conducted among them. Data were collected on the reporting status and facilitators and barrier toward NIKSHAY reporting were assessed. For the qualitative component, focused group discussions were done.

Results: Out of 375 private practitioners, over two-third (68%) practitioners reported that they were not treating TB patients. Out of 108 doctors treating patients only 50% were reporting the cases. Major reason cited for not reporting was “don’t know how to” and major barrier considered was “lack of training.”

Conclusion: Strategies such as training and retraining, and one-to-one sensitization of private practitioners to address barriers may enhance TB notification

Keywords: Notification, private practitioners, tuberculosis

❖ **Title: A Mixed-methods Study on Challenges Faced by Undergraduate Students of a Medical College in Kolkata during Family Visits under Family Adoption Programme**

Mode of presentation: Oral; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr. Ankita Mishra, Senior Resident, Department of Community Medicine, IPGME&R, Kolkata

Co-authors:

- **Dr. Soma Chakrabarti**, Assistant Professor, Department of Community Medicine, IPGME&R, Kolkata
- **Dr. Ratul Kumar Bysack**, Post Graduate Trainee, Department of Community Medicine, IPGME&R, Kolkata
- **Prof. (Dr.) Mausumi Basu**, Head, Department of Community Medicine, IPGME&R, Kolkata



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Background: Family Adoption Programme has been introduced in the curriculum for medical students to help them learn empathy while understanding the customs and limitations of the community. Though this would help in attaining universal health coverage, most of its aspects are still unknown. Through this study challenges, faced by the students could be identified and addressed.

Objectives: To identify challenges faced by under-graduate students of a Medical College in Kolkata during family visit under Family Adoption Programme and to explore the possible solutions for the challenges.

Materials and Methods: A descriptive study, cross-sectional in design, using mixed-methods approach (concurrent parallel) was conducted from 12th December, 2022 to 31st January, 2023 at Institute of Post Graduate Medical Education & Research, Kolkata. A pre-designed, pre-tested and semi-structured questionnaire was employed to collect data from 175 undergraduate medical students. An in-depth interview was conducted on 5 purposively selected faculties supervising the visit. The quantitative data were analysed using SPSSv25 while the qualitative data were analysed thematically. The data collection was initiated after getting approval from the institutional ethics committee and taking informed written consent from the participants.

Results: The study included 170 students and 5 faculties. Majority (96.18%) of the students reported transport related problems. Other problems faced were lack of supervision during examination of the family members (35.03%), difficulty in communicating (24.84%), locating allotted family (10.83%) and safety issues (3.18%). The solutions identified for addressing transport-related issues were provision of air-conditioned buses and cautious driving. Both the students and the faculties felt that selecting families near the institute and allotting post-graduate trainees for supervising the students could solve most of the issues.

Conclusion: Almost all the students faced challenges during the family visits. Selecting areas close to the institute and expert supervision could help in addressing most challenges.

Keywords: Family Adoption Programme, medical students, community health services, challenges, competency-based education

❖ **Title: A Qualitative analysis of the challenges in the implementation of competency-based medical education for MBBS students in a Government Medical College of Assam**

Mode of presentation: Oral; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr Madhur Borah Assistant Professor Department of Community Medicine JMCH

Co – author :

▪ **Prof. (Dr) BR Das**, Professor and Dr Chandana Deka Assistant Professor Department of Community Medicine JMCH

Introduction: As medical education is evolving in India, therefore competency based medical education (CBME) was introduced for the 2019-20 batch of MBBS students. With the new curriculum the medical teachers have greater responsibility to impart measurable skills to the future doctors. But most of the



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medical faculties are newly inducted to the evolving CBME curriculum. COVID pandemic as well as inadequate infrastructure of government medical colleges posed formidable barriers in the successful implementation of CBME curriculum. As we are now in the third year of the new CBME curriculum we attempted to assess the current situation of implementation of CBME for MBBS students in a Government Medical College through a qualitative study.

Objectives: To identify the key challenges perceived by the medical faculties in implementation of CBME curriculum for MBBS students in a Government Medical College of Assam.

Materials and Methods: It was an exploratory qualitative study conducted among total 25 faculty members of Jorhat Medical College using the "Free-listing" method to identify the challenges of implementation, through an open ended questionnaire. Anthropic software used for analysis of "Free-listing" data.

Results: Our study revealed three main domains of challenges: infrastructure and training of faculties, attitude of students, teachers and curriculum related challenges. Most respondents listed 4 to 5 challenges with group consensus found on issues related to infrastructure. Most frequent salient items found were: less manpower, inadequate infrastructure, inadequate training, non simplified curriculum (Smith's index of significant values). Frequency of salient items and list length were found to be dependent upon years of teaching and departments.

Conclusion: Our study identified various challenges during implementation of CBME course as perceived by medical faculties which needs to be addressed.

Keywords: Attitude, competency based medical education (CBME), Challenges, Free-listing, Implementation, Qualitative study,

❖ Title: A study on knowledge regarding teenage pregnancy and its possible outcome among the adolescent girls in a rural area of West Bengal

Mode of presentation: Oral; **Theme:** Reproductive & Maternal Health

Presenting author:

▪ **Dr. Pushpak Das**, Junior Resident, Department of Community Medicine, Medical College Kolkata.

Co – author :

▪ **Dr. Nirmalya Manna**, Associate Professor, Department of Community Medicine, Medical College Kolkata.

Introduction: Pregnancy during adolescent phase can be very stressful for a girl as they are not physically and mentally mature enough to handle the demands of pregnancy. Each year, at least 10 million unintended pregnancies occur among 15- to 19-year-old adolescent girls of developing world. Of the estimated 5.6 million abortions that occur each year among adolescent girls aged 15–19 years, 3.9 million are unsafe, contributing to maternal mortality, morbidity and lasting health problems. Complications during pregnancy and childbirth are the leading cause of death for 15–19-year-old girls globally.

Objectives: 1. To assess the knowledge regarding teenage pregnancy among study population. 2. To know the outcomes of teenage pregnancies.

Materials and Methods: The study was a prospective observational study. It was done in Rural field practice area of Medical College, Kolkata. A total of 93 teenage pregnant women, aged between 14 and 19 years were selected and information on sociodemographic variables, knowledge regarding teenage



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pregnancy and pregnancy outcome was recorded in 3 visits with a help of a pre designed, pre tested structured schedule.

Results: Among the 93 participants mean age was 17.58 ± 1.22 years, maximum belonged to age group of 18-19 years, with 30.1% belonged to socioeconomic class I and III. Participants overall knowledge score regarding teenage pregnancy was 4.25 ± 1.88 with 62.4 % having good knowledge. Regarding pregnancy outcome 31.2% had preterm delivery with 39.8% having low birth weight babies.

Conclusion: The present study recommends that programs that encourage parent-teenage communication of reproductive health issues, starting from early adolescence, in order to build skills to prevent pregnancy in the late teenage years. In addition, multi-pronged activities must be undertaken across sectors that encourage delayed marriage and improve health service utilizations for girls are essential.

❖ **Title: A Study on Perceptions Regarding Cervical Cancer and HPV Vaccination among Women of the Reproductive Age Group in a Rural Area of Hooghly District.**

Mode of presentation: Oral; **Theme:** Reproductive & Maternal Health

First author:

Dr Soumik Ghosh, Junior Resident, Department of Preventive and Social Medicine, All India Institute of Hygiene and Public Health, Kolkata-700073

Co-authors:

- **Dr Monalisha Sahu**, Associate Professor, Department of Preventive and Social Medicine, All India Institute of Hygiene and Public Health, Kolkata-700073
- **Dr. Lina Bandyopadhyay**, Advisor Public Health(SAG) , Professor(EQ), Department of Preventive and Social Medicine, All India Institute of Hygiene& Public Health, Kolkata
- **Dr. Madhumita Bhattacharyya**, Professor in pediatrics, Department of Maternal & Child Health, All India Institute of Hygiene and Public Health, Kolkata
- **Dr. Bobby Paul**, Professor & Head, Department of Preventive and Social Medicine, All India Institute of Hygiene and Public Health, Kolkata

Introduction: Cervical cancer is the fourth most common cancer among women globally. HPV (16 and 18) are responsible for 50% of the high grade pre cancers. Vaccination and screening are cost effective ways of prevention of cervical cancer. The Health Belief Model can effectively address problem behaviours that evoke health concerns. Despite efforts, HPV vaccination has not gained popularity in India. Hence this study was done.

Objectives: The objectives of the study were to assess the knowledge and perceptions regarding cervical cancer and HPV vaccination among the study participants and to identify the factors associated with the perceptions.

Materials and Methods: A cross-sectional study done from October 2022 to March 2023 in a rural area of Hooghly district. A total of 138 study participants were selected using Simple Random Sampling (known cases of cervical cancer were excluded from the study) and their knowledge and perceptions were assessed using a pre-designed, pre-tested interview schedule based on the constructs of Health Belief Model. The collected data was analysed using descriptive and inferential statistics using SPSS 16 version. Ethical approval was taken from institutional ethics committee of AIIPH&PH.

Results: The median age of the study participants was 30.0(25,41) years and most of them belonged to socio-economic class IV. Majority of them were currently married (95.4%) with 1-2 children (89.0%) and



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16.5% of them had family history of cancer. Of them, 54.1% had unsatisfactory knowledge about cervical cancer and HPV vaccination. Most of the study participants (89.0%) had satisfactory perceptions. The factors associated with unsatisfactory perception were Knowledge($p=0.006$), family history of cancer($p=0.006$), age group($p=0.003$) and educational status($p=0.003$).

Conclusion: Knowledge and awareness regarding risk factors, symptoms of cervical cancer and HPV vaccination and its importance need to be increased among the study participants through proper BCC. The lacunae in perceptions can thus be improved.

Keywords: cervical cancer, HPV vaccination, Health belief model, perceptions

❖ **Title: A study on primary wound management and delay in post-exposure prophylaxis among animal bite victims attending tertiary care hospital Jabalpur.**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

▪ **Dr. Arvind Sharma**, Professor, Department of Community Medicine, NSCBMC, Jabalpur, Madhya Pradesh.

Co – author :

▪ **Dr. Sunita Patel**, Assistant Professor, Department of Community Medicine, Netaji Subhash Chandra Bose Medical College, Jabalpur, Madhya Pradesh.

▪ **Dr. Arindam Maiti**, 2nd Year Post Graduate Resident, Department of Community Medicine, Netaji Subhash Chandra Bose Medical College, Jabalpur, Madhya Pradesh - Presenting author.

▪ **Dr. Ashish Mishra**, 2nd Year Post Graduate Resident, Department of Community Medicine, Netaji Subhash Chandra Bose Medical College, Jabalpur, Madhya Pradesh.

Introduction: In India Rabies occurs due to 17.4 million exposures to animal bite with 15 million requiring post-exposure prophylaxis every year. There are many myths and false beliefs associated with primary wound management. So, this study was undertaken to assess primary wound management and delay in Post-exposure prophylaxis among animal bite victims.

Objective: To assess the primary wound management and delay in post-exposure prophylaxis among animal bite victims.

Materials and Methods: It was a cross-sectional study conducted among 688 animal bite victims attending tertiary care hospital, Jabalpur for a period of 6 months. Data collection was done by pre-tested self-structured questionnaire Interview method. Data was entered in MS Excel; Descriptive and Inferential statistical analysis was done.

Results: Among 688 animal-bite victims, maximum bites were due to dogs (81.98%) followed by monkeys (12.65%). It was found that maximum of the victims washed with water at the wound site (42.01%) followed by application of water and turmeric powder paste (22.35%) and 20.35% did nothing. In the study, 92.01% of the victims received TT injection, among them 65.69% received TT within 24 hrs, 17.06% received it after 48 hrs., while 7.99% did not receive it before coming to the hospital. It was observed that 98.69% of the victims took < 24 hrs to reach the hospital for wound management and post-exposure prophylaxis, the remaining took > 48 hrs, while 95.93% of the victims received post-exposure prophylaxis within < 24 hrs, and 2.91% of them within > 24 hrs.



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Conclusion: This study concludes that victims were very well aware of primary wound management and post-exposure prophylaxis for animal bites because majority of the victims did primary wound management and received post-exposure prophylaxis as per recommended guidelines, though traditional and cultural practices were still prevalent among the victims.

Keywords: Rabies, animal-bite victims, post-exposure prophylaxis, primary wound management

❖ **Title: A Study On Psychological Distress And Its Determinants Among School Going Adolescents In A Rural Area Of West Bengal**

Mode of presentation: Oral; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Pratiti Panchanan

❖ **Title: A study on smart phone use and its perceived health effects among the adolescents attending Medical College and Hospital, Kolkata**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Meghali Marak, PGT, Medical College and Hospital Kolkata

Co-authors:

- **Dr. Nirmalya Manna, Medical College and Hospital Kolkata**

Introduction- Smartphones are new generation of mobile phones that provide integrated communication and entertainment services. With rapid rise, a new kind of health disorder called “smartphone addiction has now emerged as a challenging public health problem among adolescents.

Objectives- To determine the proportion of smart phone use among study participants, to assess the smart phone’s perceived health effects on the study population and to find out the relationship between smart phone use and the perceived health effects.

Materials and Methods: A cross-sectional observational study was performed on 187 attending adolescent friendly health clinic at Medical College, Kolkata. Systematic random sampling, participants were selected and they were interviewed using the data collection form.

Results- 61.49% of the study participants used smart phone for 1-2 hr per day. 56.68% of the study participants recharged for 151-200 rupee per month. 21.39% agreed that smart phone was irresistible for them. 48.66% agreed for watching movies and videos .39.03% agreed for downloading games & videos. 14.43% agreed in using social networking .19.25% agreed using mobile phone to watch TV serials and reality shows. Eye pain was perceived by 4.82% participants and headache was perceived by 3.21%.

Conclusion: There is urgent need for emotional support and provision of personalized counselling for limiting their smart phone use and their perceived health side effects.

Keywords: assess, usage of smart phone, impact on health, addictions, adolescent’s

❖ **Title: A Study On Socialm Stigma Perceived By Tuberculosis Patients Attending National Tuberculosis Elimination Programme(Ntep) Clinic In A Tertiary Care Teaching Huospital In Kolkata**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance



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Presenting author:

Dr. Anamitra Chakraborty

Introduction: Tuberculosis (TB) is a multisystem disease with myriad presentations and manifestations. India is the country with the highest burden of TB. Stigma originates from the ancient practice of branding or making someone who is thought to be morally flawed or to have behaved badly. Some common examples of stigma related to Tuberculosis is assuming that someone with TB also has HIV or may be a drug abuser, etc.

Aims: To estimate the proportion of tuberculosis patients with perceived social stigma attending NTEP clinic in a tertiary care teaching hospital of Kolkata.

Materials and method: The present study was a descriptive, Observational Study. This Study was conducted from 1 year (10 months for Data Collection and 2 months for Analysis) at National Tuberculosis Elimination Programme (NTEP), DOTS clinic at S.S.K.M Hospital, Kolkata. Total 270 patients were included in this study.

Result: We observed that, majority number of patients were Strongly Disagree (I feel hurt how others react to knowing I have TB) in without TB Stigma [109 (83.3%)] compared to with TB Stigma [5 (3.6%)] but this was statistically significant ($p < 0.0001$). It was found that, lower number of patients were Disagree (I lose friends when I share with them that I have TB) in with TB Stigma [1 (0.7%)] compared to with TB Stigma [2 (0.7%)] but this was statistically significant ($p < 0.0001$). Present study showed that, lower number of patients had No opinion (I keep a distance from others to avoid spreading TB germs) in without TB Stigma [1 (0.8%)] compared to with TB Stigma [3 (2.1%)] but this was statistically significant ($p < 0.0001$). It was found that, lower number of patients had TB Stigma Hospital in without TB Stigma [2 (1.5%)] compared to with TB Stigma [13 (9.3%)] but this was statistically significant ($p = 0.0054$). We examined that, lower number of patients had TB Stigma neighborhood in without TB Stigma [5 (3.8%)] compared to with TB Stigma [67 (47.9%)] but this was statistically significant ($p < 0.0001$).

Conclusion: We concluded that the proportion of tuberculosis patients with perceived social stigma attending NTEP, the factors associated with stigma and the manifestations of stigma perceived by tuberculosis patients.

Keywords: Tuberculosis (TB), stigma and NTEP.

❖ **Title: A Survey on Emerging Online Educational Platforms among medical undergraduates - The New Normal**

Mode of presentation: Oral; **Theme:** Medical Education & Public Health Ethics

Presenting author:

▪ **Dr. Neha Chaudhary**, AIIMS Patna

Co-authors:

- Dr. Pragya Kumar, AIIMS Patna
- Dr. Naveen KG, AIIMS Patna
- Dr. Haripriya H, AIIMS Patna

Introduction: For undergraduate medical education, digital media has emerged as the predominant source of information and this supremacy has been further cemented during the COVID-19 pandemic



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which caused an unprecedented disruption in healthcare systems and medical education. Recent trends show a continuous increase in the usage of medical educational apps among students.

Objectives: To determine the prevalence of Online Educational Platforms among Medical Undergraduates studying in various medical colleges across India. **Materials and Methods:** A cross-sectional study design was adopted for the study. The study was conducted among medical undergraduates from five different medical colleges. A sample size of 414 was calculated and information from the participants was collected using an online questionnaire, which was disseminated using various social media platforms mainly WhatsApp.

Results: It was found that 85.8% of the students have used online study platforms and 31.3% preferred them over traditional classroom teaching. It was found that nearly 22.4% of students use these apps on daily basis and around 40% a few times a week. According to the data collected, the frequency and duration of usage increases during exams for 61.4% of the students. The apps seemed to satisfy their users as indicated by a very low dropout (11.9%) and high recommendation percentage (71.9%)

Conclusion: Even though online education platforms are well received among medical undergraduates for theoretical knowledge, their effectiveness for clinical practices still remains questionable. There is scope for further improvement by preparing the platforms as more clinically oriented and budget friendly

❖ **Title: Application of human-centred design approaches in public health: a scoping review**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Co – author :

Dr. Archisman Mohapatra, Executive Director, GRID Council

Co-authors:

- Dr Priyanka Pawar, Research Fellow, GRID Council
- Dr Ritika Mukherjee, Research Fellow, GRID Council
- Dr Divita Sharma, Research Associate, GRID Council
- Dr Archisman Mohapatra, Executive Director, GRID Council

Introduction: Contemporary public health challenges have posed themselves as ‘wicked’ problems despite collective global efforts for development and sustainability. These problems require human-centred approaches. Interestingly, public health research fraternity is gradually realising this, especially for problems requiring wider stakeholder engagements. Human-centred designing being a relatively new public health expertise, there is a need to explore avenues where these have been attempted with some success and to learn the nuances therein.

Objective: To explore areas of scientific enquiry where human-centred design thinking approaches have been used for public health causes.

Methods and Materials: We undertook a scoping review of literature on human-centred approaches in PubMed, Scopus and Web of Science. Our search was limited to humans and original articles. The articles were screened for eligibility by a team of researchers using Rayyan. From the final selection of articles,



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Results: 88 articles were analysed. The number of publications on human-centred designing in public health showed an exponential increase since 2019. Majority of articles involved researchers from high-income countries like USA, UK and Canada. However, articles emanated from communities based out of lower- and middle-income countries (LMICs) e.g., China, Brazil, South Africa, Kenya and India. Areas of enquiry ranged from development of health-tech (mobile and web-based) applications, health-system, disease and care management, and co-designing strategies for social mobilisation across equity dimensions. Though the papers mentioned using human-centred approach, most of them have not adequately explained all its 5 steps i.e., empathize, define, ideate, prototype and test, thus limiting reproducibility.

Conclusion: Human-centred approaches are in evolution and are likely to become more explicit as expertise and experience accrue. There is a need to build capacity for human-centred designing of programs among researchers in LMICs to address contextual wicked public health challenges. **Keywords:** human-centred approaches, design thinking, problem-solving, wicked problems, program designing

❖ **Title: Assessing perceptions on the burden and health systems preparedness for snakebite in Odisha, India: a qualitative study**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author :

- **Dr. Deepti Beri**, The George Institute for Global Health (TGI), New Delhi

Co-authors:

- **Sucharita Panigrahi** –TGI, New Delhi, India.
- **Jaya Singh Kshatri** – Scientist C, Regional Medical Research Centre – Indian Council of Medical Research (RMRC-ICMR), Bhubaneswar, Odisha, India
- **Jagnoor Jagnoor** - Head, Injury Division, TGI, New Delhi, India.
- **Sanghamitra Pati**– Director, RMRC- ICMR, Bhubaneswar, Odisha, India
- **Soumyadeep Bhaumik** – Senior Research Fellow, Injury Division; Co-Head – Meta Research & Evidence Synthesis Unit, TGI, India

Introduction: Snakebite kills 64,100 people in India annually. The true burden of snakebite remains unknown as most of the deaths occur outside health facilities. The Government of Odisha, a state in eastern India, declared snakebite a ‘state-specific disaster’ due to its high burden since 2015.

Objectives: We conducted a qualitative study to explore stakeholder perceptions on the burden and systems preparedness for addressing the issue and suggest areas for future research and funding to reduce the snakebite burden in the state.

Materials and Methods: We conducted 21 in-depth interviews with key stakeholders, including clinicians, academicians, community health workers, wildlife workers and snake rescuers. We anonymised interview data, developed coding framework and conducted thematic analysis using NVivo 12 software.

Results: The following four themes emerged based on interim results of 17 interviews– 1) There is discordance on the status of availability of snake anti-venom between clinicians, healthcare workers and



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the wildlife workers and snake rescuers. 2) There is a strong felt need, across all stakeholders, for community-based interventions for promoting use of formal healthcare system, increasing awareness about decreasing snake-human conflict and awareness on government scheme for snakebite death compensation. 3) Clinicians and health workers identified the need for training and support to address hesitancy to treat snakebite patients at the primary health centers. 4) Lack of funding (especially for awareness), partnerships, and coordination between government, community-based organisations, and advocacy groups was identified as a key challenge in Odisha.

Conclusion: There are multiple challenges at different levels for which there is a need for a state-specific strategy for addressing burden with dedicated funding. Such a strategy should focus on awareness and education of communities, training of healthcare workers, and strengthening of formal primary healthcare system of the state, which is first point of seeking care for snakebite.

Keywords: Snakebite, Odisha, Burden, Health systems, Qualitative, Perceptions

❖ **Title: Assessing the coverage and compliance of Mass Drug Administration in eliminating Lymphatic Filariasis : A study of an endemic district in Eastern Uttar Pradesh India**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Co – author :

Dr. Sanket Vilas Nandekar, JR Department of Community Medicine IMS BHU.

Co-authors:

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Introduction: Lymphatic Filariasis is targeted for elimination in India through mass drug administration (MDA) with diethylcarbamazine (DEC) combined with albendazole (ABZ). Our objective was to assess the coverage, compliance and causes for non-compliance towards MDA in an endemic district of U.P., Northern India.

Objectives: Objective of our study was to evaluate Coverage and Compliance of Mass Drug Administration Programme for Elimination of Lymphatic Filariasis in endemic district of eastern Uttar Pradesh (Gazipur), India.

Materials and Methods: A cross sectional coverage evaluation survey was conducted in 25 rural and 5 urban clusters of Ghazipur district using multi-stage cluster sampling technique. Data was collected in a semi-structured Performa from the individuals in selected households by interview technique. Bivariate analysis was performed to identify the factors associated with non-consumption of MDA drugs.

Results: A total of 1422 individuals were surveyed from the 30 randomly selected clusters of which 1401(98.5%) were found eligible for MDA at the time of round. Majority of participants were in the age-group of 15-59 years (67.0%) and were males (53.3%). The overall coverage of MDA (both drugs) among the eligible population in Ghazipur district was 58.5%. Compliance among those who had received both the drugs was 61.6% with effective coverage of 36.0%. The coverage was significantly higher in rural areas compared to the urban clusters ($p < 0.0001$). The most common reason for nonconsumption of drugs was fear of side effects (34.9%).



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Conclusion: Coverage and compliance towards MDA in Ghazipur district was found to be below satisfactory levels. Targeted Information Education and Communication (IEC) campaigns focusing on the safety of drugs and the necessity of MDA, and mass mobilization with effective monitoring and supervision is the need of the hour for effective coverage of MDA Programme.

Keywords: MDA, DEC, ABZ.

❖ **Title: Assessment of drinking water security in tea gardens of darjeeling district: A cross-sectional study**

Mode of presentation: Oral; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

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Co – author :

- **Dr. Sharmistha Bhattacharjee**, Associate Professor, NBMCH, Darjeeling

Introduction: Water security is important to life and human kind by supporting human well-being, political stability, women empowerment, environmental sustainability. Household level water security means the ability to access water without stress and supply from reliable, adequate and safe water for healthy livelihood.

Objectives:

- To determine proportion of water secure households in tea gardens of Darjeeling district using Household Water Insecurity Experiences scale (HWISE)
- To find out factors affecting water security in tea gardens of Darjeeling district

Materials and Methods: 320 households in 20 tea gardens through two-stage cluster sampling were included in the Darjeeling district, West Bengal. The 12-item Household Water Insecurity Experiences (HWISE) Scale was used to quantify water security. There are 12 HWISE items which measures water insecurity in last 4 weeks. Responses to each item are: never (0), rarely (1), sometimes (2), often and always (3). A score of ≥ 12 was considered as water in-secure household.

Results: Among 320 households, in 197 households (61.6%) households water security was present. 20.3% replied positively regarding worry about not having enough water for household needs, followed by 19.7% had to go without washing hands after dirty activities e.g., defecating or changing diapers, cleaning animal dung because of problems with water. Association between type of water source, distance to source and time spent for collection, expenditure on water, occupation of the head of the family, caste of the family were found significant.

Conclusion: Availability, accessibility, affordability were the factors behind low water security in the tea gardens of Darjeeling district. Continuous water supply at household level by implementation of National Rural Drinking Water Programme, rain water harvesting can be the possible solutions.

Keywords: Drinking water, security, tea

❖ **Title: Assessment of Kala-azar surveillance system at Vaishali and Muzaffarpur district, Bihar, September 2022**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:



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- **Sweta Roy, Anand Gautam, Ujjawal P Sinha, Khyati Aroskar , Kevisetuo Dzeyie, BP Subramanya,** World Health Organization, India

Co – author :

- **Satendra Prasad Singh, Satish Kumar, District Vector Borne Disease Control Office, Vaishali and Muzaffarpur**

Background: Visceral leishmaniasis (kala-azar) is a potentially fatal neglected tropical disease endemic in four states of India of which Bihar alone has 33 affected districts in 2020. The national kala-azar elimination programme aims to reduce annual incidence to <1/10,000 population at sub-district level by 2023.

Objectives: We assessed kala-azar surveillance of two affected districts, Vaishali and Muzaffarpur in Bihar having five government treatment-cum-reporting sites each to identify gaps and provide actionable recommendations.

Material and Methods: We described the district surveillance data using Kala-azar Management Information System (KAMIS) and assessed identified indicators with the U.S. Centers for Disease Control and Prevention guidelines between 1 January – 30 June 2022. We reviewed sub-district/block weekly and monthly reports for completeness, timeliness and data quality as per the programme. We also interviewed key informants including medical officers, supervisors and district vector borne disease officers using semi-structured questionnaire at all treatment-cum-reporting sites.

Results: As per KAMIS, there were 37 cases, median age 29 years (range: 4-67), males 19 (51%), residing in rural area 36 (97%). We identified 23/37 (62%) being notified by private/autonomous institutes. Among 260 weekly reports, 33 (13%) were timely, 52 (20%) were complete while 190 (73%) reports were not sent. Among 60 monthly reports, 29 (48%) were timely, 48 (80%) were complete. Of 24 key informants, 20 (83%) were aware of reporting protocol, 24 (100%) about case definition and treatment protocol. Reasons of sub-optimal reporting was designated person being engaged in other work 15/24 (62%) and being unaware of importance of nil reporting due to minimal case detection at facility in 11/24 (46%).

Conclusion: The kala-azar surveillance system in Vaishali and Muzaffarpur was sub-optimal for timeliness, completeness and data quality. We recommended review by district and capacity building of designated persons with increased testing at reporting sites and expanding the network with private involvement.

Key words – Capacity building, Kala-azar, Reporting, Surveillance system, Vector borne diseases, Visceral leishmaniasis

❖ **Title: Assessment of Pubertal changes in female students and physical activity in students of Middle and High Schools of Raipur City, Chhattisgarh.**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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- Dr. Prashant Jaiswal, Assistant Professor, Pt. JNM Medical college, Raipur (C.G)

Introduction: School health services are services provided by the health worker to students enrolled in schools, either within school premises or in a health service centre situated outside the school. School provides opportunities for the effective implementation of health services.

Objectives: Primary Objective-

To assess the Pubertal changes and menstrual hygiene in female students and physical activity in students of Middle and High Schools of Raipur City, Chhattisgarh.

Materials and Methods: This was an institution based cross-sectional study conducted in 20 schools of Raipur city. In which 15 were middle schools and 5 were high schools selected. The total study subjects of 400 (200 boys and 200 girls) were selected by cluster sampling method. A pre- designed, self-administered, semi-structured questionnaire was used for data collection which consisted of information related to basic details, and to assess the knowledge and practices on menstruation hygiene, Pubertal changes in female students and physical activity.

Results: This study found that 11% of girls think that menstruation is a disease and 52% girls think that they should not enter temples during menstruation. 38% students show participation in indoor games and 62% students do not, 57% study subjects said no to availability of physical activity breaks and 43% said no to availability of breaks for physical activity.

Conclusion: A simple action of health inspection and record keeping of data could lead to miraculous improvement in children health. Education boards should be advocated to issue directives to incorporate the health promotion into the school curriculum. Health promotion at school can use as a tool to introduce the concepts of timely prevention and health maintenance in young minds.

Keywords: School health, Menstruation, Physical activity

❖ **Title: Assessment of the baseline status of Quality of National Health Programs ongoing in the Urban Primary Healthcare Centres of Berhampur- An Observational Study.**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr Madhumita Bhakta, Post Graduate Student, MKCG Medical College and Hospital

Co – author :

- **Dr Sourav Parida**, Post Graduate Student, MKCG Medical College and Hospital
- **Dr. JN Panda**, Senior Resident, MKCG Medical College and Hospital
- **Dr Durga Madhab Satapathy**, Professor and HOD, MKCG Medical College and Hospital

Background: The Ministry of Health and Family Welfare has developed National Quality Framework to assess the quality of services for improvement and helps in the certification of facilities. National Quality Assurance Standards (NQAS) have been developed keeping in the specific requirements for public health facilities as well global best practices. The NQAS are broadly arranged under 8 “Areas of Concern”. These standards are ISQUA accredited and meet global benchmarks in terms of comprehensiveness, objectivity, evidence, and rigor of development.

Objectives: To determine the status of the Quality of National Health Programs ongoing in the Urban Primary Healthcare Centres of Berhampur.

Methods: Study design- Observational Study; Study period- October 2022 to March 2023.; Study setting- Urban PHCs of Ganjam District; Sampling- Universal Sampling; Sample Size- All Urban PHCs of Ganjam.; Study Tool- NHP component of NQAS checklist

Analysis- After assessing all the measurable elements, checkpoints, and marking compliance, scores of the department has been calculated.

Once scores have been assigned, department-wise scores were calculated for department and standards by adding the individual scores for each checkpoint. The final score was given in percentage, so it can be compared with other group departments.

The assessment scores are presented as Departmental Score card – Depicting the score card in the individual score.

Results

The NHP scores for each Urban PHC are as follows:

Ankuli	32.96
Aska Road	98.66
Aga Sahi	98.85
Baikuntha Nagar	97.52
Khodasingh	98.09

Conclusion: A facility’s national assessment is a long process, and so, it needs several arrangements to be made such as training of the external assessors for the assessment of facilities, sensitization of state nodal officers, facility doctors, and staff for this program, awareness of the program protocols and framework to the facilities, and long-term impact of programs.

Keywords

Urban Primary Healthcare Centres, National Quality Assurance Standards, quality

❖ **Title: Assessment of risk factors and perceptions of non-communicable diseases among adults in a rural area of West Bengal: A mixed-method study**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Soumik Roy

Introduction: The burden of non-communicable diseases (NCDs) like cardiovascular diseases, diabetes, hypertension, stroke and cancers have been rising in India, mainly due to increase in prevalence of various risk factors like tobacco use, alcohol intake, overweight, physical inactivity.

Objective: a) To estimate proportion of different NCDs among study subjects b) To identify association of NCDs with various risk factors if any. c) To asses perception regarding risk factors and curative aspects of NCDs.

Materials and methods: A mixed method study (quantitative → qualitative) was done in Hariharpara Rural Hospital for 1 month and a total 224 patients were selected who were satisfying inclusion criteria by complete enumeration from NCD clinic. For quantitative data they were interviewed using predesigned pretested semi-structured schedule framed on the basis of WHO STEPS framework. Data were analyzed with SPSS version 23.0 and binary logistic regression was done to identify association of



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NCDs with various risk factors. Qualitative exploration was conducted by focused group discussion to know their perceptions regarding risk factors & curative aspects of NCDs.

Results: In this study 60.26% were hypertensive, 30.35% were diabetic and 16.51% had other non-communicable diseases. Binary logistic regression model was done and found geriatric age group study subjects had 4.26 times more chances than their below counterparts and alcoholic had 3.21 times more chances than non-alcoholic of having hypertension which were statistically significant. In case of diabetes geriatric study subjects had 3.19 times more chances of having diabetes than their below counterparts which was statistically significant. Qualitative analysis revealed there were more inclination towards curative than preventive aspects of NCDs.

Conclusion: The development of NCDs had significant association with age and alcohol intake. The perceptions of study subjects were inclined more towards curative than preventive aspects of NCDs.

❖ **Title: Assessment of Satisfaction of Using Socially Marketed Health Consumables at Government Settings Among Beneficiaries in a Rural Area of Hooghly, West Bengal**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

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Introduction: India is committed to achieving universal health care for all by 2030. The objective of social marketing is to promote public health and its goal is to improve health for all, but there are some challenges like irregular availabilities, poor quality, improper marketing causes under-utilization of the government supplied health consumables.

Objectives: Present study envisages to estimate the proportion of beneficiaries utilizing the socially marketed health consumables and to find out the satisfaction level of beneficiaries and perception of stakeholders involved in health care services, about use of socially marketed products.

Materials and Methods: A community based, Mixed-Methods study (Convergent parallel design) was done between December 2022 to February 2023, where Quantitative component was carried out by



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face-to-face interview among 150 beneficiaries selected by two stage cluster sampling; and Qualitative component was done by 4 Key informant interviews (KII) among stake holders involved in health care services (medical officer, pharmacist, public health nurse). Statistical data, analyzed by descriptive statistics using SPSS 16 version and Microsoft excel. Institutional Ethics Committee clearance was obtained.

Results: Ever use of Government supplied OCP, Chhaya, Antara, Condom and IUCD were done by only 8%,4%,2.7%, 8% and 20% of beneficiaries respectively. The major causes of irregular use were lack of awareness regarding availability (OCP-13.3%, Chhaya-18.7%, Emergency contraceptive pills -37.3%, Antara-32%, condom-17.3% & IUCD- 17.3%) and Inadequate promotion (OCP-26.7%, Chhaya-29.3%, Emergency Contraceptive pills-14.7%, Antara-18.7%, Condom-5.3%, IUCD-16%) and poor faith regarding quality (Condom-21.3%, OCP- 4%). Key informant interviews among health care personnel revealed avoidance of using contraceptive methods among beneficiaries and frequent unavailability of some socially marketed health consumables were the predominant causes of reduced uptake of those products by beneficiaries.

Conclusions: Proper social marketing strategies, Information Education and Communication (IEC) activities are required to improve quality, acceptability, availability and marketing of health consumables.

Keywords: Social marketing, socially marketed health consumables, OCP, Contraceptive methods.

❖ **Title: Assessment of WHO Supported Measles Surveillance System, Patna, Bihar, India 2022**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

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Co – author :

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- **Ismeet Kaur**
- **Kevisetuo A Dzeyie**
- **Pareesh Kantharia, B P Subramanya**

❖ **Title: Awareness regarding utilization of Untied Funds among the members of Mahila Arogya Samitis (MAS) in Delhi.**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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- **Monica Rana**, Director. Health &Family Welfare, DSHM, Delhi.

Introduction: Mahila Arogya Samitis (MAS) are one of key community interventions in slum level under National Urban Health Mission. It is an all women led group who generate awareness on locally relevant



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issues related to health, hygiene, nutrition, water, sanitation and social determinants. An annual untied fund of Rs 5000 is given for undertaking different activities related to health, sanitation and nutrition, aimed at improving the health of the slum.

Objectives: To assess the knowledge of members of MAS regarding allocation of fund and utilization of untied fund as compared to the guidelines and the problems there in.

Materials and Methods: Cross-sectional study was conducted in South Delhi district by selecting all 135 MAS members, functioning under two Urban Primary Health Centers, using 100% sampling technique. MAS members were interviewed using pre-tested semi-structured questionnaire and records were reviewed. Data analysis was done by Microsoft excel etc.

Results: 44% were aware about the untied fund. 56% members had no awareness of untied fund and the amount. All members had received induction training. Utilization of fund pattern was very poor. Main problems faced by members were administrative issues (93%), irregular receipt of funds (69%), inadequate funds (54%), lack of interest (37%), coordination with President (34%) etc.

Conclusion: Awareness levels and utilization of untied fund among study participants is poor hence require quality training and strong supportive supervision.

Keywords: Mahila Arogya Samitis, Untied Fund, NUHM

❖ **Title: Bottlenecks in Implementation of National programme for prevention and control of cancer, diabetes, cardiovascular diseases and stroke (NPCDCS) in Raipur, Chhattisgarh. (Mixed method study)**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

First author:

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Co-authors:

▪ **Dr. Gouri Kumari Padhy**, Additional Professor, Department of Community and Family Medicine, All India Institute of Medical Sciences, Raipur.

Introduction: Non Communicable diseases (NCDs) are responsible for the total 82% of the entire disease burden of the world so it is emerge as a public health problem. NCDs account for 62% of total disease burden and 42% all deaths in India. So, to identify the barriers in implementation and utilization of NPCDCS program this study was conceptualized.

Materials and Methods: It is a cross sectional mixed method study (**Qualitative and Quantitative study**) conducted in four blocks of Raipur district. The Beneficiaries of NPCDCS program and healthcare providers working in public healthcare facilities (District Hospitals, CHC, PHC & Sub centres) was the study population. In depth interview of 15 stakeholders and Focus Group Discussions was conducted at DH, CHC, PHC, and sub-centres. Statistical analysis was done by Atlas.ti software.

Results: After assessing the NPCDCS program in four blocks of the Raipur, it was found that there is lacking of human resources, infrastructure and materialistic resources in most of the centres. The staff was not having subject wise training of NPCDCS program. IEC material is available in the various centres but the proper use of it is lacking

Conclusion: The study identified the need for strengthening infrastructure and manpower to provide quality care for non-communicable diseases. Identification of loop-holes and bridging the gap by corrective action will make the program successful.



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Key words: NPCDCS, human resources, infrastructure, non-communicable diseases

❖ **Title: Burden of care perceived by the principal caregivers of refractory epileptic patients and its determinants in a tertiary care hospital in Kolkata: A mixed method stud**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

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- **Dr. Sukanta Manna**

Introduction: Refractory epilepsy causes premature mortality and residual disability. Along with the patients the principal caregivers are also put into considerable suffering because of the need of lifelong care and support of these patients. Distress and burden lead to prolonged consequences of poor physical and emotional health among the caregivers which are often unreported.

Objectives: This study was conducted to estimate the burden of principal caregivers of refractory epileptic patients and to evaluate the factors influencing them.

Materials and methods: A descriptive, observational mixed-method study was conducted among 110 principal caregivers of refractory epileptic patients attending the epilepsy clinic at Neuromedicine OPD in IPGME&R, Kolkata, during January-February 2023. After obtaining informed consent, the quantitative data were collected using a pre-designed, pre-tested questionnaire comprising the socio-demographic details of the caregivers and Zarit Caregiver Burden Scale. A focus-group-discussion (FGD) was conducted with 6 participants for qualitative data.

Results: 74% (81 out of 110) of the principal caregivers were females, 84.5% were from Hindu religion, 39% were illiterate and 21.8% had primary level of education. 43.6% had continued caring of the epileptic patient for more than 10 years. More than half of the participants (52.8%) experienced severe level of caregiver burden. As per Modified BG Prasad socioeconomic status scale January, 2022, among the participants, 50% were belonged to Class IV and 42.7% were belonged to class III. Education and per capita family income were found to be significantly associated with care giver burden. Qualitative data from the FGD indicated that caregiver burden increased with the rise in medical expenditure resulting from inadequate and irregular government supply of medicine.

Conclusion: Counselling and destressing mechanisms should be arranged for these caregivers, whenever, they encounter the health system. Peer and support groups among the caregivers can also help them cope with the burden of care.

Keywords: Caregiver Burden, Epilepsy, Refractory, Zerit Scale



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❖ **Title: Can refill rate be used to predict control status among people with hypertension at primary health care level – Record-based exploratory study**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

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Co-authors:

Dr. Sitanshu Sekhar Kar, Professor and Head, Dept. of Preventive and Social Medicine, JIPMER, Puducherry

Introduction: In India, only about 12% people with hypertension have their blood pressure (BP) under control. Uncontrolled BP is one of the main risk factors for cardiovascular diseases and are responsible for one-third of total deaths in India. Hypertension management requires patients to take prolonged medication to achieve control status. Non-adherence to prescribed medication contributes to increased morbidity and mortality. Health facilities should have information system on medicine refills to monitor control status.

Objective: To assess the association between refill rate and hypertension control status among individuals receiving care from primary health centre.

Materials and Methods: We reviewed records of people with hypertension seeking care at Urban Primary Health Centre of a tertiary care teaching hospital in Puducherry. Number of visits for medication refill of every month over last 12 months and blood pressure recordings at each visit was collected. Individuals having SBP under 140 mmHg and DBP under 90 mmHg were defined to have controlled BP. Individuals who had controlled BP for ten or more months were defined to have adequate control. We entered data in Microsoft Excel and analysed using STATA software. Control status was expressed in proportion with 95% confidence interval (CI). Univariate logistic regression was done to assess the strength of association.

Results: Out of 590 people with hypertension, mean age was 58 years, 72% were women and nearly half of them were on treatment for more than 5 years. Only 10% individuals with hypertension had adequate control status. Mean number of visits over last one year for medication refill was 8 times. With increase in refill rate there was improvement in control status of hypertension (OR=2.26, p-value<0.05).

Conclusion: Health records can be considered as a feasible option to assess medication utilization and refill adherence, and to improve the hypertension control status.

Title: Can refill rate be used to predict control status among people with hypertension at primary health care level – Record-based exploratory study

❖ **Title: Causes and Concerns of COVID vaccine hesitancy (strong vs. some) among rural population of Uttar Pradesh one year after roll out of vaccination programme: A community based mixed method study**

Mode of presentation: Oral; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

Dr. Bhola Nath

Co-authors:

- Chandra Mauli Mishra
- Tarun Chhabra
- Abhay Singh



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Introduction: Vaccine hesitancy is always observed in new vaccines (e.g., Ebola, dengue, malaria, etc.), but the problem of COVID-19 vaccine hesitancy is multifaceted. Though the factors related to COVID vaccine hesitancy were time, context, type of vaccine, area-specific, and different systematic reviews conducted at different timelines had highlighted multiple factors associated with it. There is a scarcity of studies showing the characteristics of the population who express some or severe hesitancy, significantly more than one year after the rollout of the COVID vaccine. **Objectives:** To determine the factors and concerns related with strong and some COVID vaccine hesitancy, their grading using RII and their association with socio demographic factors. **Material & Methods:** The present study was a mixed method community-based cross-sectional study conducted in the 1st quarter of 2022 among COVID vaccine hesitant participants using multi-stage cluster sampling. A modified predesigned pretested semi-structured questionnaire developed by Syed Alwi SAR et al. was used for quantitative data collection, whereas FGDs were conducted for qualitative data collection. **Results:** A total of 8,521 people were initially screened for vaccine hesitancy from 10 selected villages to reach the required sample size (n=373). Self-reported vaccine hesitancy was some hesitancy 123(33.0%) & strong hesitancy 250 (67.0%). Higher level of education (AOR= 2.516, p=0.017) & multiple sources for COVID-19-related information (AOR=9.073, p=0.003) had strong COVID-related vaccine hesitancy. In contrast, a history of chronic disease (AOR=0.381, p=0.013) and no exposure to social media (AOR=0.421, p=0.005) as a source of COVID information had comparatively less vaccine hesitancy. Afraid of side effects of the vaccine (RII=0.78), vaccine-associated COVID-19 infection (RII=0.77), and insufficient information about COVID-19 (RII=0.76) were the major three concerns about the vaccine. The logistic problem, lack of trust in govt system, and misinformation on social media were some of the central themes highlighted by the focus group discussion (FGD). **Conclusion:** Addressing the concerns of strong hesitant will be helpful for the successful implementation of the COVID vaccine precautionary dose or booster dose (if required) program in future in the country.

Keywords: COVID-19, Vaccine hesitancy, mixed method study, FGD, Relative importance index

❖ **Title: Change in knowledge, attitude and practices with regards to the anthrax disease in tribal communities of Odisha: evidence from a cross-sectional comparative study**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Hari Ram Choudhary, ICMR – Regional Medical Research Centre, Bhubaneswar

Co-authors:

Debaprasad Parai, Matrujyoti Pattnaik, Jyoti Shandilya, Jaya Singh Kshatri, Arun Kumar Padhi, Sanghamitra Pati & Debdutta Bhattacharya

Introduction: This study is a comparative analysis of baseline and end line survey to assess the knowledge, attitude and practices with regards to the anthrax disease among the communities before and after demonstration of interventions based “One Health” approach for elimination of human anthrax in an endemic district of Odisha.

Objectives: The primary objective of the study was to develop and implementing a package of coordinated interventions using “One Health” approach to demonstrate a replicable strategy for elimination of animal to human disease transmission of Anthrax in an endemic district of Odisha.



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Materials and Methods: A total of 2511 respondents from 112 villages of 14 blocks were interviewed for the study using a structured questionnaire by multi-stage sampling method. Descriptive statistics were reported and logistic regression was performed to estimate the relationship between the variables and knowledge of anthrax.

Results: Out of 2511 participants in the study, 72.08% were male and about half were illiterate. Most of the respondents (54.56%) were involved in agriculture as an occupation. Majority of the respondents (75.39%) were involved in agriculture and daily labour as an occupation. Knowledge about anthrax was about 20.26% at baseline and it has increased to 53.64% after the demonstration of interventions based on “One Health” approach for elimination of human anthrax. Livestock vaccination against anthrax was reported 21.29% at baseline and now the coverage of vaccination reached to 66.50% at the end line survey. 84% of the livestock owners disposed the animal carcass by burial method.

Conclusion: The study findings indicates that the community member’s knowledge of cause, symptoms, transmission and prevention of anthrax disease has increased significantly after the demonstration of interventions based on “One Health” approach for elimination of human anthrax in Koraput district of Odisha.

Keywords: Anthrax, Knowledge-attitude-practices, One Health Approach, Tribal, Koraput

❖ Title: Common Mental Disorders: Prevalence and Perspectives: A Mixed Method Study from East Delhi

Mode of presentation: Oral; **Theme:** Menatal & Geriatric Health

Presenting author:

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Introduction: The awareness about mental health is limited, and is considered a taboo in the community.

Objectives: To find out the prevalence of common mental disorders in an urban resettlement colony of East Delhi, associated sociodemographic factors and community perspectives towards mental health.

Materials and Methods: Mixed method study having quantitative and qualitative component, conducted in urban resettlement colony of East Delhi from January 2021 to August 2022.

In the quantitative part of the study data were collected using Hindi version of SRQ-20 questionnaire from 130 adults aged 18-59 years to find out prevalence of common mental disorders. Sociodemographic information was collected using a pre-tested, semi-structured, interviewer administered questionnaire. For qualitative part of the study, a total of 12 key community members (local medical practitioners, ASHA workers, priest, school teachers) were interviewed using a in-depth interview guide.

Results: The prevalence of common mental disorders was found to be 18.5%.

Predictors of common mental disorders were lower socioeconomic status (O.R: 9.750; 95% C.I: 2.0-46.7), hypertension (O.R: 7.148; 95% C.I: 1.8-26.9), chronic health condition (O.R: 18.0; 95% C.I: 4.1-79.1), and having impact in personal life due to COVID-19 pandemic (O.R: 3.5; 95% C.I: 1.1-11.0).



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Participants believed that mental illness had increased during COVID-19 pandemic and subsequent lockdown due to job losses, difficulties in getting job and a sense of panic created by news channel. Women were disproportionately affected due to their susceptibility to violence and less opportunity to improve health. Beliefs such as medication changes one's personality, mental health automatically improve with time were some of the reported barriers for professional help.

Conclusion: Common mental disorders are a significant public health problem which is curable and preventable. A major problem is lack of awareness and stigma that is attached to mental illness.

Keywords: Mental Health, prevalence, perspective

❖ **Title: Comparative Cross-Sectional Study of Preferred Learning Approaches Among Degree and Professional Courses in Etawah District.**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Jyoti Kumari, PG JR 1, UPUMS, Saifai

Co-authors:

- **Dr P.K Jain**, Professor, UPUMS, Saifai
- **Dr Sandip Gupta**, Professor and Head, UPUMS, Saifai
- **Dr Rashmi Bhujade**, Associate Professor, UPUMS, Saifai

Introduction: Learning is described as "the process by which knowledge is generated through the transformation of experience." A learning approach is a method of learning that is used to acquire information. It is rightly said by Confucius I HEAR and I FORGET, I SEE and I REMEMBER, I DO and I UNDERSTAND. As everyone has got different preferred learning approaches makes it is very challenging to impart a large amount of knowledge in a limited time to maximum number of students, so that it is retained, remembered and effectively interpreted. That's why an understanding of the favored method is must. **Objectives:** To assess the diversity of learning styles amongst professional and degree college undergraduate students. **Materials and Methods:** A comparative cross-sectional study was done in a professional & a degree college. Sample size was 628 (314 students from professional college & degree college each). Data was collected with the help of google form containing Socio-demographic information & VARK (visual, auditory, read/write and kinesthetic) questionnaire for assessing the preferred learning method. Data was analysed with the help of SPSS-26. **Results:** The professional college students have preferred "kinesthetic approach" for learning while degree college student's preferred learning approach was found to be "Aural" and this difference in preferred approach was statistically significant as after application of z test (for proportion) we get the P value <0.05 for each proportion. **Conclusion:** Knowledge of preferred learning Methods is need of the hour as it can make a difference in the academic performance/ outcome of students. We can utilize this knowledge in making new education policy by including these methods according to their preference in respective streams.

Keywords- Learning preferred approach, Visual, Aural, Read/write, Kinesthetic, Student.



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❖ **Title: Comparison of Neck circumference with Body Mass Index (BMI) and Lipid profile of patients attending tertiary care hospital - A cross-sectional study**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Vinoth Kumar Kalidoss, Tutor, Dept of CFM, AIIMS Mangalagiri

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Introduction: Dyslipidaemia has become a significant health problem, often affecting individuals psychosocially and physically. Individuals with morbid obesity risk developing morbidities such as diabetes, heart diseases, stroke and fatty liver. ICMR-INDIAAB study showed that around 79% of the Indian population have any one abnormal lipid parameter. The anthropometric indicators like waist-to-hip ratio and Body Mass Index (BMI) used indicators for dyslipidaemia. Recent studies showed that neck circumference as reliable indicator of dyslipidaemia.

Objectives: This study aims to correlate the neck circumference with the lipid profile and body mass index of the adult population attending tertiary care hospitals.

Materials and Methods: A cross-sectional study was conducted in the outpatient department of community and family medicine AIIMS Mangalagiri. Persons more than 18 years attending the outpatient department for lipid profile investigation were included in the study. persons with neck swelling or injury, shoulder injury, pregnant women, hormonal disorders, congenital anomaly were excluded. Expecting a correlation coefficient of more than 0.5 between neck circumference and total cholesterol with 5% alpha error and 90% power, the sample size was calculated to be 98 using nMaster software.

Results: Majority of study participants belongs to 41- 60 years age group (50%) and half of them were male. The mean BMI and neck circumference of the study participants were 29 and 36.6cm. Majority of participants were obese (63%) and 28% were overweight. Among the study participants around 87.8% were had at least one abnormal lipid profile. The neck circumference has good positive correlation with BMI. The neck circumference had significant positive correlation with total cholesterol, triglycerides, low-density lipid level and negative correlation with high-density lipid level.

Conclusion: The neck circumference was statistically correlated with all anthropometry and lipid profile. The neck circumference can be used screen for obesity and dyslipidaemia.

Keywords: Neck Circumference, Dyslipidaemia, Lipid Profile

❖ **Title: Competency assessment as a tool for training need assessment for ensuring capacity building of front line health care workers in select district of Madhya Pradesh**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

- **Dr. Neha Ahirwar**,



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❖ **Title: Compliance and implementation barriers of Weekly Iron & Folic Acid (WIFS), Bi-annual Deworming among School going Adolescents of Deoghar, Jharkhand**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. G Jahnavi,

Introduction: Weekly Iron & Folic Acid Supplementation (WIFS) is an evidence-based programmatic response to the current anaemia condition among teenage girls and boys. Objectives: To assess compliance to WIFS among school going adolescents and to explore implementation barriers in public schools of Deoghar.

Materials and Methods: A mixed-method observational study was conducted among school going adolescents. The selection of schools was done using simple random sampling. The study questionnaire included socio-demographic, knowledge (34 items) ($\alpha=.894$) and attitude (2 items) ($\alpha=.711$) regarding iron deficiency anaemia, awareness regarding WIFS, and deworming (20 items) ($\alpha=.783$) and practice related to WIFS with qualitative components. The data was analyzed using statistical package for social sciences (SPSS) (version 16.0).

Results: Compliance to WIFS and bi-annual deworming was observed in 27.2% and 68.0% of the school students respectively. In multivariable logistic regression analysis the attributes affecting WIFS compliance were observed to be gender (males) [adjusted odds ratio (AOR): 1.8 (1.1-2.9)], fathers educational status [AOR: 2.2 (1.2-3.7)], caste [AOR: 2.5 (1.3-4.7)], socioeconomic status (AOR: 2.2 (1.3-3.6)), adequate knowledge [AOR: 2.6 (1.5-4.2)] and positive attitude towards anaemia [AOR: 2.7 (1.5-4.6)]. Factors facilitating biannual deworming were observed to be religion [AOR: 2.6 (1.3-5.1)]; diet type [AOR: 2.3 (1.2-4.7)] and positive attitude towards anaemia [AOR: 2.1 (1.4-3.3)]. The major implementation barriers emerged were irregular supply of medication and lack of awareness among students.

Conclusion: Periodic sensitization and uninterrupted drug supply are warranted to ensure effective implementation of WIFS in the study area.

❖ **Title: Delays In Diagnosis And Initiation Of Treatment Among Adult Tuberculosis Patients Registered Under NTEP In Urban Visakhapatnam: A Mixed Method Study**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Tumarada Manoj, TATA Medical College, Jamshedpur, Manipal Academy of Higher Education, Manipal, India.

Co-authors:

Sai Manoj M.D, SENIOR RESIDENT, Department of Community Medicine, Manipal TATA Medical College, Jamshedpur, Manipal Academy of Higher Education, Manipal, India.

Introduction: Tuberculosis (TB) is a chronic communicable bacterial disease. It is important to know the duration of onset of symptoms, diagnosis, and causes of delay in treatment-initiation of tuberculosis patients. Along with conventional indicators, the magnitude of treatment delay would prove as a performance indicator for tuberculosis (TB) control in high TB burden countries like India. Our understanding of the health system and patient factors responsible for the time delay in diagnosis and treatment is limited.

Objectives:



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1. To assess the proportion of patients who had delays in Seeking Medical Care, diagnosis and treatment.
2. To identify the reasons for delays in Seeking Medical care, diagnosis, and treatment .
3. To explore perceptions of Health care providers and patients on delays in diagnosis and treatment and probable solutions.

Materials and Methods: Mixed Method study ,Concurrent triangulation design in urban Tuberculosis units with a sample of 132 patients was done.

Sampling technique: For quantitative data, Line listing of all TB patients using a simple random sampling method,. For qualitative data - purposive sampling .

Study tools: Quantitative Data was collected using a predesigned, pretested semi-structured questionnaire while qualitative data was obtained through in-depth interviews ,Key informant interviews and focused group discussions .

Results: A total of 102 patients from 8 T.U's were included.The Mean age of study population was 39.40 ±14.68 years.A median delay of 30 days (IQR - 59) was observed in Seeking Medical Care. A median delay of 1day (IQR - 1) was observed in arriving at a diagnosis. A median delay of 30 days (IQR - 43) was observed in Total patient pathway duration,

A total of two themes were derived through thematic analysis.

1.Reasons for delays. 2.Proposed solutions.

Conclusion: Overall, there were minimal delays observed in the study population in terms of diagnosis and treatment initiation, but still gaps were seen pertaining to contact screening, patient awareness factors. Focus on these aspects will drive the NTEP to achieve the Vision of "END TB 2025".

Keywords: Diagnostic delay,NTEP,Treatment delay,Tuberculosis

❖ Title: Demographic characteristics and vulnerabilities amongst geriatric population under Rural Health and demographic surveillance site in Maharashtra

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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- Patil K. Ex-Biostatistician Bhratai Vidyapeeth DTU Medical college Pune; Bhattacharjee T. London School of Hygiene & Tropical Medicine;
- Bhujbal S. KEMHRC Pune

Introduction: The increase in human longevity in 20th century has resulted in the phenomenon of population ageing all over the world. The population over the age of 60 years has more than tripled in last 50 years in India and will relentlessly increase soon. Years 2020-2030 have been declared the UN Decade for Healthy Ageing. The number of geriatric women has outnumbered elderly men. Objectives: To assess the demographic factors, and morbidity pattern amongst the geriatric population residing in rural HDSS site.



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Material and Methods: It was a community based cross sectional study conducted between January-June 2019. Study participants were residents aged 60 years or above (geriatric population) belonging to 13 villages under the field practice area of Rural Health Training centre of a private medical college. The data collection was done by trained field workers via house-to-house visits using pretested, semi structured questionnaire incorporated into the software application developed on world bank survey solution website. The form labels were multilingual- English and Marathi, Quality control was done through random periodic resurveying of the households by the supervisors, to control the human error in data entry. **Results:** There were total 13,930 households with 46,571 participants in the HDSS area. Out of these, 3,372 households had a total of 1,130 (7.24%) family member aged 60 years or above. Majority i.e., 81% (913/1130) of the geriatric population were females of which 75.57% (690/913) were illiterate. One third (33.51%) of this geriatric population was widow/widower. One fourth (24.66%) belonged to nuclear/single parent/other type of family, 93.72% possessed yellow/orange ration card.

Conclusion: The geriatric population of this rural HDSS constitutes 7.40% of the total population, majority being illiterate widow females, one fourth belonging to family which may be risk of economic vulnerabilities and morbidities thus geriatric care programme and policies should be more gender sensitive.

Keywords: female, widow, widower, morbidity, yellow ration card, orange ration card, family

❖ Title : Diagnostic Accuracy of Mid Upper Arm Circumference in Determining Wasting Among 6 - 59 months Children

Mode of presentation: Oral; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Huda Siddiqui, Junior Resident, Community Medicine

Co-authors:

- **Dr S.D. Kandpal**, Prof and HOD
- **Dr Arvind Kumar Singh**, Prof (Jr grade)
- **Dr Neha Thakur (Rai)**, Associate Professor

Introduction: In countries with a high prevalence of undernutrition, timely, accurate screening at the community level is essential to identify children with wasting. Mid Upper Arm Circumference (MUAC) is an easy tool requiring less skills and equipment compared to WHO Weight-for-Height Z (WHZ) Score. However study on the diagnostic accuracy of MUAC estimating acute malnutrition is scarce.

Objectives:

1. To estimate diagnostic accuracy of MUAC against WHO WHZ Score for assessing wasting in 6 - 59 months children.
2. To study agreement between Mid Upper Arm Circumference and WHO Weight-for-Height Z Score Among 6 - 59 months children.

Materials and Methods: This cross-sectional study with an aim to study 630 children is ongoing and part the sample collected till date i.e. 300 is being used for the calculations of results. The study area has been chosen by multistage random sampling. Weight, height and MUAC is measured for children 6- 59 months old. Sensitivity and specificity of MUAC and WHZ will be calculated and Kappa agreement will be calculated between WHO WHZ score and MUAC.



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Results: The study is presently under process and the results are awaited.

Conclusion: Conclusion will be drawn after the results.

Keywords: MUAC, WHZ, Malnutrition, Wasting

❖ **Title : Health Systems Research, Healthcare Management, Health economics & Health Informatics**

Mode of presentation: Oral; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Abhishek Guhey

❖ **Title : Effect of lifestyle on Body composition and the prevalence of prediabetes in obese patients: a lifestyle medicine approach**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

▪ **Dr. Rabbanie Tariq Wani**

Introduction: An interdisciplinary, standardised "lifestyle medicine intervention programme (LMIP)" that targeted physical activity as well as dietary and behavioural modifications was offered to 4451 obese prediabetic patients in the current study.

Objectives: To investigate the effects of an interdisciplinary standardized lifestyle program addressing physical activity and changes in dietary and lifestyle behaviour in 2,227 obese prediabetic participants
Materials and Methods: Cardiopulmonary fitness, metabolic parameters (TC, LDL, HDL, and FBG), and assessments of obesity (BMI, waist circumference) were evaluated both before and after the intervention period.

Results: Of the 4451 participants who were prediabetic at the start of the intervention, 1602 no longer met the criterion for prediabetes and had normal HbA1c values post intervention. Data analysis revealed that the lifestyle medicine intervention programme (LMIP) significantly enhanced physical fitness (+13.8%), decreased body weight (-8.5%), and decreased waist circumference. According to data from the database, patients who achieved normal glucose regulation throughout the intervention had a considerably decreased likelihood of acquiring T2DM over the course of the ensuing five years. Increased physical activity of all kinds was strongly linked with pre-diabetes reversal across all therapies ($p < 0.001$).

Conclusion: In obese and prediabetic patients, the clinical benefits are expected to reduce the prevalence of a full-blown metabolic syndrome and the risk of developing diabetes. Standardized programmes, centralised coordination, and funding from health insurance seem to be essential elements of a successful intervention.

❖ **Title: Effectiveness of "Front of Package labels" (FOPL) on packaged food on parental decision of choosing food items for children in Jamshedpur City.**

Mode of presentation: Oral; **Theme:** Public Health Nutrition

Presenting author:

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Co – author :

▪ **Nikunj Gupta**, MBBS Student, Manipal TATA medical college, Manipal Acedamy of Higher education, Manipal, Karnataka.



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- **Dr Sachin Kumar Patil**, Assistant professor, Manipal TATA medical college, Manipal Academy of Higher education, Manipal, Karnataka.

Background: Childhood obesity is a major risk factor for non-communicable diseases in adulthood. The consumption of processed and ultra-processed food has increased drastically. FOPLs are consumer friendly, more noticeable and easy to interpret. They can help parents make better food choices and inculcate healthier eating in children.

Objective:

- To compare the effectiveness of FOPLs over conventional NFL on making healthier choices for children by parents.
- To study factors affecting the utilization of the NFL.

Methodology: A cross-sectional study was conducted among 562 parents of school children in Jamshedpur. A predesigned structured questionnaire was circulated among parents by snowballing technique. Data regarding the demographic profile, utilization of NFL & the effectiveness of FOPL developed using coded GDA or reference Intake system was collected and analyzed using SPSS software.

Results: 47.8% of respondents were mothers and 36.7% were fathers. All the parents were literate. 90.8% of fathers and 20.6% of mothers were employed. 63% said both parents made decisions on the child's food. Biscuits (27.8%), fries/chips (33%), and chocolates (24%) were most commonly purchased. 87.9% were aware of NFL and 73.3% used it. 73.7% said that the information on FOPL is adequate whereas only 66.5% said it is adequate in NFL and was similarly, 32.6% felt that they do not need any mathematical calculation to understand FOPL in comparison to NFL. 48.2% felt the NFL was time-consuming.

Conclusion: FOPLs are found to be effective for making a decision as they are easy to understand, less time-consuming, and capture adequate information compared to NFL.

Keywords: Nutritional labels, packaged food, FOPL, decision making.

❖ **Title: Effectiveness of Activity Center for Senior Citizens in Bhubaneswar, Odisha and its impact in improving the Quality of Life of the Elderly**

Mode of presentation: Oral; **Theme:** Menatal & Geriatric Health

Presenting author:

Dr. Prashansa Dash, PhD Scholar, KIIT University, Bhubaneswar, Odisha

Co-authors:

- Prof Manas Ranjan Behera, Associate Professor, KIIT University, Bhubaneswar
- **Ms Bharati Chakra**, State Head, Helpage India, Bhubaneswar, Odisha, India

Introduction: Senior citizens' proportion has increased due to improvements in health care facilities. There is a need to create a social environment sensitive to the emotional needs of the elderly. Odisha is no exception to the demographic transition of population ageing both in numbers and proportion of the population. With an aim to provide recreational activities and engagement to these elderly persons, Tata Trusts and HelpAge India along with Govt. of Odisha, launched a multi-activity centre, (Anand Center) for senior citizens where HelpAge India implemented the project. This base line study is conducted to capture the views of senior citizens about the activity center. The study has been carried out within 3-4 kms of CRP square in Bhubaneswar to understand the present scenario of senior citizens



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improving their Quality of Life and reduces their Disability Adjusted Life Year (DALY) .

Materials and Methods: The study employed both the quantitative and qualitative methods to gather information from both primary and secondary sources. Desk review, Primary survey, Data validation and analysis were used. The study was carried out in Bhubaneswar Municipal Corporation Area within 4 km radius from the CRP square where the activity center was implemented. To undertake the base line survey total 684 sample were taken through simple random sampling method.

Results: The study findings revealed that about 14.8% (101) senior citizens currently engaged in employment and rest are unemployed and among them 345 senior citizens (65.5%) need gainful employment. It is revealed that 29.86 percent (103) elderly persons have no skill, while rest are skilled. It has been found that only 10.23% elderly persons were aware about the Anand center implemented at CRP square. It was found that 90.94% respondents feel the need of the Senior Citizens Activity center in their neighborhood

Conclusion: In this location, the baseline survey found key areas that need urgent attention among government, civil society, private sector, and community with efforts and commitment to population ageing.

❖ **Title: Effectiveness of multi component modular intervention among adults with prehypertension in a village of Dakshina Kannada district - a community based interventional study**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

- **Dr. Neneh Feren PV**

Introduction: The main role of the criteria prehypertension[pre-HTN] (systolic BP: 120-139 mmHg), (Diastolic BP: 80-89 mmHg) in JNC 7 is to emphasize on the people who are at a risk of progressing to HTN. Objective: to develop a multi modular comprehensive intervention and to study its effectiveness among the prehypertensive individuals identified.

Materials and methods: This open label, parallel group (intervention and control) study consisted of 142 individuals diagnosed with pre-HTN at the baseline. A questionnaire was administered to assess the sociodemographic and baseline characters. The multi-modular intervention was given to the participants in the intervention group and the control group received standard routine care. Intervention sessions were held every 3 months. Both the groups were followed up every 3 months. At the end of 12th month, the results were analysed.

Results: In the Intervention group, there was a significant reduction of SBP and DBP when compared with control group at the 3rd follow up. An increase in the blood pressure levels of in the control group was noted at 3rd follow up . The intervention was beneficial in lowering the BMI and stress levels in experimental group when compared to the control group. The change scores of all the study variables showed a significant difference from baseline to the endline.

Conclusion: Our study showed that use of a multicomponent modular intervention among prehypertensive was helpful to reduce the blood pressure in a small group frequent follow ups is effective to attain a normal range of blood pressure in community settings.

Keywords: Hypertension, Non-communicable diseases



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❖ **Title: Efficacy of nutritional and lifestyle counselling on quality of life of patients visiting Geriatric OPD in a tertiary care hospital of western Maharashtra**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Nikunj Kumar Kansara, Asst Director Health, HQ 14 Corps (Med)

Name of co-authors with designation:

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2. Col Arun Kumar Yadav, Associate Professor, Dept of Community Medicine, AFMC, Pune
3. Col Vivek Aggrawal, Professor, Dept of Geriatric Medicine, AFMC Pune

Keywords: Elderly, nutritional counselling, lifestyle counselling, quality of life

Introduction: The Elderly population is among the most significant public health concerns in the present era, which demands more attention towards this vulnerable group. With advancing age, there comes an increase in chronic diseases, disabilities and psychological issues. Increasing life expectancy and decreasing birth rate have directed to surge in the elderly population worldwide. Therefore, the present study was done to determine the effect of nutritional counseling and healthy lifestyle program on patients visiting geriatric OPD.

Objectives:

Main objective of the study is to study the efficacy of nutritional and lifestyle counselling on Quality of Life of patients visiting Geriatric OPD in a tertiary care hospital of western Maharashtra.

Materials and Methods: Before and after intervention study was carried out on 33 older adults visiting geriatric OPD in Maharashtra, India. The participants attended three instructional classes on nutrition, physical exercise, sleep health, personal hygiene and prevention of injuries over three months. Data were collected through the standard Quality of life questionnaire (SF-36)

Results: The mean(SD) age of the participants was 71.91(4.97) year. Majority of the participants 25(75.76%) were male. There was a significant mean difference of PCS(Physical component scoring) and in MCS(Mental component scoring) was -9.85 (-12.41, -7.29), SD of 7.21 with p-value of < 0.01 and -16.85 (-29.61, -4.09) SD of 35.92 with p-value of < 0.01 respectively.

Conclusion: The evaluation between the quality of life in the older adults before and after the instructional intervention showed that continuing education for the aged based on a regular nutritional and healthy lifestyle suite is an effective strategy to overcome their age-related problems. Results of this study are often ignored but seem essential after learning about the findings of this study.

❖ **Title: Efficacy of two doses of Ivermectin tablet in treatment of scabies in comparison to once application of 5% permethrin lotion- A randomized controlled trial**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

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Co-authors:

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Introduction: Scabies is a contagious disease with potential community outbreaks; without early diagnosis and treatment, it will be a significant public health problem [1]. Currently, Topical (5% permethrin, 0.5% malathion in aqueous base, 10–25% benzyl benzoate, 5–10% sulphur ointment) and oral (ivermectin) are approved for the treatment of Scabies [2]. In our study, we assessed the Incremental Cost-effectiveness ratio of two doses of Ivermectin (200 microgram/day) oral dose given seven days apart in comparison with 5% Permethrin lotion local application one time in the treatment of scabies. **Materials and Methods:** Our study was a randomized open-labelled standard controlled parallel arm non-inferiority clinical trial conducted in the Bhubaneswar rural block on the outskirts of the capital city of Odisha from February 15, 2022, to May 15, 2022. Using the efficiency (20%) from Ranjkesh M R et al. study [3], 20% loss to followup and an exclusion rate of 10%, a sample size of 50 in each arm was recruited by a physician through convenient sampling from the OPD and extended health clinics of CHC Mendhasala. In the treatment arm, Tablet Ivermectin (200 micrograms per kg) was given on days one and seven at 30 minutes before food. In the control arm, 5% Permethrin ointment was applied locally from neck to toe at bedtime for 8 hours. The family members of the participants were counselled and provided with topical treatment. The participants were followed up after one month by another physician. The cure rate, compliance and ICER were calculated as per the intention-to-treat analysis. Ethical clearance was taken from the Institutional Ethics Committee (IEC) of AIIMS Bhubaneswar (T/IM-NF/CM&FM/21/149), and the trial was registered in CTRI CTRI/2022/03/040762.

Result: The cure rate of Scabies in Permethrin and Ivermectin arms are similar (Permethrin 84% (95% CI: 0.75-0.90) and Ivermectin 78% (95% CI: 0.68-0.85); P value: 0.71. The ICER for ivermectin over permethrin was 5.425(GOI).

Conclusion: Two doses of Ivermectin (200 mcg/kg) are not inferior to a 5% single permethrin application. Ivermectin can treat scabies in the community or primary care settings.

Keywords: scabies, ivermectin, permethrin, efficacy, treatment

❖ **Title: Evaluation of population-based screening under hypertension component of National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke of District Dhamtari, Chhattisgarh, India 2022**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

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Co – author :

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Introduction: One in four adults in India has hypertension. The National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Disease and Stroke (NPCDCS) was implemented in the district of Dhamtari, Chhattisgarh, in 2010.

Objectives: Evaluate the Population-Based Screening (PBS) for hypertension under NPCDCS in Dhamtari from May-July 2022.

Materials and Methods: We conducted a cross-sectional study among Community Health Workers (CHWs) responsible for PBS. We used simple random sampling (SRS) to select two community health centres and six primary health centres and subsequently chose two CHWs per facility. We also did a community survey among 220 individuals ≥ 30 years to estimate the coverage of hypertension screening under PBS. We chose 220 individuals from consecutive households in one village (rural) and one ward (urban) selected by SRS. We used a semi-structured questionnaire to collect data using open data kit software and analyzed using EpiInfo v7.2.5.0. We used the log frame matrix to define indicators and expressed them using percentages.

Results: Of the 16 CHWs interviewed, all (100%) had tablets for data entry and a functional Blood Pressure (BP) apparatus. Ten (63%) CHWs had the line list of individuals eligible for PBS, and 11 (69%) underwent refresher training in 2021. Of the 220 individuals interviewed in the community survey, 71 (32%) had self-reported hypertension. Among them, 37 (52%) were diagnosed in private facilities, and 70 (99%) were currently on treatment. Of the 131 individuals eligible for screening, 48 (31%) were screened for hypertension through PBS in the past two years.

Conclusion: Only one-third of eligible individuals were screened for hypertension through PBS. Nearly three out of ten CHWs did not have a line list of eligible individuals and did not undergo refresher training. Training the CHWs, and emphasising the importance of maintaining a line list can improve the coverage of PBS.

Keywords: Blood pressure, Hypertension, Program Evaluation

❖ **Title:** Evaluation of the 'Health in All Policies (HiAP)' approach as a solution in the hills of Uttarakhand for sustainable tourism, reaching SDGs, and solving climate change and health issues.

Mode of presentation: Oral; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

- **Dr. Mahesh Bhatt**, MD and CEO MMBSHS Trust

Introduction: Tourism in the hills is crucial for the economy, development, and employment. However, its effects on biodiversity and fragile mountain ecosystem simultaneously make it good and bad for community health, creating multiple complex sustainability and environmental issues.

Objectives: To explore the relationship between tourism, SDGs, and health as influencing and the possible role of driving activities of the WHO agenda of Health in All Policies (HiAP) approach to encourage sustainable tourism with community health benefits.

Materials and Methods: We reviewed SDG targets, five pillars (fundamentals) and their 20 areas of the tourism industry, 12 aims of the agenda of sustainable tourism, and HiAP activities in the WHO framework, their synergies, antagonism, supportiveness, and direct or indirect relationship to each other.



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Results: Directly or indirectly, 13 SDGs and 32 targets are related to health, and 2 SDGs and 21 targets to tourism; out of these 21 targets, 19 have a direct or indirect relationship to health, and out of these 19 targets, tourism helps health in 9 and cause harm to health in 10. For example, it helps decrease poverty (good for health) and will harm biodiversity (bad for climate and health). But interestingly, out of 20 areas of 5 pillars of sustainable tourism by UNWTP and UNEP, 16 areas can be managed under the WHO framework of HiAP, and it can help in achieving 9 out of 12 aims of the agenda of sustainable tourism. It can solve the complex but crucial dilemma of tourism, health, climate, and SDGs for hill communities.

Conclusion: Tourism in Uttarakhand is a big dilemma between the economy, development, health, climate, and sustainability. From a health perspective, all of them are necessary; HiAP will take care of tourism's negative environmental impacts and enhance its positive impacts for a better ecosystem and community health.

Keywords: SDGs, climate change and health, Health in All Policies, sustainable tourism, community health,

❖ **Title: Exploring the potential of Kalmegh in managing Non-Alcoholic Fatty Liver Disease: A promising randomized controlled trial**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Sanket Vilas Nandekar, JR Department of Community Medicine IMS BHU.

Co-authors:

- Dr Sunil Kumar, Associate Professor.
- Dr Devesh Yadav, Associate Professor.
- Dr Binay Sen, Assistant professor

Introduction: Non-Alcoholic Liver Disease (NAFLD) is a global health concern affecting significant number of populations worldwide. NAFLD caused by the built-up of extra fat in hepatocytes which is not caused by alcohol. It affects around 20-30% of the general population all over the world. Kalmegh is an exception herb from Classical Indian Literature having comprehensive action over liver by acting as Cholagogue, anti-inflammatory and antioxidant properties.

Objectives: Objective of our study was to evaluate the impact of Kalmegh supplementation on anthropometric parameters and dyslipidaemia in individuals with Non-Alcoholic Liver Disease (NAFLD).

Materials and Methods: NAFLD patients were enrolled from Gastroenterology OPD prospectively over a period of 1 year. Enrolled patients (n=91) were randomized to Group A and Group B and subjected to Kalmegh and placebo supplementation respectively for 3 months along with standard lifestyle modification and diet restriction common in both the group. Anthropometric measurements along with blood and radiological investigation were performed during each follow-up.

Results: Intra-group findings of the study suggest significant improvement ($P < 0.05$) in both the groups for weight, BMI, Waist/Hip ratio, Sr. Triglycerides, LDL & HDL when compared with baseline and subsequent follow-ups. In inter group comparison findings of this study there was significant difference ($P < 0.05$) for LDL at 2nd follow-up & HDL at 1st 2nd & 3rd follow-up. No significant difference ($P > 0.05$) was observed between the group for weight, Sr. Triglycerides & LDL/HDL ratio at any follow-up.



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Conclusion: No patient in both the group has shown any adverse reaction or progress in the disease pathogenesis. These results suggest that the above given intervention can be useful in improving the anthropometric parameters, lipid profile and can stop the progression of disease in NAFLD patients.

Keywords: NAFLD, LDL, HDL, BMI.

❖ **Title: Health and well-being of truck drivers in India: a mixed method study on the situation and associated factors for intervention planning**

Mode of presentation: Oral; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

- **Dr Ritika Mukherjee**, Research Fellow, Knowledge Management & Learning, GRID Council

Co – author :

GRID Council, K-Spire Solutions, People to People Health Foundation (PPHF), and AASTHA (Asia-Africa Supply Chain Transform Health Alliance)

Introduction: The 9-million vehicle strong Indian trucking industry transports ~67% of country's freight. But, the industry faces shortage of drivers. Trucker's profession is very demanding both physiologically and psychologically and hence, despised as an occupation. However, the problem is not adequately investigated.

Objectives: To explore the situation of and factors associated with health and well-being of truck-drivers operating across major highway routes in India for evidence-informed interventions planning.

Materials and Methods: We used mixed-methods approach and exploratory-cross-sectional design. We surveyed 177 full-time truck-drivers on long-duration (>24 hour) assignments sampled from 5 sites (n=35-36 per site) i.e., Faridabad (Haryana), Bengaluru (Karnataka), Dankuni (West Bengal), Jagatpur (Odisha) and Vasai (Maharashtra), along the Golden Quadrilateral. The survey tool, besides having customized items, also incorporated Sleep Condition Indicator (SCI) and Short Form-12 (SF-12) questionnaires. We conducted 4 in-depth interviews and 1 focus-group discussion with truckers at each site. Additionally, we interviewed 10 key-informants representing fleet-owners, corporate-users and truckers' association. Data was analyzed on STATA and NVIVO. The study was conducted in April-May 2022 with approval from IAPSM Ethics Committee.

Results: Truck-drivers commonly suffered from musculoskeletal (36.7%), fatigue and sleep (28.2%), vision (19.2%), respiratory (14.7%) and gastritis (9.6%) related problems. About 75.1% seldom got a place to sleep during transit; 09% had 'possible-insomnia' on SCI. On SF-12, 54.2% had low physical and mental health scores. About 64.4% were unaware if they had any health insurance. We noted that truck-drivers had inadequate health awareness and an attitude of self-neglect. About 98.3% did not want their family members to join this profession. Secured parking space, washrooms, health and emergency services and information booths were reported as most needed facilities. Stakeholders identified funding, consensus building, bureaucracy, dissemination, demand-creation, scalability and sustainability as actionable areas for intervention planning.

Conclusion: The problem is complex and requires human-centered designing of solution(s).

Keywords: occupational health, truck driver, India, mixed-method study



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❖ **Title: Healthier Food Purchase and its determinants in an urban resettlement colony of Delhi**

Mode of presentation: Oral; **Theme:** Public Health Nutrition

Presenting author:

- **Dr. Aswani Kumar Seth**, Junior Resident, Centre for Community Medicine, AIIMS, New Delhi

Co – author :

- **Dr. Anand Krishnan**, Professor, Centre for Community Medicine, AIIMS, New Delhi
- **Dr. Baridalyne Nongkynrih**, Professor, Centre for Community Medicine, AIIMS, New Delhi
- **Dr. Mohan Lal Bairwa**, Assistant Professor, Centre for Community Medicine, AIIMS, New Delhi

Introduction: Dietary risk, one of the major risk factors for the increasing burden of non-communicable diseases in India, is influenced by household food choices and purchases.

Objectives: To estimate the proportion of households purchasing different healthier food options during the last purchasing occasion and to identify its key determinants.

Materials and Methods: A community-based cross-sectional study was conducted in 250 randomly selected households of an urban resettlement colony in Delhi. A pre-tested semi-structured questionnaire with 22-item healthy food option inventory covering all major food groups was developed with each item getting a score of 1, to calculate the Household Healthy Food Purchase Score (HHFPS). Determinants of households with high HHFPS were identified by adjusted Odds Ratio (aOR) with 95% confidence interval (CI) using logistic regression.

Results: Purchase of healthier options in staple items like wheat flour with fiber (100%), plant-based oils (97.9%), unpolished pulses (96.2%), toned milk (94.5%) was high along with green leafy vegetables (100%) and fresh fruits (92.8%). Other healthier food items purchased less often were baked food products (1.3%), brown/multigrain bread (1.3%), frozen fruits and vegetables (1.3%), whole wheat noodles/pasta (1.3%), honey (2.1%), green tea (2.5%), tofu paneer (3.0%) and canned fruit juice with no added sugar (3.4%). Median (IQR) HHFPS was 7 (7-9). Monthly family income above INR 10,000 (aOR 5.5; 95% CI 1.4-22.6) and health consideration in food purchase decisions (aOR 2.0; 95% CI 1.03-3.70) were significantly associated with high HHFPS.

Conclusion: Healthy options were exercised for staples but not much for discretionary food items. Increasing awareness and improving affordability are likely to work in promoting healthier food purchases at household level.

Keywords: Food choice, Healthy food, Healthy food purchase

❖ **Title: How far a tribal district reaches: A three years secondary data analysis of Malaria data under National Vector Borne disease control program Koraput, Odisha, 2019-2021**

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Sunita Jena, Scholar-Intermediate Field Epidemiology Training Program Odisha-Cohort 1, ICMR National Institute of Epidemiology

Co-author:

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Introduction : Ten Southern districts of Odisha, including Koraput, report more than two-thirds of malaria cases. The district contributes 9.5% of the total disease in the state.

Objective: The study aimed to describe the epidemiology of malaria by time, place, and person and to estimate the incidence of malaria along with calculating the program indicators for NVBDCP from 2019-2021.

Materials and methods : We conducted a secondary data analysis of the data from the National Vector Borne disease control program of the district. Then we summarised the variables like sociodemographic characteristics and type of malaria as proportions. We calculated various program indicators. We analyzed data using MS Excel.

Results : 11,45,446 fever cases were tested, of which 10589 (1%) were malaria positive. Among the cases, 56% were males, and children less than five years contributed more to the cases. Malaria incidence reduced from 3.21 to 1.60 per 1000 population from 2019 to 2021. Every year, July records a higher count of cases and gradually declines by September. The Narayanpatna and Bandhugaon blocks contributed more than 50% of the cases to the district. The ABER remained around 25%, with an API of 1.6% in 2021. Over the years, the Test Positivity Rate of malaria seems to have declined from 1.10 in 2019 to 0.63 in 2021. Plasmodium falciparum contributed to 96% of the cases. Despite the decrease in malaria incidence, cases among pregnant women per thousand significantly increased from 1.4 in 2019 to 5.8 in 2021.

Conclusion : The high malaria incidence among children and pregnant women highlights the importance of targeting these vulnerable populations in malaria control efforts. The high malaria incidence in two blocks highlights the need for improved access to diagnostic and treatment services.

Keywords : Malaria, Koraput, ABER, API, Odisha

❖ **Title: Implementation analysis regarding Ayushman Bharat initiative in Kashmir region. A descriptive cross-sectional study**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

- **Dr. Shahroz Nabi**, SPM GMC Srinagar

Co-authors:

- Prof. S. Muhammad Salim Khan HOD SPM GMC

Introduction: As the emphasis on comprehensive health care and universal health coverage is growing, government launched Ayushman Bharat scheme in 2018 aiming to achieve these goals. In Kashmir any independent study regarding the implementation of Ayushman Bharat program was not available hence this study was formulated to study the program implementation at grassroot levels in Kashmir.

Objectives: To assess and analyze implementation status of Health and Wellness center PMJAY components of Ayushman Bharat Program in Kashmir.

Materials and Methods: Cross sectional study was carried out from October 2020 till October 2021. One year study was done in 10 districts of Kashmir valley. Two components of Ayushman Bharat program were studied simultaneously. Around 200 interviews were carried out with different stakeholders at different levels. Observation and quantitative analysis were done. Study tools included semi open questionnaires and observation checklists.



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Results: Results showed that there were many deficiencies regarding the implementation of Ayushman Bharat program at grassroot levels. There was considerable satisfaction with PMJAY services at empaneled hospitals.

Conclusion: A one year cross sectional study was carried out in 10 districts of Kashmir region to assess the implementation of Ayushman Bharat initiative. The study was carried out at newly established health and wellness centers and PMJAY empaneled hospitals in Kashmir. The study revealed that implementation at grassroot levels were not as per program guidelines at many places considerable improvements were needed at ground level for implementation of this program as per national guidelines.

Keywords: Ayushman Bharat; PMJAY; Health insurance; Health and wellness; Comprehensive primary care

❖ **Title: Implementation Status of Health and Wellness Centres in a Community Development Block in Purba Bardhaman District: A Mixed Method Study.**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Soumik Dandapat, Junior resident, Department of Community Medicine, Burdwan Medical College and Hospital.

Co – author :

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- **Dr. Pramit Goswami,** Demonstrator, Department of Community Medicine, Burdwan Medical College and Hospital.
- **Dr. Pranita Taraphdar,** Professor and Head, Department of Community Medicine, Burdwan Medical College and Hospital.

Introduction: Access to quality healthcare is a fundamental human right, yet it remains a challenge for rural population in India. To address this issue, Indian government decided to upgrade existing Government Primary Health Care Facilities (GPHCFs) to Health and Wellness Centers (HWCs) to deliver Comprehensive healthcare spanning preventive, promotive, curative, rehabilitative and palliative care under Ayushman Bharat program.

Objectives: To assess the implementation status of HWCs and to explore the challenges faced by service providers during service delivery in a community development block of Purba Bardhaman district.

Materials and Methods: A facility-based, mixed-method study was conducted in Bhatar Block of Purba Bardhaman during October2022-February2023. For quantitative component, implementation status of 12 HWCs, functional for ≥ 6 months, was assessed using National Quality Assurance Standard (NQAS) checklist during visits to these facilities. For qualitative part, In-depth-interview of nine Community Health Officers (CHOs) was done to explore challenges faced by them. Principles of descriptive statistics was applied to present the implementation status. Thematic inductive analysis was done to explore constraints.

Results: Among the 12 HWCs, 8(66.67%) centers scored satisfactorily($\geq 70\%$) in overall score. Service-provision, clinical-services, infection control, and output were among 8 areas of concern where all HWCs scored satisfactorily($\geq 60\%$) while input was the area with lowest score[Mean(\pm SD)-60.58(\pm 9.53)]. Among



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12 themes described in NQAS, elderly and palliative healthcare, emergency medical services, and management of mental health ailments were the lowest scoring with all HWCs scoring below satisfactory ($\geq 70\%$) level. Thematic inductive analysis revealed inadequate infrastructure, resource constraints, administrative and managerial constraints, lack of motivation, and inadequate health-promotion & community participation were major challenges faced by CHOs.

Conclusion: Although significant progress has been made towards implementation of HWCs in rural India, still various challenges need to be addressed, including improving infrastructure, enhancing access to medicines and supplies, providing adequate training to CHOs, and increasing community participation.

Keywords: Community Health Officer, Health and Wellness Center, Implementation status, Mixed-method study, National Quality Assurance Standard.

❖ **Title: Indian fathers' beliefs regarding their children's lifestyle behaviours: A qualitative study**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Neha Rathi, Malaviya Post Doctoral Fellow, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University, India

Co-authors:

- **Sangeeta Kansal**, Professor, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University, India
- **Anthony Worsley**, Emeritus Professor, School of Exercise and Nutrition Sciences, Deakin University, Australia

Introduction: Parents play a pivotal role in shaping children's food and physical activity behaviours during the formative years. Existing research has primarily concentrated on maternal influences, precluding any understanding of the unique influence of fathers on child lifestyle behaviours. The surge in maternal employment in urban India over the recent past warrants the need to develop greater understanding of fathers' roles and their beliefs regarding children's food and physical activity behaviours.

Objectives: The purpose of this research was to document the views of Indian fathers about their role in nurturing healthy behaviours in their young ones.

Materials and Methods: A convenience sample of 33 fathers of children aged 6-59 months from Kolkata, India participated in-depth, semi-structured interviews conducted either face-to-face or over Zoom/telephone in Hindi, Bengali, and English. The interviews were audio recorded, transcribed verbatim, and translated to English. The transcribed data were subjected to thematic analysis informed by Template Analysis technique. Themes were detected using NVivo software.

Results: Seven themes were identified which included: (i) Limited involvement of fathers in feeding; (ii) Implementation of both responsive and non-responsive feeding practices e.g. coercing the child to eat, incentivizing food consumption, providing healthy food, using food to bond with the child; (iii) Active participation of fathers in children's physical activity and vaccination; (iv) Child rearing viewed as a mutual responsibility of both mother and father; (v) Barriers to routine engagement of fathers in child rearing; (vi) Poor knowledge regarding dietary requirements of children; (vii) Advocacy for promoting nutritious diet and active living in children



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Conclusion: The emerging themes provide unique insights about Indian fathers' beliefs regarding child rearing in the rapidly transforming Indian society. Unanimously, the participants strongly advocated the need for inculcating healthy dietary and physical activity behaviours in early childhood for the optimum growth and development of the young ones. This enhanced understanding of paternal parenting behaviour potentially supports the inclusion of fathers in future interventions aimed at improving diet and physical activity of children.

Keywords: Fathers, India, qualitative, childcare, feeding

❖ **Title: Infrastructure mapping of Anganwadis in Vizag city using Geospatial analysis.**

Mode of presentation: Oral; **Theme:** Child & Adolescent Health

Presenting author:

▪ **Dr. Parthiban R.**, Post Graduate Resident, GITAM Institute of Medical Sciences and Research, Visakhapatnam

Introduction: ICDS has been recognized as the world's largest program for early child development. Under ICDS, Anganwadi centres act as a focal point for providing comprehensive services to children and women.

Objectives: The objectives of this study were to assess the basic infrastructure in Anganwadis in Vizag city and to map the locations of Anganwadis using geospatial analysis.

Materials and Methods: It is a cross-sectional study conducted in Vizag (GVMC) Corporation which comprises 8 zones, and 50% of these zones were randomly selected. Within each of the selected zones, 10% of the Anganwadis were accessed through multi-stage systematic random sampling and the final study sample arrived at 40. Study data collected using semi-structured interview schedule and some observations. To map the locations of the Anganwadis, geospatial analysis is used, which involved plotting the Anganwadis on a digital map using Kobo Toolbox. Permission was obtained from ICDS, Vizag and Ethical clearance was obtained from Institutional ethical committee.

Results: Out of 40 Anganwadis, 50% had their own building/premises, 27.5% were rented, and 22.5% were located in panchayat bhavans. 75% Anganwadis had adequate ventilation and lighting, while 25% did not. 80% Anganwadis had appropriate drinking water storage, while 20% did not. 90% Anganwadis had toilet facilities, while 10% did not.

Conclusion: This study provides an insight into the existing situation of the infrastructure of Anganwadis in Vizag city. Some improvements are needed, particularly in terms of ventilation and lighting.

Keywords: Geospatial analysis, ICDS, Kobo Toolbox

❖ **Title: Interventions to promote household waste segregation: A systematic review**

Mode of presentation: Oral; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

Dr. Tanwi Trushna

Waste segregation or separation at source, particularly at the household level, is acknowledged to be an integral component of sustainable solid waste management, which is a critical public health issue.



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Although multiple interventions have been published, often with contradictory findings, few authors have conducted a comprehensive systematic synthesis of the published literature.

Therefore, we undertook a systematic review to identify and synthesize all published interventions targeting household-level waste segregation with or without additional focus on recycling/composting. Following PRISMA guidelines, Web of Science, Medline, Global Health, and Google Scholar were searched using a search strategy created by combining keywords for 'Waste', 'Segregation', and 'Household'. Two-stage blinded screening and consensus-based conflict resolution were done, followed by quality assessment, data extraction, and synthesis. 8555 articles were identified through database search and an additional 193 through grey literature and citation searching. After excluding 2228 duplicates and screening title abstracts of 6520 articles, 275 full texts were screened, and 84 articles reporting 88 intervention studies were included in data synthesis. High methodological heterogeneity was seen, preventing the conduct of meta-analyses.

Few studies were identified from India and other low-middle-income countries. The interventions focused mainly on information provision as the method of intervention. However, despite informational interventions being the most used strategy among the included studies, the provision of incentives and infrastructural modifications were seen to be more effective. Evidence was not conclusive Pro regarding the long-term and cost-effectiveness of individual intervention strategies, highlighting the need for high-quality future interventions, especially in low and middleincome income countries.

❖ **Title: Knowledge, Attitude and Perception regarding utilization of Anwasha Clinic services in a rural area of West Bengal**

Mode of presentation: Oral; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Abhishek Reja, Junior Resident, Community Medicine, Medical College and Hospital, Kolkata

Co-authors:

- **Dr. Nirmalya Manna**, Associate Professor, Community Medicine, Medical College and Hospital, Kolkata

Background: In India, talking about reproductive and sexual aspects is still bounded by taboos and socio-cultural restrictions. In West Bengal, Anwasha Clinic is an initiative to provide counseling and medical facilities to the adolescents relating to menstrual problems, puberty, unwanted pregnancy and depression.

Objectives: To explore the knowledge, attitude and perception regarding Anwasha Clinic services and examine relationship with the socio-demographic variables.

Materials and Methods: A cross-sectional study was conducted among 403 school students studying in class 9-12. By simple random sampling technique, participants were selected and questionnaires were given regarding factors related to their knowledge on existence and services provided by Anwasha clinics, and their attitude and perception towards the clinics.

Results: Among the participants, 232 (57.57%) were male. Only 97 (24.07%) were aware of the existence of Anwasha Clinics. Among them, 83 (85.57%) have visited Anwasha clinic last year, mostly female (61, 73.49%), the reason being due to menstrual reasons followed by nutritional reasons. 77 (92.77%) found the visits helpful. 79 (95.18%) opined that Anwasha clinics are the need of the hour. Most of the



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participants asked private questions to their friends followed by teachers, and agreed on the necessity of right information and training regarding sexual health. Statistically significant association was observed between age and gender with knowledge regarding Anwasha Clinic services.

Conclusion: There was severe lack of knowledge among the participants regarding Anwasha Clinic and most of them still rely on their friends for regarding any query about sexual health. Awareness campaigns and trainings must be arranged to help adolescents gain insight on decision-making towards positive adolescent sexual and reproductive health.

Keywords: Knowledge, Attitude, Perception, Anwasha Clinic, Rural

❖ **Title: Knowledge, Attitude of Medical Students towards inclusion of Transgender Healthcare in Medical Curriculum- Survey from Medical Colleges Across India**

Mode of presentation: Oral; **Theme:** Medical Education & Public Health Ethics

Presenting author:

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Introduction: Gender Incongruence friendly health care in India is almost non-existent. Studies have reported that 20% of gender incongruent population have unmet specific health care needs.¹ Barriers to affordable and empathetic health care has been reported. Healthcare professionals continue to treat gender incongruence as a psychiatric issue or deviation as per reports.² This can be mainly attributed to lack of awareness amongst health care professionals. Gender incongruent individuals remain to fight with: stigma in combination with bias at healthcare organisations; a lacunae of gender-sensitive health care protocols; declining health literacy rates; gender-based cruelty in the society; non-existent health insurance, dearth of social benefit schemes.³ These shortcomings necessitate the need of transgender ethics to be a part of medical curriculum. The medical students today form the doctors of the future. Hence it is necessary for them to be aware of needs of gender incongruent population and how they can be met.

Even though trans-health is not usually taught, few studies have reported benefits of addition of trans-health to medical curriculum.⁴ The pledge by WHO to support transgender healthcare is reflected in the set-up guidelines to improve transgender healthcare worldwide, specifically in lower- and middle-income nations.⁵ With respect to this matter, the WHO firmly recommends the presence of trans-health in the medical curriculum.⁵ Communication is the foundation of Doctor-patient relationship. Transgender healthcare especially in the paediatric age group may involve family, school teachers and friends. Doctor and counsellors have to work upon empathetic communication with the patient as well support system of the patient.



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Medical students symbolise the future healthcare. Hence it is crucial to provide them with value based education along with empathy. Previous studies have reported various benefits of incorporating trans-health into medical curriculum.⁶ The elementary stage towards advancing education and training in trans-health is to figure out the current knowledge and attitudes of medical students towards individuals and patients who identify as transgender. Hence this study intends to assess knowledge and attitudes regarding the transgender identity, as well as the perceived need for trans-health in the medical curriculum, amongst medical students across medical colleges in India

Objectives:

- a. To assess the attitude of medical students towards inclusion of transgender health care .
- b. To assess the knowledge of medical students about transgender health care.

Materials and Methods: Web based cross sectional study conducted across the medical colleges of India. Students who are studying in 1st, 2nd, 3rd and 4th MBBS and interns were the participants. The questionnaire containing demographic, knowledge, perception, attitude etc was sent in the form of g-form which was shared through the social media.

Results: A total of 1315 students participated in the current study. Most of the participants were Hindus (83.2%). Major participation was received from the 1st MBBS students (32.4%). Pertaining to the questions on Knowledge on the transgender identity 42.8% strongly disagree that it is a contagious condition, 54.5% and 49.4% strongly disagree to a statement transgender identity is a disease and mental illness respectively. Upon interim analysis of the results obtained the overall students' knowledge and attitude towards transgender identity and health needs was ranging from average to good

Keywords: transgender, medical curriculum, health care

❖ Title: Managing Hypertension in Urban Nepal: findings from a qualitative study

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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- **Dr. Archana Shrestha** (Associate professor),
- **Dr. Eva Skovlund** (Professor),
- **Dr. Bjørn Olav Åsvold** (Professor),
- **Dr. Bente Prytz Mjølstad** (Associate Professor)
- **Dr. Abhijit Sen** (Senior Scientist)

Introduction: Hypertension is a major risk factor for cardiovascular diseases and leading cause for premature deaths. In Nepal, one-fourth of the adult population have hypertension. Comprehensive hypertension services are provided through the primary health care. However, inadequate infrastructure, unmotivated healthcare providers, and poor adherence to the guidelines persists resulting in poor identification and follow up of hypertensive patients.



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Objectives: Our research explored the individual, interpersonal, health system and community-level barriers and facilitators affecting hypertension management in urban Nepal. We discuss how these findings informed the development of an integrated intervention including home visits and healthcare provider training for effective control of blood pressure. **Materials and Methods:** We used a qualitative methodology informed by the Kaufman's socio-ecological model, conducting focus group discussion with patients (3) and their family members (4). Semi-structured interviews with patients (8), healthcare providers (10) and key informants (2) with municipal officials. **Results:** We found inadequate knowledge and harmful cultural beliefs hindered timely diagnosis and treatment of hypertension. Interrupted supply of medication and weak functional referral between different levels of care eroded community trust in public health facilities affecting access to hypertension services. Family members were not sufficiently engaged to support patients in managing hypertension. This study guided the development of home visit manuals, training of community counsellors and to focus on engaging family members to dispel misconceptions regarding hypertension, its complication and treatment measures; and demonstrating the need to rebuild community trust in the primary healthcare providers. **Conclusion:** Results revealed the importance of integrating various aspects of hypertension care to overcome the multiple barriers for effective management of hypertension in low resource countries. Participatory home visits will empower the patients and families to develop and implement feasible and acceptable actions to address the reasons of poor adherence to antihypertensives, and behavior change facilitating home management of hypertension.

Keywords: hypertension, urban, Nepal, formative, barrier, and facilitators

❖ **Title: Medical Intern Led Quality Improvement Initiative (MILQII) at a rural primary health care setting: A process documentation and initial findings.**

Mode of presentation: Oral; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr. Arvind Kumar Singh, Department Of Community Medicine and Family Medicine, AIIMS Bhubaneswar

Co-authors:

- **Dr Alekhya G**
- **Dr. Swayam Pragyan Parida**
- **Dr. Abhisek Mishra**
- **Dr. Debkumar Pal**
- **Dr Bimal Kumar Sahoo**
- **Dr. Kritika Singhal**

Background: Quality improvement is the framework we use to systematically improve the ways care is delivered to patients. MILQII may have a dual benefit, i.e. of improving quality of care at primary care setting and of imparting training of quality improvement to Medical Interns (MIs).

Objectives: To assess the feasibility and effectiveness of Medical Intern Led Quality Improvement Initiative among medical interns of AIIMS, Bhubaneswar,



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Materials and Methods: MIs, on the first day of their 30 days posting at Rural Health and Training Centre, were trained regarding quality improvement with special emphasis on implementing QI cycles using Plan-Do-Check-Act (PDCA) approach. A timeline of one week was allotted to each component of PDCA cycle. Plan included identification of a problem area, situational assessment and planning an intervention program; Do included implementation of the intervention program; Check included monitoring using specific indicators; Act included reorienting the intervention program. We assessed the feasibility and effectiveness of this program by interviewing MIs and other staffs and by measuring % change in indicators before and after QI.

Results: We are presenting the plan of one QI cycle with objective to improve the treatment compliance of patients with status asthmaticus. Plan included root cause analysis, training, care standardization; Do included indent review of inhalers, preparing treatment charts, and recording of the treatment in Asthma Diary. Check included observing number of exacerbations of Asthma. Act included modifying the plan as per the results. After one cycle of QI, 47.0% patients reported good compliance as compared to 14.7% before the implementation. Most of the interns who participated in MILQI were satisfied by the initiative and perceived that program may be implemented during internship training.

Conclusion: Such program can be beneficial for imparting quality improvement training to medical interns at primary care setting along with improving quality of care.

Keywords: Quality improvement, PDCA, training

❖ **Title: Mobile health service demand, key morbidity magnitude and trend at mountainous outreaches of Uttarakhand- A descriptive study.**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Introduction: Deploying mobile health vans to service disadvantaged, underserved mountainous hamlets across six districts of Uttarakhand on a 'fixed day-fixed location' strategy was an effective initiative in the state in collaboration with TIFAC and NRHM. The paper reviews service outcome data generated during May 2007-Feb 2012.

Objectives: To provide quality diagnostic & curative care through mobile health clinics at select mountainous outreaches of Uttarakhand state.

Materials and Methods: A bimonthly mobile health services with fully equipped Mobile Health Vans sponsored by the Directorate of Science and Technology (DST) through Technology Information Forecasting and Assessment Council (TIFAC) & Govt. of Uttarakhand (NRHM) on a 'fixed day, fixed time and fixed place' schedule were provided along pre-designated service locations by a team of providers. Data generated during 1st implementation quarter i.e., March-May 2007 was assumed as baseline for the trend in utilization of mobile health services, morbidity pattern & health seeking in Uttarakhand.



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Results: A total of 77688 beneficiaries received services through 902 camps spanning 13 quarters with an estimated 5976 and 89 beneficiaries per quarter per camp respectively; 573 (9.5%) clients received USG, 639 (10.7%) X-Ray, 34 (0.56%) ECG and 3543 (59.3%) other lab procedures. Quarterly demand for services was highest (19.5%) for Gastrointestinal Disorders (GID) followed by 1105 (18.4%) for Musculoskeletal Disorders (MSD), 830 (13.8%) for Genitourinary system disorders (GUD), 710 (11.8%) for Respiratory System Disorders (RSD) and 513 (8.5%) for ENT and Ocular Disorders (OCD). A visible increase in number of clients for key ailments i.e., MSD, GID, RSD, ENT and OCD could be seen quarter 7 onwards and endline morbidity profile of beneficiaries varied significantly with that of baseline for key prevalent diseases. Prevalent morbidity was predominantly Acid Peptic Disease (15.5%) followed by Osteoarthritis (13.3%), Low Backache & Renal stones (7.2% each).

Conclusion: Integrating mobile health service delivery component with existing strategies adopted by public health system in primary health care is an operationally feasible and viable option to address 'inaccessibility at disadvantaged mountainous outreach.

❖ **Title: Navigating the Complexities of a Rapidly Evolving Landscape of Digital Health Policy in Low and Middle-Income Countries: A scoping review and course development**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Introduction: Digital health technologies are transforming healthcare and public health, presenting new opportunities and challenges. Policymakers, researchers, and practitioners require a strong grasp of digital health policies, frameworks, and ethical, legal, and regulatory considerations. This study aims to review available courses on digital health policy and develop coursework outlines tailored to low- and middle-income countries (LMICs).

Objectives: 1. To conduct a scoping review of available courses on digital health policy and identify relevant themes in LMIC contexts. 2. To develop detailed coursework outlines, lesson plans, assignment plans, and other coursework deliverables.

Materials and Methods: The study was divided into two steps: a. Scoping Review: A review of massive open online courses (MOOCs) across four platforms and relevant literature search was conducted. Identified courses were audited, and data was extracted and analyzed thematically to identify relevant themes. b. Course development: Course outlines and lesson plans were developed based on identified themes, with feedback from experts incorporated. Guidelines for Quality Assurance ensuring course transparency were followed throughout the process.

Results: a. Scoping Review: Digital health policy was found to be a module or submodule in courses on Health Policy or Digital health. Relevant themes identified include the changing landscape, data infrastructure, data management, data security issues, digital health governance, ethical, legal, and socio-cultural contexts, the complexity of digital interventions, and design, implementation, and evaluation frameworks. b. Course development: The final deliverables included defining the target



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audience, defined credits, course description, course objectives, learning outcomes, learning activities, and assessment criteria.

Conclusion: This study provides insights into the complexities of designing, implementing, and evaluating digital health interventions in LMICs. The coursework outlines developed can serve as a valuable resource for students, policymakers, researchers, and practitioners seeking to enhance their understanding of digital health policy and promote health equity and public health.

Keywords: Digital Health, Health Policy, Complex interventions, LMICs

❖ **Title: Need For Environmental Health Impact Assessment For Setting Air Quality Standards In Odisha: A Perspective Framework**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

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Background: Air quality standards vary from region to region and also act as a pillar for curbing air pollution. Odisha is one of the disaster-prone regions in India with deteriorating Air Quality which is causing adverse health impacts. The Environmental Health Assessment is the assessment of Health problems arising from the environment, environmental policies, and risks associated with the environment. **Objectives:** (i) To identify the health impact of air pollution. (ii) To assess and improvise the existing mitigation measures for air quality standards for Odisha by using a conceptual framework.

Methodology: A systematic review will be conducted to provide a detailed picture of the topic. **Inclusion criteria:** All original articles will be included, and all mitigation strategies at the national & international level being mitigated in Odisha will be outlined. **Exclusion criteria:** All types of reviews, meta-analyses, case reports, expert opinions, animal studies, and studies related to cells and tissues. **Work plan:** All eligible articles will be identified and the title and abstract will be screened. Another screening will be conducted based on the inclusion and exclusion criteria from electronic databases (like PubMed, Scopus, Embase, Cinhal, ProQuest & Google scholar) with appropriate MeSH terms. **Expected Outcomes:** This study will give us a detailed account of health and environmental interdependencies. The purpose of this study is to provide a conceptual framework based on the assessment made which will enable policy experts to develop the conceptual framework into a mitigation strategy.

Keywords: HIA (Health Impact Assessment), Environmental Health, Air quality, Mitigation policies, Odisha



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❖ **Title: Needle Stick Injuries (NSI) among Housekeeping Workers at a Tertiary Healthcare Teaching Institute in Northern India: A mixed method study**

Mode of presentation: Oral; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

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Introduction: During patient care, Needle Stick Injuries are preventable hazards in a healthcare setting. NSI are on higher risks in transmission of HIV, Hepatitis B and Hepatitis C.

Objectives: To assess the incident of NSI and the effectiveness of evidence-based interventions in prevention & management of NSI among Housekeeping (HK) workers.

Methods: The study was conducted in three phases- first was a baseline data collection phase, second was an intervention phase & third was a follow-up phase. In the first phase data was collected during January-July'22 and assessed the incidents of NSIs among the HK workers (n=356) including their reporting & the hepatitis B vaccination status through google form. In second phase, handouts on NSI management protocol were distributed to the HCWs. In the third phase, NSI incidents were prospectively recorded during September'22-February' 23.

Results: The majority of the participants (N=356 HK Workers) were males (n=330) and all had a percutaneous exposure. Among the total respondents 95% (n=338) were either not vaccinated or partially vaccinated. There exists a definite gap in the awareness about reporting NSIs. The study found 35% (n=109) NSI incidents from which 34% (n=37) of the respondents reported the incident. After the intervention, 47 incidents were reported which included 62% nurses, 24% (n=11) Housekeeping workers and 11% resident doctors. All the HK workers were unvaccinated for Hepatitis B (n=11, 100%). Majority



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of Housekeeping workers 82% (n=9) had NSI during BMW handling & 18% (n=2) during cleaning & mopping.

Conclusion: With a comprehensive NSI management system coupled with educational interventions and counselling support, we aim to create an awareness towards prevention, prompt reporting and management of NSIs, thereby bringing down the need for emergency Immunoglobulin administration & cost significantly.

Keywords: Needle stick injury, vaccination, Healthcare workers (HCW), Housekeeping Workers

❖ **Title: Nutrition Education Through E - Learning to Rural Adolescent Girls and Women. Are We There Yet?**

Mode of presentation: Oral; **Theme:** Public Health Nutrition

Presenting author:

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- Dr K. Uma Maheswari, Senior Professor and HOD, Gitam University, Visakhapatnam, Andhra Pradesh.

Background: Nutrition education to the illiterate segment through E - Learning is a great innovative idea with a potential to expand outreach and reduce the barrier of the traditional methodologies allowing an efficient, cost effective learning process when it comes to the diverse low - income population. With this purpose in mind the 2D animated movie was created to educate the rural women on nutrition and compare their KAP scores after 6 months of educational intervention.

Objectives: Developing and educating rural adolescent girls and women on nutrition through E-Learning (2D animated film) and study the KAP scores pre and post intervention.

Materials and Methods: E- learning using animation was used to educate the girls and women of selected villages of Rangareddy district. Using Adobe flash software a 2D animated film including nutritional needs of children (1-6) years, pregnant and lactating women, common nutritional deficiencies seen and ways to prevent was developed. A standardised questionnaire assessed the KAP scores before and after the E - learning educational intervention.

Results: The script and content of the 2D animation was found to be relatable, acceptable and interesting by the experimental group. Nutrition literacy develops confidence, empowerment, facilitates greater participation in all daily activities among women. Pre and post KAP scores were (10.85-17.70 for knowledge),(52.87-70.64 for attitude) and (24.59 - 30.70 for practice).It was found that the quantum of improvement in knowledge, attitude and practices was 1.63, 1.34 and 1.25 times

Conclusion: E - learning incorporates electronic media and multimedia which constitutes its core imparting meaningful contribution to nutrition education. Majority of the women displayed a positive attitude about learning nutrition knowledge and animation has a strong way of conveying information and potential to motivate rural folks.

Keywords: E- learning, Multimedia, 2D animation, Rural women, adolescent girls, KAP, Nutrition education.



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❖ **Title: Occupational health hazards of bidi workers, and their families in India: a systematic scoping review**

Mode of presentation: Oral; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

Dr. Jyoti Tyagi

Introduction: Bidi manufacturing is a cottage industry, such that bidi rolling is generally done from home. Exposure of bidi workers to harmful substances during the manufacturing process makes not only bidi workers but also their families, at risk for occupational diseases.

Objectives: The review aims to assess the current evidence from India on health conditions of bidi workers, their families, and environmental effects of bidi manufacturing to inform policy and stakeholder.

Materials and Methods: A systematic review of the literature was conducted by searching nine databases to identify research articles published since inception till April 2022. Two authors independently conducted screening and data extraction. Data was analysed using a narrative synthesis approach. Results: Ninety five studies were identified that met our eligibility criteria. Studies reported bidi workers had high prevalence of musculoskeletal (up to 87%), gastrointestinal (up to 70%), neurological (up to 60%), respiratory (up to 52.5%), skin (up to 37%) conditions. Most studies (n=66) were conducted on women bidi workers and reported decreased fertility, increased frequency of miscarriages and higher risk of having cervical cancer. Pregnant bidi workers were at an increased risk of anaemia and pregnancy induced hypertension. Higher frequency of neonatal deaths, still birth, and premature births was reported in this group in comparison to non-bidi workers. Babies born to female bidi workers reported low birth weight. This evidence was also supported by cohort studies suggesting its causal nature.

Conclusion: The identified evidence in this review suggests that bidi rolling leads to occupational health hazards in bidi workers who are already economically weak and have poor living and working conditions. There is a need to strengthen existing regulations and promulgation of new provisions for additional protection of bidi workers to improve their health and well-being.

❖ **Title: Occupational noise induced hearing loss in Indian black tea processing factories: estimating the burden and associated factors of an overlooked problem**

Mode of presentation: Oral; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr. Alapan Bandyopadhyay

Introduction: In India, standards related to workplace safety are not widely followed, especially those related to noise. This study aimed to provide data regarding occupational noise generation and noise induced hearing loss in black tea factories of Darjeeling, India.

Methodology: An observational cross-sectional study was conducted. Multi-stage sampling was used to select 6 conveniently selected factories as primary sampling units and consecutive sampling technique used to obtain data from 51 employees from each factory, making 312 employees the total sample, calculated based on previous prevalence data. A pre-designed proforma was used to collect socioeconomic and work-related data. Noise induced hearing loss was measured using a portable audiometer.



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Results: The mean age of the study participants was 34.1±9.6 years. Most of the employees assessed were men (77.2%). Of the participants, majority (33.3%) had completed their secondary education and belonged to lower socioeconomic classes (60.6%). Among the participants, the majority were found to be working in the Crushing-Tearing-Curling (CTC) room (42.9%), followed by workers in the withering area (12.5%) and office workers (12.5%). The mean duration of them working in the factories was 10.7±8.8 years. The prevalence of noise-induced hearing loss among the participants was 28.8%. On multivariate logistic regression analysis, it was observed that working in the CTC, Withering, maintenance, and packing areas; male sex; and higher age were significantly associated with the development of occupational noise induced hearing loss among the workers. None of the workers wore any personal protective equipment.

Conclusions: Occupational noise induced hearing loss was highly prevalent among the black tea processing factory workers. Proper education, pre- and post-placement health check-ups, and use of PPE should be mandated to tackle this problem.

Key words: India, occupational noise induced hearing loss, workplace safety, personal protective equipment, tea factories

❖ **Title: Perception and Constraints of Telemedicine Services among the Health Care Providers and Beneficiaries in Purba Bardhaman District, West Bengal: A Qualitative Study.**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

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- **Prof. (Dr.) Pranita Taraphdar**, Burdwan Medical College, Burdwan, West Bengal

Introduction: Telemedicine has emerged as a potential solution to the country's expanding healthcare needs, particularly in rural and isolated locations. However in order to implement telemedicine services successfully, a number of issues and limitations must be resolved. This study tries to pinpoint these challenges and offer suggestions for improving telemedicine services in India.

Objectives: To explore the perception and constraints faced by health care providers to provide telemedicine services in Purba Bardhaman district, West Bengal.

- To explore the perception and constraints faced by beneficiaries to avail telemedicine services in the study area. **Materials and Methods:** A qualitative study

Materials and Methods: A qualitative study with phenomenological approach was conducted in Purba Bardhaman District, West Bengal from November'22-February'23. All tiers of health-care delivery system(from Health and Wellness Centre to tertiary care facility) with provision of telemedicine services were selected by simple random sampling. From these selected facilities, beneficiaries(those attended ≥2 telemedicine consultations) were chosen purposively for focused group discussion. Similarly, doctors and Community Health Officers(providing telemedicine service for ≥3 months) were selected for In-



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Depth Interviews. Data analysis was done by inductive thematic approach. Ethical clearance was obtained from Institutional Ethics Committee, Burdwan Medical College, Purba Bardhaman.

Results: Lack of access to technology and infrastructure, resource constraints, limited training and support, resistance to change and adoption of new technology, challenges in maintaining patient privacy and confidentiality, administrative and managerial issue emerged as significant challenges from service-provider's perspective. Beneficiaries faced various constraints, which includes accessibility and availability of telemedicine services, resource constraints, acceptability and trust issue, quality and effectiveness related issues. **Conclusion:** Acceptance of telemedicine service in India is hampering due to lack of infrastructure and essential medicine, inadequate manpower, and unrealistic target from higher authorities. However increasing adoption of technology and government initiatives will help to promote growth and development of telemedicine. **Keywords:** Beneficiary, Constraints, Health Care Provider, Perception, Qualitative, Telemedicine

❖ **Title: Perception, uptake, determinants of Weekly Iron Folic acid prophylaxis among adolescent girls in rural Odisha– A mixed method study**

Mode of presentation: Oral; **Theme:** Child & Adolescent Health

Presenting author:

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Introduction: The prevalence of anemia among Indian adolescent girls has increased in NFHS 5 . Nearly 10% to 54.3% school going adolescent girls (6-12 class) were provided with 4 Iron and Folic Acid (IFA) tablets in India and Odisha respectively according to the WIFS programme. In our study we are evaluating the uptake and determinants affecting Weekly Iron folic acid uptake among adolescent girls. We are also assessing the effectiveness of small group education in the uptake of WIFS.

Materials and Methods: Our study was a mixed method study conducted among the adolescent girls in the rural areas of Bhubaneswar block of Odisha from December 2022- February 2023. Multistage sampling with simple random selection of villages and schools followed by Universal sampling of participants were used. They participants were categorized into school going and school drop outs and semi-structured questionnaire was administered to assess the compliance and various determinates of WIFS uptake. A nominal group technique (NGT) was used to assess the perceptions of the participants, followed by a small group education using a structured PowerPoint presentation by an investigator. Another investigator followed up the participants after 1 month to assess the change in compliance status. We used a step forward multilogistic regression to assess the independent risk factors and an inductive analysis was done on NGT

Result: The proportion of participants complaint for WIFS was 68.7% (0.01; 95% CI: 0.63- 0.73) and was significantly poor in school dropouts 0% (0.00: 95% CI: 0.00-0.10). The significant factors



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affecting the WIFS uptake were the education of the child, regular supply of IFA tablets and awareness on the importance of WIFS among adolescents. The perceptions about anemia were good among school-going compared to school dropouts, while perceptions on appropriate method on WIFS uptake were poor in both groups. The small group education was effective with an increase in complaint status among schools going from 16% to 72% and among school dropouts 0% to 58%.

Conclusion: WIFS uptake is poor among adolescent girls in rural Odisha. A small group education along with adequate supply is found to be significantly effective for increasing in the uptake of WIFS.

Keywords: WIFS, Weekly Iron folic acid supplementation, Iron folic acid prophylaxis, adolescents, anemia, uptake, perception

❖ **Title: Perceptions and barriers of nurses towards oral care of stroke patients: a phenomenographical study**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Diplina Barman

Co-authors:

Dr. Pranab Mahapatra, Dr. Avinash J., Dr. Kunal Jha, Dr. Rounik Talukdar

Introduction: There is an increased need to maintain the oral hygiene of the stroke patients as it increases the risk of secondary infection which is detrimental to the overall physical health of the stroke patients. The duty of the ICU Nurses includes maintaining health of the stroke patients, but refrain from maintaining their oral health pertaining to certain barriers to their performance. This study assessed the barriers to the utilization of facilities available for the maintenance of oral hygiene of the stroke patients.

Materials and Methods: In depth interviews were conducted among ICU nurses using a pilot tested interview guide. A total of 12 interviews were conducted until data saturation was reached. The interviews were transcript and themes were deduced.

Result: An overall positive attitude has been noted amongst the nurses interviewed. The lack of performance may be attributed to various factors including the sociological implications of performing oral hygiene for the patients, lack of confidence among the participants, lack of knowledge regarding practical applications of the equipment.

Conclusion: The evidence that has been gathered through our study points towards a pressing need for standardized guidelines pertaining to oral care for debilitated patients. Though the nurses had prior knowledge regarding oral care, to translate it into practice they need regular training which can be conducted in workshop mode. This study successfully identified the barriers in oral hygiene performance among the nurses attending stroke patients belonging to tertiary care hospitals in Bhubaneswar city.

❖ **Title: Perceptions and Intention of Healthcare workers' to vaccinate their children against COVID-19 from a Tertiary care Institute of Eastern Uttar Pradesh, India**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. MD. Abu Bashar



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Background: COVID-19 vaccination program among Adults in India is one of the highly successful vaccination programs globally. However, providing vaccines to children remains a challenge for policymakers. As parents are primary decision-makers for their children, we aimed to assess parents' perceptions and intentions regarding COVID-19 vaccination in India.

Aim : To assess parental perceptions and intention to get COVID-19 vaccination for their children (aged <18 years),

Materials and methods: A cross-sectional anonymous web-based survey was designed. Healthcare workers of a tertiary care institute in Gorakhpur, U.P. having any children aged <18 years were the study population. They were recruited through snowball sampling and were sent the study questionnaire in Google form through WhatsApp. Cross-tabulation was performed by parents' intention to vaccinate their children against COVID-19 virus with socio-demographic characteristics and their risk perception toward COVID-19, trust in the healthcare system, and their history of vaccine hesitancy behavior. Multivariable logistic regression analysis was performed to compute the predictors of child vaccination intention among the parents.

Results A total of 388 healthcare workers having children < 18 years of age completed the survey. Mean age of the parents were 40.28+11.34 years. Around 75% of them had already completed 3 recommended doses of COVID-19. Around 61% of the parents agreed that COVID-19 vaccines are important for child's health whereas 58.7% agreed to the statement that COVID-19 vaccines are effective. A total of 232(59.9%) of the participants were willing to vaccinate their child against COVID-19, 91.3% of them like to do so as soon as possible. The factors significantly associated with the stated likelihood of child vaccination among the participants were urban residence, having higher education level, higher monthly income, working as doctor and completing self covid-19 vaccination. Parental concerns mainly centered around vaccine safety and side effects.

Conclusion The healthcare worker parents have good knowledge and positive attitude towards covid-19 vaccination for children. However, about 60% parents intended to vaccinate their children currently. The study highlighted the need for health promotion strategies that promote COVID-19 vaccine uptake among children.

Keywords: Parents; Healthcare workers; Children; COVID-19 vaccine; Perception; Intention

❖ **Title: Prevalence and predictors of Vitamin A and D deficiency in microbiologically confirmed patients with pulmonary TB and their household contacts: A sub-study within the RATIONS trial**

Mode of presentation: Oral; **Theme:** Public Health Nutrition

Presenting author:

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Background: Vitamin-A and D deficiencies (VAD, VDD), in patients with TB has been linked to disease severity, and response to treatment. They have a role in immunomodulation, and their deficiency is a risk factor for TB incidence. **Objectives:** To estimate the prevalence and predictors of VAD and VDD in microbiologically-confirmed pulmonary TB-cases (index) and their household-contacts (HHC) as a sub-



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study of RATIONS (Reducing Activation of Tuberculosis by Improvement of Nutritional Status), a cluster-randomized trial in Jharkhand.

Material and Methods: 250 participants, 125 index-cases and adult HHC in each arm were enrolled. Samples were collected before nutritional intervention for Vitamin-A and Vitamin-D levels estimation using High Performance Liquid Chromatography (HPLC) at National Institute of Nutrition, Hyderabad. Serum retinol <20ug/dl was considered as VAD; 25-hydroxyvitamin D [25(OH)D] level <12ng/ml as VDD. Levels were expressed as median and interquartile range (IQR), compared using Mann-Whitney-U test, and predictors of VAD and VDD assessed using multiple logistic regression.

Results: The median Vitamin-A was 36.12 ug/dl (IQR:22.3, 54.3) in index and 53.45 ug/dl (IQR:39.5, 81.0) in HHCs ($p<0.0001$); while serum 25-hydroxyvitamin-D [25(OH)D] was 33.24 ng/ml (IQR:19.7, 49.5) in index-cases and 33.35 ng/ml (IQR:22.6, 47.6) in HHC ($p=0.98$). The prevalence of VAD was 20%, VDD was 9.6% in the index-cases; the same was 3.6% and 4% in HHC respectively. On multivariable logistic regression, male sex (aOR=2.96, 95%CI: 1.41,6.23), body mass index (aOR=0.76, 95%CI: 0.67, 0.87), but not disease status were predictors of VAD. In the case of VDD, the predictors were active TB (aOR =3.85, 95%CI: 1.52, 9.77) and female sex (aOR =2.36, 95%CI: 1.08, 5.14)

Conclusion: There was modest prevalence of vitamin A and D deficiency in this rural cohort of patients and contacts. VAD was associated with male sex and low BMI, while VDD was associated with active TB, and female sex.

❖ **Title: Prevalence of depression among elderly women in India- An intersectional analysis of the Longitudinal Ageing Study in India (LASI), 2017-2018**

Mode of presentation: Oral; **Theme:** Mental & Geriatric Health

Presenting author:

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- **Dr. Parmjot Panda**, Faculty, AIPH University, Bhubaneswar, India

Introduction: Epidemiological transition in India shows a shift in disease burden from youth to the elderly. As life expectancy increases, the state, society, and families are burdened more. Globally, depression is the leading cause of mental health-related disability. Mental illness contributes to 4.7% of Disability Adjusted Life Years (DALYs) in India. By 2026, the elderly sex ratio will reach 1,060, feminizing aging. Researches have shown that elderly women are more prone to depression along with chronic morbidities. Especially widowed and economically dependent, elderly women struggle to cope with the health issues. No studies have been conducted on exclusively elderly female depression in India. As a result, we seek to hypothesize the prevalence of depression among elderly women in different regions and demographic groups in India.

Objectives: To determine the extent of depression among women in various regions and demographic groups in India and the factors associated with depression among the elderly women in India.



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Materials and Methods: Through intersectional analysis of Wave 1 of the LASI (N = 16,737), the intersecting patterns between variables and how individuals are positioned simultaneously, based on their place of residence, age and education level. Binary Logistic Regression was used to estimate the prime factors associated with depression in elderly women. Using the Choropleth map, the prevalence of depression among elderly women over 60 in different states was determined.

Results: The study suggests that place of residence plays a significant role in the development of depression among elderly women, with rural areas experiencing a higher prevalence. Depression was significantly more common among low-literacy women. Across states, there is a huge difference in the prevalence of depression among elderly women.

Conclusion: Depression is a concern for elderly women. Aging women, both in urban and rural areas, can benefit from government programs focused on their needs. Mental health needs multi-factor approaches, taking age, literacy, and location into account.

Keywords: Elderly Health, Elderly Women, Depression, Non Communicable Diseases

❖ **Title: Prevalence Of Scoliosis Among School Children In Mysuru District, Karnataka**

Mode of presentation: Oral; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Nimisha Bhatu, MPH Scholar, School of Public Health, JSS Medical College, Mysore

Co-authors:

- Shantanu Shrivastava, MPH Scholar, School of Public Health, JSS Medical College, Mysore

Introduction: Scoliosis is lateral abnormal curvature ($>10^\circ$) of the spine. Sometimes this lateral curve can also be accompanied by some rotational deformities resulting in altered load and force mechanism of the spine. Although the deformity was present in mankind for a very long period, the exact etiology is unknown. Early detection is ideal for treating deformity, as some studies show the importance of school screening to diagnose the condition and treat it on a priority basis.

Objectives:

1. To estimate the prevalence of scoliosis in primary and secondary school students of the Mysuru district.
2. To evaluate the relationship between scoliosis and school bag weight among study subjects.

Methodology:

After the clearance of the institutional ethics committee, the students were assessed from the randomly selected schools with pre-tested semi-structured questionnaires. Assessment criteria: I-personal information and demographic details, II-Spinal assessment with WRVAS and SRS questionnaire, and III-Scoliometer reading by adam's forward bending test.

Inclusion criteria: School children aged 12-16 years studying in the selected schools of the Mysuru district who gave assent with the consent of teachers/principals.

Exclusion criteria: Children with spine deformities other than scoliosis on Adam's forward bending test with the help of a scoliometer can not be performed and will be excluded.



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Results: The prevalence of scoliosis among 440 students was 2.96% who had scoliometer reading of 7 degrees or above. It affected 53.84% of girls and 46.16% of boys and among them, 69.23% of students are having left thoracic curvature.

Keywords: Adolescent Scoliosis, Spinal deformity, Scoliometer, WRVAS - Walter Reed Visual Assessment Scale

❖ **Title: Prevalence of suicidality among medical and nursing students of a medical college in Odisha**

Mode of presentation: Oral; **Theme:** Mental & Geriatric Health

Presenting author:

Ms. Reetika Biswas, Junior Resident, Department of Community Medicine and Family Medicine, AIIMS Bhubaneswar

Co-authors:

▪ **Dr. Sonu H Subba**, Professor and HOD, Department of Community Medicine and Family Medicine, AIIMS Bhubaneswar

▪ **Dr. Priyamadhaba Behera**, Assistant Professor, Department of Community Medicine and Family Medicine, AIIMS Bhubaneswar

▪ **Dr. Arpit Parmar**, Assistant Professor, Department of Psychiatry, AIIMS Bhubaneswar

Introduction: Suicidality includes the stages of self-injurious behaviour an individual experiences which lead to suicide – suicidal ideation, suicide planning, communication and suicide attempt. Prevalence of suicidality among medical and nursing students in Western countries is higher than general population. Indian medical education system differs from Western countries, so estimation of prevalence is necessary in the Indian context to identify the burden.

Objectives: To estimate the prevalence of suicidality among medical and nursing undergraduate and post-graduate students of AIIMS, Bhubaneswar

Materials and Methods: An institutional cross-sectional study was conducted from September 2021 to August 2022 at AIIMS, Bhubaneswar. Total 974 medical and nursing students were selected by universal sampling. A semi-structured, pre-tested, anonymous self-report questionnaire collected data on socio-demographic and relevant factors. Suicidality was assessed with SBQ-R (Score \geq 7). Ethical clearance was obtained from Institutional Ethics Committee. Informed consent was obtained from participants.

Results: Total 721 participants completed the survey. Prevalence of suicidality among the study participants was 19.1% (95% CI: 16.4 – 22.2). Prevalence was 18.5% among medical and 20.5% among nursing students. Highest prevalence of suicidality was among medical postgraduate students at 25.0%. The lifetime prevalence of suicidal behaviour was 35.4% of which, 21.7% had suicidal ideation only, 10.4% made a definite plan but did not act on it, while 3.2% made an attempt. In the past one year, 24.5% had suicidal ideation at least once while 1.6% had it often to very often. Nursing students were at 1.6 times higher odds of suicidal ideation in the past year. Suicide communication was done by 18.9% participants. 2.7% of participants reported they were likely and very likely to attempt suicide in future.

Conclusion: About one in five students were found to have suicidality. The high prevalence of suicidal ideation and plan among the participants calls for urgent need to focus on mental well-being of students and ensure adequate institutional support for them.

Keywords: suicidality, suicidal ideation, suicide attempt, medical students, nursing students



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❖ **Title: Prevention of High altitude related diseases**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Pijush jaiswal, MD (COMMUNITY MEDICINE)

Introduction: Around 140 million people over the globe live permanently at altitudes of over 2500 m and approximately another 40 million enter high altitude every year for occupation, sporting or recreation. As of now, high altitude related illness and cold injuries have become a matter of study, not only in context of military or polar expeditions, but because of increase participation by the general population in such outdoor activities as mountaineering, ice skating, ice fishing, cross country skiing, snow-games, etc. Human exposure to high altitude(HA) leads to significant physiologic and psychological challenges by exposure to many stressors, principal among which are hypobaric hypoxia, cold, low humidity and increased ultra-violet (UV) radiation. The Indian army defines high altitude as an altitude above 2700m (9000 feet), altitudes greater than 5500 - 5800m (18000 – 19000 feet) are classified as extreme altitude (EA) and altitudes between 1500m – 2700m (5000 feet to 9000 feet) are classified as moderate altitudes

Objectives: To acquaint the young medicos to the spectrum of high altitude diseases not experienced in normal medical practise

Materials and Methods: Descriptive study, Elucidation of clinical features of diseases related to high altitude diseases, extreme cold conditions, acclimatization and preventive aspects

Results: NA

Conclusion: High altitude medicine is a young science and has few practitioners. Hence, knowledge of HA physiology and medicine is limited, especially at extreme high altitude. Research is needed and it give a great opportunity to young medical officers engaged in mountaineering adventure to make quantum contributions to this budding branch of medicine by constant careful observation, methodical record keeping and rigorous analysis of collected data.

Keywords: High altitude, hypoxia, pulmonary oedema

❖ **Title: Quality Assessment of Implementation of Rashtriya Kishor Swasthya Karyakram in Visakhapatnam District of North Coastal Andhra Pradesh, India: A Mixed Method Study**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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Background: Adolescence is a unique stage in human development and a critical period for setting the basis for optimal health. With 253 million adolescents, India has the world's largest adolescent population, accounting for over 21% of the country's total population. In 2014, Indian Government introduced the Rashtriya Kishor Swasthya Karyakram (RKSK) to address adolescent health concerns, raise awareness, and improve preventative care.

Objectives:

1. To assess the Implementation of Rashtriya Kishor Swasthya Karyakram(RKSK) in Visakhapatnam district and the quality of services under this programme.
- 2.To assess functioning of Adolescent Friendly Health clinics(AFHCs), the implementation of Menstrual Hygiene Scheme(MHS), the implementation of Weekly iron folic acid supplementation(WIFS) programme and to identify the barriers and challenges in implementation.

Materials and Methods: An explanatory mixed method design in which quantitative phase (Survey) followed by qualitative phase (Focus Group Discussion) was done among Medical Officers, Multipurpose Health Workers-Female(MPHW), ASHAs, Anganwadi workers and Adolescents of fifty percent of total Primary Health Centres(PHCs), Community Health Centres(CHCs) and Area Hospitals(AH) of Visakhapatnam district.

Results: AFHCs were operational and WIFS was being implemented successfully in the district. Lack of dedicated space, IEC material and dedicated manpower at some health facilities were the gaps in implementation. The challenges faced by Health workers MPHWF were mainly work overload, lack of awareness/stigma among Adolescents.

Conclusion: AFHCs were operational in Secondary Level Health Facilities (CHCs & AH) where dedicated Counsellors are present. The challenges include inadequate infrastructure, non-availability of dedicated manpower, poor awareness and misconceptions among the community, workload of MPHWF, accessibility. Allocating a dedicated team for adolescent health services,training of health staff and supportive supervision would help in effective implementation of the program.

Keywords: Adolescents, AFHCs, MHS, RKSK, WIFS

❖ **Title: Randomized clinical trials involving Adivasi people in India: a systematic mapping**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Introduction: Randomized clinical trials (RCTs) produce high-quality evidence of effects of health interventions. Adivasis (Indigenous people) in India are known to have poorer health outcomes, and the extent and nature of health research involving them is not known. It is important that interventions to improve health outcomes among Adivasis are informed by high-quality RCTs.

Objective: To systematically map RCTs from India involving Adivasis as research participants.

Materials and Methods: We used data from RCT India Mapping project which mapped RCTs conducted in India from the year 1990 to 2019. The mapping involved screening of 119,322 records and 30,489 full texts. The current analysis includes RCTs which enrolled Adivasis as research participants.

Results: Of the total 25,011 Indian RCTs, only 8 enrolled Adivasis. Among these, five studies exclusively had Adivasis as participants, two had more than 50% Adivasi participants, and for other studies it was not clear how many were Adivasi participants. All RCTs were community based and conducted among 2,83,517 participants in 7 different states of India. 25% (n=2) RCTs were of pharmaceutical interventions; followed by 12% (n=1) of educational/behavioural interventions; 37% (n=3) were on environmental interventions; 12% (n=1) of mobile and web-based interventions, and 12% (n=1) were of other interventions. All RCTs reported the funding details. Health conditions examined were malaria 37% (n=3); hookworm diseases 12% (n=1); Iron deficiency anaemia 12% (n=1); maternal depression 12% (n=1); and neonatal health 12% (n=1). One study investigated on knowledge among social workers. Majority of the reported primary outcomes were clinical 75% (n=6); psychological 12% (n=1) and mortality 12% (n=1). None of the studies reported on vaccines, and medical device interventions.

Conclusion: There have been very few RCTs among Adivasis. This gap needs to be addressed by additional research to improve health outcomes among Adivasis.

Keywords: Adivasi, randomized clinical trials, mapping, India

❖ **Title: Real World Evaluation of the Use of a Novel Artificial Intelligence Enhanced Breast Thermography technique, Thermalytix, in Screening for Breast Abnormalities at the Community level in a Rural Population of South India**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Sathiakar Collison

Co-authors:

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- **Dr SivaTeja Kakileti** PhD: Principal Research Scientist, Niramai Health Analytix Pvt Ltd, Bangalore



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Introduction: Community level mammographic screening is not effective in resource constrained countries since it requires considerable resources. Thermalytix, a novel breast cancer screening technology, applies artificial intelligence algorithms on breast thermal images to generate an automated interpretation report.

Objectives: Here we assessed the performance of Thermalytix in detecting anomalies in a community setting.

Materials and Methods: Women who underwent Thermalytix tests in community-based screening camps in the Indian states of Karnataka and Maharashtra between Aug 12, 2017, and May 31, 2021, were included in this study. The Thermalytix test captures five thermal images in multiple views from each participant and the tool automatically generates a triage score, the B score, ranging from low risk score of 1 or 2 to the high risk scores of 4,5. Scores of 4 or 5 lead to a recommendation for an ultrasonography or mammography and results of these tests were obtained telephonically.

Results: 13 932 women were screened and included in the analysis, predominantly less than 50 years of age and pre-menopausal. 625 of these (4.5%) with scores of 4 or 5 were advised further investigations. 118 underwent further tests detecting 78 pathologies including 4 malignancies indicating that Thermalytix has a positive predictive value of 66.7% in detecting benign and malignant breast lesions.

Conclusion: In resource-constrained countries where systematic screening programmes with mammography is not scalable or feasible, the portable, radiation-free Thermalytix test is a promising option for affordable and accessible breast cancer screening.

Keywords: Artificial Intelligence; Breast Neoplasms; Mammography; Technology; Early Detection of Cancer

❖ **Title: Reasons and possible solutions for suboptimal TB Score in South Goa District: An operational research study.**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Frederick Satiro Vaz, Assistant Professor (Community Medicine), Goa Medical College.

Co-authors:

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- **Dr. Newtonraj A**, Scientist E, ICMR-NIRT
- **Dr. Jaya Prasad Tripathy**, Assistant Professor, AIIMS Nagpur
- **Dr. Jagadish Cacodcar**, Prof & HOD, Community Medicine, Goa Medical college
- **Dr. Bhargav Sawant**, PG student
- **Dr. Dinesh Rajan**, PG Student, Community Medicine, Goa Medical College.

Introduction: The TB score is a composite score based on nine domains of TB care and management under programmatic setting. An optimal TB score represents robust implementation of the National Tuberculosis Elimination Programme (NTEP) in a district. Focusing on improving the TB score



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would help improve program implementation thereby help in achieving the goal of TB elimination by 2025. **Objectives:** To identify the reasons and possible solutions for the suboptimal TB score for South Goa district. **Materials and Methods:** A sequential exploratory mixed-methods study design was used. The quantitative study was based on the data from the “Sub-National Certification (SNC) of Progress towards TB free status” exercise. For the qualitative component, the study population included NTEP functionaries at various levels of the district. Study participants were selected by purposive sampling. For the quantitative component, the “Achievement Gap” i.e. gap between maximum score/points and actual score achieved were calculated and a weighted ranking was done to normalize the ranks. Five top ranked domains were selected for further exploration in the qualitative study. As part of the qualitative exploration, reasons for suboptimal TB Score in the top five ranked domains and possible solutions were explored through Key Informant Interviews (KIIs) of STO, DTO and Nominal Group Technique (NGT) for other NTEP functionaries.

Institutional Ethics Committee approved the study. Written informed consent was obtained from all the participants. For the qualitative study, audio recordings were transcribed and translated from Konkani to English within 3 days of conducting the KII/NGT. Manual coding and descriptive content analysis was done followed by development of categories and themes. **Results:** Top five ranked TB domains identified were: TB notification, Beneficiaries paid under Nikshay Poshan Yojana, Expenditure, DR-TB treatment initiation, Treatment success rate. In the qualitative study the main themes generated for the possible reasons for suboptimal TB score were poor knowledge and awareness of TB and NTEP, Social factors, NTEP implementation at level of diagnosis of TB, TB management and treatment and administrative issues. Solutions identified included training of health staff, awareness campaigns, recruitment of staff to man vacant posts, effective system for monitoring and supervision of NTEP implementation, resolving administrative issues, solving transportation issues, reducing delays among others. **Conclusion:** Practical and simple solutions could be generated from within the NTEP which are likely to be acceptable, easily implemented in time bound manner.

Keywords: TB score, NTEP, Tuberculosis.

❖ **Title: Reasons and types of domestic violence against married women: a community based cross sectional study in urban slums of Pune.**

Mode of presentation: Oral; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Sujata Murarkar, Associate professor

Co-authors:

- **Dr Neetu Chowdhary**, Assistant Professor, Dr Rupeshkumar Deshmukh Assistant Professor

Introduction: Domestic violence against women is a global issue without any socio-economic, cultural or racial distinction. Women are trained to accept, endure, and even excuse domestic abuse in many nations, including India, and to stay quiet about such experiences

Objectives: To assess reasons and types of domestic violence against married women in urban slums of Pune



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Materials and Methods: This was a community based Cross-sectional study conducted in urban slums of Pune, Maharashtra. Study participants were total 405 married women above 18 years of age with marital age of minimum 6 months in the selected urban slums and willing to participate in the study.

Results: Domestic violence was noted in 151 participants out of 405. Hence the prevalence of domestic violence in the present study was 37%. Most common reason of domestic violence was married women not doing household work properly (23.47%). Emotional violence (69.19%) was the most common type of violence followed by physical violence (21.33%)

Conclusion: Awareness among women regarding domestic violence and laws for prevention of domestic violence needs to be made. Also law enforcement regarding it needs to be made stringent.

Keywords: Domestic violence, Married women, Reasons, Types

❖ **Title: Relevance of Narratives in Verbal Autopsies for Cause of Death Ascertainment.**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Ayon Gupta, Assistant Professor, Dept of Community Medicine, AFMC Pune

Co-authors:

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Introduction Verbal Autopsy (VA) is a viable solution to obtain adequate and reliable Cause-of-death (CoD) data in populations with poor-quality mortality data. Structured VA tools with close-ended items and text-narrative fields are used to gather information on signs and symptoms preceding death. Traditionally, VA CoD was assigned by physicians, but this is resource intensive and presents a barrier to scale-up of VA systems. Automated VA systems are available, but current leading automated VA coding methods primarily use structured data from VAs to assign CoD due to difficulties faced in interpreting text narrative fields.

Objectives The relevance of narratives for ascertaining CoD was assessed to determine essentiality for retention during VA scale-up using IT-enabled methods.

Materials and Methods VA was performed for 390 consecutive deaths occurring in the field practice area of a medical college in Faridabad district between 01 January 2019 – 31 January 2020 using three commonly used tools (Ballabgarh, SRS-VA 2018, WHO-VA 2016) with varying number of close-ended items. Physician assigned CoD, based on information contained in the close-ended item alone and on addition of narrative information was assessed for reduction in ill-defined CoDs and change in 3 character ICD-10 code.

Results Relative reduction of 50.9% in ill-defined CoDs was observed across tools. ICD-10 code changed in 203 deaths upon addition of narratives. Maximum change was observed in SRS-VA tool possibly due to fewer close-ended items and reliance on narratives. Narratives contain information on temporality, context, terminal event description and health seeking behaviour.

Conclusion Narratives in VA contribute important information relevant to ascertainment of CoD which needs to be retained during planned scale-up of IT-enabled VA systems.



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Keywords: Verbal Autopsy, Narratives, Cause of Death

❖ **Title: Adverse Events Following Immunization with Japanese Encephalitis Vaccine among children attending the Immunization Clinic at a Tertiary Hospital in Eastern India.**

Mode of presentation: Oral; **Theme:** Non-Communicable Diseases

Presenting author:

- **Dr Pravin Pisudde**, Associate Professor

Co – author :

- **Dr Mamta Jadon**, Assistant Professor
- **Dr Yashika Garg**, Assistant Professor, Shweta Singh Chauhan

Introduction: It is estimated that there are 67,900 cases of JE each year, with approximately 13,600 to 20,400 deaths, with an overall incidence rate of 1.8/100,000 population worldwide. An estimated 3 billion people live in the 24 countries in the WHO South East Asia and Western Pacific regions are at risk of JE which includes India. India has started vaccination of JE by SA 14-14-2 live attenuated under its National Immunization program. WHO advocates surveillance on AEFI post vaccination. There are no studies after inclusion of two doses of JE vaccines in immunization schedule on AEFI.

Objectives: To know the AEFI with JE vaccine among the children.

Materials and Methods: Observational longitudinal study among children visiting Immunization Clinic. **Results:** Study results shows that incidence of any AEFI after 1st dose was less 14.9 compared to 39.8 with second dose. Over all AEFI incidence followed by 1st and 2nd dose combined was 26.0 per 100 doses. Among the study subjects who witnessed AEFI after JE vaccination suffered from more than one AEFI(1.8 AEFI per study subjects when combined doses taken into consideration and 1.6 and 1.9 AEFI per study subjects in 1st and 2nd dose respectively. When 1st and 2nd dose combined AEFI was observed it shows that fever was present in 87.7% study subjects. Followed by pain and swelling. It can also be seen that fever is the major AEFI followed by 1st & 2nd dose of JE vaccine. No serious AEFI witnessed among the study subjects. **Conclusion:** It can be concluded from the study JE vaccine SA 14-14-2 was found to be completely safe and if adverse events observed also they were minor and resolved within 12 hours only. **Keywords:** AEFI, JE Vaccine

❖ **Title: Size estimation and vulnerability assessment of Transgender people in Manipur**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

Dr. Bishwalata Rajkumari, Professor, Dept. Of Community Medicine, JNIMS, Imphal

Background: Transgender people are individuals whose characteristics or behaviors differ from stereotypes about how men and women are “supposed” to be. They are marginalized and usually remain as hidden population.



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Objectives: The study planned to estimate the size of transgender population size and to determine the social acceptance and vulnerability of transgender people

Materials and Methods: A Cross-sectional study using mixed method approach was conducted among 170 transwomen in Imphal-east and Imphal-west districts of Manipur using Respondent Driven Sampling method. Interviews were taken using a semi-structured interview tool. Descriptive statistics were generated and size estimation was calculated using RDSAT 5.6. Ethical approval was obtained from the institutional ethics committee.

Results: A total of 170 transwomen were interviewed with mean(SD) age of 30.3±8.9 year. Majority (131,77%) were residing with their own parents. Mean(SD) age of realization was 8.8±5.9 year and mean(SD) age of expressing gender identity was found to be 17.3±2.7 year. Around one-third of them (61,35.9%) were in a relationship. Majority (112, 65.9%) expressed that 'they were scared of family dissent before expressing their gender identity'. Almost all said that they faced harassment (157, 92.4%) and 111, 65.3% of them reported that they have been sexually abused. More than two-third (127, 74.7%) said that they have avoided attending social/religious functions fearing that they will not be welcomed. The reported network size was found to be 40.4 (± 12.1) and estimated population size was 2073 (95% CI :1630.9 - 2395.5).

Conclusion: Majority of them faced harassment and abuse in different forms. Stigma towards transgender people is still prevalent in our society. Public awareness about the gender identity of transgender people should be raised.

Keywords:Size, stigma, transgender, vulnerability

❖ **Title: Size Matters: Cigarette size and smoker satisfaction among males above 15 years in an urban slum of West Bengal.**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Bhaskar Shahbabu, Health Advisor (Armed Force Medical Services)

duction: Tobacco kills half of its users and globally every year around 8 million deaths are attributable to tobacco use. All forms of tobacco are harmful and there is no safe level of exposure to tobacco but cigarette smoking is the most common and notorious since it kills not only its users but also the innocent passive bystanders.

Objectives: The study was conducted to determine the prevalence of cigarette use, minimum length of cigarette to quench the craving, level of nicotine dependence along with their stage of change and also to find out its determinants.

Materials and methods: A community based observational, cross-sectional study was conducted in an urban community of West Bengal from May 2014-April 2015. Data was collected as per a pre-designed and pre-tested schedule adapted from GATS India Questionnaire. Males above 15 years of age residing in the study area were interviewed during house-to-house visit.



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Results: A total of 352 study participants were interviewed. 38.4% of study participants consumes cigarettes on a regular basis. Study participants with a positive family history of tobacco use are 2.1 times (95% CI: 1.3, 3.4) more probable to use cigarettes. Half of the population are in stage of precontemplation and 43.7% of them are having high level of nicotine dependency. 66.7% of them do not need to consume the full length of a cigarette to quench their craving. Those with younger age of initiation (OR 5.35 95%CI:2.5,11.2) and consume full length of cigarette (OR 2.72, 95% CI: 1.3,5.7) are having more probability of high nicotine dependency than their counterparts. Odds of willingness to quit is significantly more among those who don't require full length of a cigarette even when adjusted with various covariates found significant in univariate regression.

Conclusion: Length of the cigarettes may be reduced to half the size of present standard length to not only decrease the nicotine dependence but also to encourage quitting behaviour among the users.

Keywords: Tobacco, Cigarette, size of cigarette, nicotine dependency, quit cigarette

❖ **Title: Snakebite care through the first two waves of COVID-19 in West Bengal, India: a qualitative study**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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- **Deepti Beri**
- **Anthony B. Zwi**
- **Jagnoor Jagnoor**

Introduction: COVID-19 containment measures affected healthcare delivery of many conditions but not much is known about its effect on snakebite care.

Objective: We aimed to explore the effect of COVID-19 on access to appropriate timely care for snakebite envenomation through the two waves of COVID-19 in West Bengal, India.

Materials and Methods: We conducted in-depth interviews with those bitten by venomous snakes through the two waves of COVID-19, their caregivers, health care workers and social workers in Sundarbans and Hooghly. We used a constructivist approach and conducted a thematic analysis.

Results: We conducted 20 interviews and identified the following themes: 1. Snakebite continued to be recognised as an acute emergency during successive waves of COVID-19; 2. COVID-19 magnified the financial woes of communities with high snakebite burden; 3. The choice of health care provider was driven by multiple factors and consideration of trade-offs, many of which leaned toward use of traditional providers during COVID-19; 4. Rurality, financial and social disadvantage and cultural safety, in and beyond the health system, affected snakebite care; 5. There is strong and shared felt need for multi-faceted community programs on snakebite.



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As a post-hoc analysis, we mapped identified factors affecting snakebite care using the three-delay model, which was originally developed for maternal mortality.

Conclusion: Multi-faceted community programs for snakebite, can contribute to improving health systems resilience. Community programs for increasing formal health service usage, should be accompanied by health systems strengthening, instead of an exclusive focus on awareness against traditional providers.

Keywords: Snakebite, Qualitative, West Bengal, India, access to care

❖ **Title: Stigmatisation and Coping strategies: A Study on Housemaids of a Capital City**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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- **Dr. O. P. Panigrahi**, Ex-Professor, Community Medicine, Kalinga Institute of Medical Sciences, Bhubaneswar, Odisha

Introduction: Domestic workers in urban areas in India are mainly less educated girls and women who suffer from lack of dignity, working in very poor working conditions, without employment contracts and face important challenges in work-family balance especially during periods of illness.

Objectives: To study the self-perception and coping mechanisms during periods of illness among female domestic workers

Materials and Methods: A cross-sectional study was conducted in the urban areas of Bhubaneswar, among 200 consenting female domestic workers above 18 years, using two-stage cluster sampling technique. A researcher made semi-structured questionnaire was used as study tool.

Results: The mean age of the participants was 35.36 ± 8.192 with 51.5 % belonging to 31-40 year age group; 87.5% were currently married and 43% were illiterate. 93.5% of the subjects opined that domestic work is associated with social stigma and only 14.5% subjects reported to be satisfied with their job; 52.5% could avail paid sick leaves during ill health; 13.5% were granted paid maternity leave; 19.5% stated timing of their work hampered their visit to health facility when required and also 67% subjects had no access to toilet facility at their workplace

Conclusion: It has been found that social acceptance of the workers are hampered and the individual workers also considered working as “housemaids” made them the victim of social stigma, therefore it is needed to promote and encourage social acceptance and to inform the development to the competent authorities and implementation of policies aimed at reducing women’s exposure to stressors which would reduce the occupational health risk.

Keywords: Domestic workers, coping, stigma



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❖ **Title: Strengthening HRH for Integrated health care systems: Learning and experiences from District health systems analysis in India**

Mode of presentation: Oral; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

- **Shrikant Kalaskar**, Senior Technical Specialist – Public Health

Co – authors :

- **Shweta Singh**, Senior Technical Specialist – Public Health
- **SreeMeena**, Project Associate
- **Girish Bommakanti**, Director – Operations and Strategic Growth

Background: Integrated care is one of the key tenets to attaining Universal Health Coverage (UHC). This spans the individuals from the home/community, through multiple services simultaneously or sequentially, that are appropriate, coordinated, and are neither duplicated nor omitted across all levels of care. This abstract is a part of a study conducted in Telangana province of southern India to analyze integrated health care. **Objective:** To study role of HRH in integrated health care systems at district level **Method:** A mixed-method study design was adopted, which involved 50 stakeholders' interviews across 10 healthcare facilities both in the public and private sector and covered 88 households. **Results:** The situation of integrated health care is better at the primary health level with a stronger interface between community and health system, which is visible as high Institutional delivery (100%), and full immunization (94.3%). However, the situation becomes discouraging at secondary care facilities with a lack of streamlined HR policies, numerous vacancies in public facilities (Specialist 43%, Medical officers 33%, Staff Nurse 46%), skewed district health-provider ratios (0.42doctors and 1.6 Nurse for 1000 population) 55% high-unspent balance of national health mission funds, weak monitoring mechanism. Health system unintentionally became less accountable to the population and fail to cater to their rising health needs and preferences (74% preferred private providers and 68% ascertained unsatisfactory quality at public facilities) leading to high costs (\$190 per patient per episode) resulting in disintegrated care and fragmented health systems. **Conclusion :** COVID-19 has exposed the dire need to reorient health services, shifting away from fragmented supply-oriented models including health workers, being the main providers of care at all levels. This needs a translation through tangible reforms to meet rising expectations for a better and more integrated health system. To co-produce health care for increasing chronic diseases, long-term multi-morbidity and pandemics, it is crucial to focus on skill mapping, joint team trainings, on-site training, and actively involving community/family members to devise new and more effective models of care.

❖ **Title: The Effects of Spilanthol Supplementation on Muscle Size and Strength in Healthy Men – A Randomized Parallel-Group Placebo-Controlled Trial**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author :

Dr. Kumar Guru Mishra, Assistant Professor, Department of Community Medicine, Apollo Institute of Medical Sciences and Research, Hyderabad



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Co-authors:

- **Dr. Nabnita Patnaik**, Additional Professor & Head, Department of Obstetrics & Gynecology,, AIIMS Bibinagar, Hyderabad
- **Dr. Nihar Ranjan Pradhan**, Director & Head, Department of Vascular & Endovascular Surgery, AIG Hospitals, Gachibowli, Hyderabad

Introduction: Spilanthol, an active compound found in herb *Spilanthes acmella*, has been used traditionally for its analgesic, anti-inflammatory, antioxidant and other properties. Studies have established its effect on serum testosterone levels which influences muscle mass.

Objectives: To determine the effect of daily spilanthol supplementation for three months on muscle size, muscle strength, total and free testosterone, estradiol, and sex hormone-binding globulin (SHBG).

Materials and Methods: A total of 546 healthy male participants were randomized to one of the four groups: placebo with no exercise, spilanthol with no exercise, placebo plus exercise, and spilanthol plus exercise. The participants received 17.5 mg of spilanthol or placebo daily for three months. The participants in the exercise groups performed standardized weight-lifting exercises four times weekly. Before and after the treatment period, muscle size and muscle strength were measured. The secondary outcomes included serum concentrations of total and free testosterone, estradiol, and SHBG measured through competitive electro-chemiluminescence immunoassays.

Results: Among the participants in the exercise groups, those given spilanthol supplementation had significant increases than those given placebo in terms of muscle size - mid-arm muscle circumference (10.54 vs 7.21 cm; $p < 0.05$), chest circumference (15.23 vs 10.82; $p < 0.05$) and thigh circumference (change in quadriceps area, 12.84 vs 9.01 cm; $p < 0.05$) and significant increases in strength in the bench-press (85 vs. 65 kg, $p < 0.05$) and squatting exercises (155 vs. 95 kg, $p < 0.05$). The participants assigned to spilanthol and no exercise had significant increases in muscle size than those assigned to placebo and no-exercise group. A significant increase was also observed in total and free testosterone and SHBG levels in spilanthol groups as compared to placebo. No significant increase was seen in estradiol levels. No significant adverse effects were observed among the participants.

Conclusion: Spilanthol, especially when combined with strength training, increases muscle size and strength in healthy men.

Keywords: spilanthol, testosterone, muscle, supplement, randomized controlled trial

❖ Title: The Role of Blood Gas Analysis among the severely ill COVID-19 positive patients

Mode of presentation: Oral; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author :

- **Dr. Soumitra Mondal**, Junior Resident of Biochemistry

Co – author :

- **Dr. Prashant Dharme, Mahendra Pakhale**

Introduction: The dominant respiratory feature of Coronavirus Disease 2019 (COVID-19) is arterial hypoxaemia, greatly exceeding abnormalities in pulmonary mechanics. Arterial Blood Gas (ABG) analysis helps to find out respiratory, metabolic acidosis and alkalosis.

Aim: To evaluate the blood gas levels among critically ill COVID-19 positive patients admitted in Intensive Care Unit (ICU).



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Objectives: To evaluate the blood gas levels among critically ill COVID-19 positive patients admitted in Intensive Care Unit (ICU)

Materials and Methods: A retrospective, observational study was conducted. Data of ABG analysis {pH, PaO₂ (partial pressure of oxygen in arterial blood), PaCO₂ (partial pressure of carbon dioxide in arterial blood) and bicarbonate (HCO₃)} in 314 adult COVID-19 positive cases were obtained from ICU records. All critically ill COVID-19 patients those who were admitted in ICU and age more than 15 years were included in this study. Data were analysed in SPSS version 16 and Pearson correlation test was applied for statistical significance.

Results: Among the study subjects, 234 (74.5%) were male. Most affected age group was 51-60 years among males and above 60 years among females. Most common ABG finding was high pH indicating alkalosis, found among 183 (58.3%) patients. Acidosis was rare and seen in only 19 (6.0%) patients. A total of 174 (55.4%) patients developed respiratory alkalosis with low PaCO₂. Hypoxaemia was found in 144 (45.9%) patients. High HCO₃, indicating metabolic alkalosis, was seen in 144 (45.9%) patients. Statistically significant correlation was found between PaCO₂ and pH (person correlation coefficient (r) = -0.153, p=0.007) and PaCO₂ and HCO₃ standard (r=0.185, p=0.001).

Conclusion: ABG should be done in all COVID-19 patients during admission. A regular interval monitoring of ABG can help in early identification of respiratory damage, silent hypoxia and cytokine storm and with early detection many lives can be saved with early initiation of management.

Keywords: Alkalosis, Bicarbonate, Hypoxaemia, Metabolic acidosis

❖ **Title: To explore the bottle necks/challenges in health care service delivery at Nutrition Rehabilitation Centre (NRC) and Child Malnutrition Treatment Centre (CMTc) of tribal areas: A Mixed Method Study**

Mode of presentation: Oral; **Theme:** Child & Adolescent Health

Presenting author :

Dr. Hinal Baria, Associate Professor

Co – author :

- **Dr. Ravikant Patel**, Associate Professor
- **Dr. Sunil Nayak**: Professor and Head

Introduction: Undernutrition is one of the most concerning health and development issues in India. Severe Acute Malnutrition (SAM) among children under 5 years of age is associated with increased risk of morbidity and mortality. It is always difficult to deliver quality health care services in tribal population and hard to reached area and also utilization of government health services by population is very low.

Objectives: To identify the gaps/barriers in nutrition health care service delivery in tribal areas and to know the satisfaction level of mothers/caregivers regarding nutrition related health services received at NRCs and CMTc, while to explore any social customs or taboos hindering the utilisation of services.

Materials and Methods: Mixed Method study was conducted in 2 NRCs and 4 CMTc of Valsad and Dang predominantly tribal districts of Gujarat. Focus Group Discussion and In-depth interview was conducted with health staff of the facility and mothers /caregivers of admitted SAM children at the facility and field level. Infrastructure assessment was also conducted. **Results:** 58.3% of mothers were satisfied with the primary care and treatment at NRC/CMTc with an average score of 3.90 ± 0.31SD on Likert scale. Barriers and challenges encountered are insufficiency of budget, late release of grants, nonavailability of paediatrician, lack of infrastructure and night security staff, nonavailability of region specific diet SOPs,



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lack of involvement of local leaders, less field referral of SAM child, lack of transportation from hard-to-reach areas, social customs and taboos related to diet etc. **Conclusion:** Facility and Community need assessment is the important cornerstone to identify barriers and challenges in framing of future strategies and policies related to malnutrition management.

Keywords: Malnutrition, Severe acute malnutrition, NRC, CMTC, Barriers

❖ **Title: To Study The Burden Of Undetected Deficiency Of Vitamin B12, Vitamin D3 And Subclinical Hypothyroidism In Apparently Healthy Individuals By Dr Seema Sharma, Dr Ns**

Mode of presentation: Oral; **Theme:** Public Health Nutrition

Presenting author :

Dr. Seema Sharma, Armed Forces

Background and Objective: Undetected deficiencies of Vitamin B12, Vitamin D3 and sub clinical hypothyroidism have assumed considerable proportion in population. Being largely asymptomatic, these disorders manifest very late in their course thus mandating early diagnosis an inescapable requirement in order to efficiently reduce the morbidity associated with these. The main objectives of the research are to determine levels and undetected deficiencies of Vitamin B12, Vitamin D3 and Subclinical Hypothyroidism in apparently healthy individuals as well as to identify their socio-demographic correlates.

Methodology: A Cross-sectional study of the population of age gp 25y-50y who reported in the OPD of primary care centre and gave their consent. The participants are selected on the basis of inclusion and exclusion criteria of the study. Six months data was captured. The sample size of the study was 897 subjects in the age group 25-50years visiting hospital OPD for various reasons.

Results: The finding indicates that the mean value of Vit D3 among Subclinical Hypothyroidism groups was (18.69±10.8) which was significantly lower than the normal (31.25 ± 9.09) with p value =0.001. The Pearson correlation indicates that Vit D3 is negatively associated with TSH (r=-0.38, p=0.03) and the severity of vitamin D3 deficiency is linked with the degree of thyroid dysfunction. The results also indicate that there is a correlation between deficiency of vitamin B12 and Vitamin D3 (r=0.46, p= 0.009). Further, the outcome also comprehensively demonstrates the demographic influence and relation with Vit B12, Vit D3 and Subclinical Hypothyroidism amongst the healthy individuals.

❖ **Title: Tobacco usage among general Adult Indian population: A meta-analysis of evidence drawn from regional studies between 2010 - 2022.**

Mode of presentation: Oral; **Theme:** Mental & Geriatric Health

Presenting author :

Dr. Rounik Talukdar, Project Scientist B, Division of Epidemiology, ICMR – National Institute of Cholera & Enteric Diseases

Co – author :

▪ **Dr. Rounik Talukdar** (MPH, BDS), Project Scientist B, ICMR-National Institute of Cholera and Enteric Diseases

▪ **Dr. Shubhajit Pahari** MPH Trainee, ²JIPMER International School of Public Health, Jawaharlal Institute of Postgraduate Medical Education and Research, Puducherry



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- **Dr. Diplina Barman** Senior Research Fellow, ICMR – National Institute of Cholera & Enteric Diseases

Introduction: Tobacco dependence is one of the most serious public health risks, with consequences that go beyond cancer, causing a slew of severe debilitating diseases involving the heart, lungs, kidneys, and other organs.

Objectives: The purpose of this review is to generate a national and zonal pooled estimate of Current Tobacco Usage (CTU) in any form, as well as stratified gender and tobacco type (smokeless & smoke) specific estimates among the general Indian population, utilizing evidence from 2010 to 2022. **Materials and Methods:** PubMed, Scopus, Science Direct, and Google Scholar databases were systematically searched. The NIH Quality Assessment Tool was used to assess study quality, and a random-effects method was used to attain a pooled estimate of usage. Heterogeneity was estimated through I^2 statistics and prediction intervals, and further subgroup analysis and meta-regression were conducted. To estimate publication bias Egger's test was performed and a leave-one-out analysis was done to establish the sensitivity of overall pooled estimate. **Results:** CTU of any form amongst the Indian population irrespective of age group was 35.25% (Confidence Interval (CI) 25.27 - 45.92, $I^2 = 99.7$, P-value < 0.001) between the years 2010 - 2022, whereas through 2016 – 2022 estimate was 44.38% (CI 30.57 – 58.64, $I^2 = 99.8$, P-value < 0.01). The region-wise highest prevalence was found in the East zone (55.43%) followed by North – East with 51.88% consumption. Though residual heterogeneity was present after subgroup analysis, Variability in estimates was statistically significant by administrative zones and gender-wise consumption (test of subgroup difference P value < 0.0001). Leave-one-out analysis proved consistency in our overall CTU estimate. **Conclusion:** The differences between national-level surveys and regional estimates are highlighted in this review and thereby warrant more regionally representative surveys of tobacco usage for tailor-making prevention efforts at national and sub-national levels.

Keywords: Tobacco; Prevalence; meta-analysis; smokeless

❖ **Title: Understanding Sexual and Gender-Based Violence through an Adolescent Lens- Qualitative Findings from New Delhi, India.**

Mode of presentation: Oral; **Theme:** Child & Adolescent Health

Presenting author :

- **Dr. Pratishtha Singh**

Introduction: Sexual and gender-based violence (SGBV) is a deep-rooted phenomenon in the Indian subcontinent which continues to remain normalized and pervasive. Majority of men who perpetrate gender-based violence, first do so during their teenage years. In order to reduce the widespread occurrence of SGBV, it is vital to intervene and reach people, especially boys, when their attitudes and beliefs about sexuality and gender are developing.

Objective/s: To understand SGBV through an adolescent lens, focusing on their knowledge, attitudes, and experiences with gendered abuse.

Materials and Methods: A cross-sectional, qualitative approach was adopted to undertake the study. 19 students from Delhi, India were recruited via snowball sampling and virtually interviewed during April and May 2020. The collected data was transcribed verbatim and qualitative coding was undertaken in Atlas.ti 8.



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Results: 18 out of 19 respondents disclosed experiencing SGBV, with only half of the victims reporting it to the police or a trusted acquaintance. The responses of the participants were organized into the following key themes: (i) Reinforcement of systemic patriarchy (ii) Violence in teen dating (iii) Men as victims and (iv) Justice System.

Conclusion: This article brings out the unheard and uncounted voices of adolescents, an underrepresented community in the Indian subcontinent around the discourse on SGBV. Findings highlight adolescents' experiences with everyday abuse, their perception towards reporting of SGBV, and a complex process of how this violence continues to remain an intricate part of their lives. The results of this study advocate for an urgent need for adolescent-friendly health promoting, and gender-equitable interventions.

Keywords: Sexual and gender-based violence, Adolescent health, Gender Equality

❖ **Title: Unmet Need for Contraception among Married Women in Reproductive Age Group in the Slums of Burdwan Municipality, West Bengal.**

Mode of presentation: Oral; **Theme:** Reproductive & Maternal Health

Presenting author :

- **Anupam Mallick, Junior Resident.**

Co – author :

- **Pranita Taraphdar, Professor and Head and Arindam De, Demonstrator, Department of Community Medicine, Burdwan Medical College, West Bengal**

Introduction: India is the 2nd most populated country in the world and it effect the socio-economic development over the past few decades. Inappropriate family planning (FP) method is one of the major culprits of population growth in India. If the determinants of FP methods were estimated, it would help to increase the acceptance of the FP methods among the user and thus help to assess the problem of population growth.

Objectives: To assess the unmet need for contraception and its determinants among married women in reproductive age group in the slums of Burdwan municipality.

Material and Methods: A community based descriptive study and cross sectional in design, conducted among 329 married women of reproductive age group (15-49 years) in the slums of Burdwan Municipality, West Bengal, from November, 2022 to January, 2023. Slums were selected by multi stage sampling and from each slum, study subjects were selected by simple random sampling. A pre-designed, pretested, semi-structured schedule was used for data collection and data analyse using SPSS-23. Results: Around 60% of coupled used some methods of family planning methods (either Condom, OCP, Injectable Contraception, IUD, Tubectomy) and 40% of couple did not use any types of methods. Around 47% of couple used these methods for spacing and 13% for limiting respectively. The significant association(p

❖ **Title: Use of wearable sensor technology to detect risk of fall in Indian Older Adults**

Mode of presentation: Oral; **Theme:** Mental & Geriatric Health

Presenting First author :

Dr. Snehal Kulkarni



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Background and objectives: Approximately 28-35% of people aged 65 and older fall each year. As most of the falls occur during walking; evaluation of gait and balance impairment are considered as the most prevalent and sensitive predictors of fall. The population of older adults is expected to increase 193 million by 2050 in India. However, no such programme fall prevention programme exists to date in India. Therefore the present study was undertaken to establish normative reference gait parameters for Indian older adults and identify older adults at risk of fall using wearable sensors. **Methodology:** This cross-sectional study was conducted in the Pune city, India among 659 community-dwelling older adults. Participants performed the Timed-up and go test (TUG) test fitted with the wearable sensors, which measured 59 gait parameters. Seven parameters were standardized for Indian older adults and fall risk of each individual was computed. Independent t-test, and one-way ANCOVA were used to establish normative gait parameters and predict risk of fall. **Results:** The study reported a fall prevalence of 24.7%, with a mean stride length of 123.00 ± 15.19 cm and stride velocity of 110 ± 17.57 cm/s respectively. Significantly ($p < 0.05$) shorter stride length was observed in participants above 80 years of age (109.01 ± 18.08 cm). Using these gait parameters, the study found that 20% of the study participants were at low risk of fall, 30.5% medium risk, 25.5% had high risk and 24.1% were at very high risk of falling. The sensor reported a sensitivity of 85.71% (CI: 69.74%- 95.19%) and 56.02% (CI: 49.82%- 62.07%) specificity to predict falls. **Conclusion:** Wearable sensors are a dependable tool for identifying older adults at risk of falling in community settings with limited resources and expertise.

❖ **Title: Why do people speed? Findings from a qualitative evidence synthesis on facilitators and barriers to speeding**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author :

Ms. Pratishtha Singh, Research Assistant, George Institute for Global Health

Co-authors:

- **Dr Jagnoor Jagnoor**, Head- Injury Division, George Institute for Global Health

Introduction: Road Traffic Crashes (RTCs) are a global public health problem and are expected to increase for the next two decades. A major risk factor of RTCs is speeding, as it contributes to 15-35% of all reported deaths. Despite legal mandates, ensuring appropriate road user behavior around speeding continues to remain a challenge. Although quantitative reviews have identified factors associated with speeding, there is no qualitative evidence in understanding the enabling and obstructive factors as to why people speed.

Objective/s:

1. To synthesize qualitative evidence on barriers to, and facilitators of speeding while using motor vehicles
2. To explore perceptions, attitudes, and experiences of road users around speeding while using motor vehicles

Materials and Methods: We searched electronic databases Medline, EMBASE, and Scopus in September-October 2022. Articles were included if they were primary studies that used qualitative methodologies. No restrictions were made on geography but only studies from 2000 or later were included.



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Results: Out of the 5103 articles from the literature search, only 17 articles met the eligibility and inclusion criteria. Among these, 13 were qualitative investigations, 3 were mixed-methods studies, and 1 was a qualitative review. The synthesis identified three main themes that influenced drivers' decisions to speed, including individual factors such as age and gender; social factors such as peer acceptance and displays of masculinity; and external factors such as road conditions and congestion. **Conclusion:** This review provides important insights into why people speed and highlights the need for further investigation into studies from lower-and-middle-income countries. Understanding the underlying factors that influence speeding behavior is a formative step towards the development of empirical interventional strategies to reduce speeding and road traffic crashes.

Keywords: Road safety, Speed, Injuries

❖ **Title: Neglect among elderly cancer patients: An attempt to measure and understand its circumstances**

Mode of presentation: Oral; **Theme:** Mental & Geriatric Health

Presenting author:

▪ **Viswanath N**, Junior Resident, Dept. of Preventive and Social Medicine, JIPMER, Puducherry

Co – author :

▪ **Dr. Sonali Sarkar**, Professor, Dept. of Preventive and Social Medicine, JIPMER, Puducherry

▪ **Dr. S. Adinarayanan**, Professor, Dept. of Anaesthesiology & Critical Care, JIPMER, Puducherry

▪ **Dr. Gunaseelan K**, Professor & HOD, Dept. of Radiation Oncology, JIPMER, Puducherry

▪ **Dr. Mahalakshmy**, Additional Professor, Dept. of Preventive and Social Medicine, JIPMER, Puducherry

Introduction: A large proportion of cancers occur in the elderly age group (60 years or above). There are evidences of neglect of care and abuse among the elderly in India. Neglect of care for the cancer patients in the elderly have been observed by the community based palliative care team. Early detection and prevention can benefit the patient's overall health but it remains underexplored.

Objectives In selected regions of Puducherry and Tamil Nadu,

1. to develop a questionnaire for assessing neglect of care among elderly cancer patients by their family members
2. to describe the circumstances influencing neglect of care in elderly cancer patients by the family members

Materials and Methods: This is the first phase of a development and validation study where In-depth interviews (IDI) and Key Informant interviews (KII) were conducted to generate items of the questionnaire. Five IDI with elderly cancer patients & their family members and five KII with community members related to the care of the patients was conducted and transcribed. Face and content validation was performed by the experts to modify and reduce the items. Thematic analysis was done to describe the circumstances influencing neglect.

Results:



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63 items were generated from the interviews. After content validation, Three separate questionnaires targeting patient (19 items) , family member (16 items) and community member (16 items) was generated. Sub-themes from KII and IDI were identified relating to individual, family and community level factors influencing neglect. Interplay of factors in these sub- themes result in neglect of care for elderly cancer patient. Major subthemes which emerged were stigma, lack of concern, support , empathy, care, and lack of insight.

Conclusion: Neglect by family members affect the quality of life of elderly cancer patients physically, mentally and psychosocially. Neglect could be measured through this questionnaire after validation.

Keywords: Cancer, Elders, Neglect

❖ **Title : A CONCEPT PAPER on “Action against Gender-Based Violence: Capacity Building of the Health Care Workers in the field practice area of KLE’s JGMM Medical College, Hubballi, Karnataka-An Interventional Study.**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr Namratha Kulkarni, Assistant Professor, Department of Community Medicine, JGMM Medical College, Hubballi, Karnataka

Co-authors:

▪ **Dr. Rizwana B Shaikh**, Associate Professor, Department of Community Medicine, JGMM Medical College, Hubballi, Karnataka

Introduction: “Gender-Based Violence (GBV)” or “Violence Against Women (VAW)” is a global pandemic. It is not new to the Indian population. In India, the Ashas, Anganwadi workers, and Auxiliary Nurse Midwives (ANMs), the AAA team, is close to women in the community, sharing a good rapport, which makes it easier for them to identify who is at risk or facing such forms of violence. **Objectives:** To assess the knowledge, attitude, and practices, to build the capacity and to assess the outcomes of the intervention among the Health Care Workers (HCWs) in the field practice area of KLE’s JGMM Medical College, Hubballi on Gender-based Violence. **Materials and Methods:** This study will be done in the field practice area of KLE’s JGMM Medical College, Hubballi, Karnataka, which caters to three- one urban and two rural primary health centers. Knowledge, attitudes, and practices about the GBV of all the HCWs(center and field staff), will be assessed before and post-intervention. A follow-up assessment will be done after 3 completed months of intervention to assess the impact of the orientation on the module of GBV among the HCWs. The data collected will be analyzed using SPSS Software Version 25. **Results:** At the end of the study, we expect to have an impact of GBV module orientation on the HCWs and a minimum increase of 20% in the knowledge in the post-tests as compared to pre-tests. **Conclusion:** The study, in the long run, will help in quantifying the problem and identifying the victims, the social determinants, and their distribution, helping in understanding what needs to be done to reverse the existence of GBV. This study will act as a pilot work for future multicentre studies. We are open to collaborations for multicentric studies so as to have a better impact of the study in the community.

Keywords: Gender Based Violence, Women Health, Women Empowerment, GBV, Domestic Violence



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❖ **Title: A cross-sectional study to assess the Hepatitis B vaccination status, awareness and reasons of taking Hepatitis B vaccine before admission among newly enrolled MBBS students in a government medical college in Maharashtra**

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Suparna Goswami, Junior Resident I, BJGMC, Pune

Co – authors :

- **Co-Investigator (Co-PI): Dr. Ashwini Umesh Patekar**, Assistant Professor, BJGMC, Pune

As per our study most of students (94.8%) belong to the age group of 18 to 20 years. Male students form the majority with 56%. 88.4% of students are Hindus, rest being from other religion. Only 26% of students belong to rural area and 74% belong to urban area. A large majority i.e., 90.4% were from Maharashtra. Awareness of Hepatitis B symptoms and its complications was found among 57.2% students before entering medical college. Only 11.6% percent of students had taken hepatitis B vaccines before joining medical college.



Abstracts for Poster Presentations

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❖ **Title: "Environmental Wellness" in Family Adoption Program: a preassessment of awareness amongst first-year medical students Theme: Medical Education and Public Health Ethics**

Mode of presentation: Poster

Presenting author:

Dr. Priyaranjan Sahoo, 2nd year PG

Co – author :

- **Dr. Ipsa Mohapatra**, Associate Professor
- **Dr. Geeta Chand Acharya**, Assistant Professor
- **Dr. Basanta Kumar Behera**, Professor

Introduction: Environmental health and wellness have been introduced in medical curriculum to help equip the future doctors in addressing complex issues like climate change, pollution and health. As a part of the "Family Adoption Program", the students are required "to carry out and be a part of the environment protection and sustenance activities". As a doctor during their field-visits they will be spreading various health awareness messages.

Objective: To assess the knowledge and practices of "environmental wellness" of first-year medical students.

Methods: This cross-sectional study was done amongst the first-year MBBS students, from December 2022 to February 2023; using an electronic online questionnaire, on sections of demographics, climate change, environmental laws and wellness. Responses on aspects of environmental wellness were rated as never, rarely, sometimes, regularly and always from lowest to highest (1-5); evaluated as frequency, proportion percentages and mean scores. Chi-square, Ftest and t-test were applied for association, with a p value

Results: Of the 250 students, 212 were present, 179 consented, with a response rate of 84.4%. Their mean age was 19.79 ± 1.76 SD years; 70.94% females and 84.9% knew about appropriate state level laws. 77.65% had excellent, 16.20% good, 6.15% had fair level of environmental wellness. The females had a better attitude ($p=0.004$) and practice ($p=0.037$) in comparison to male students with regards to facets of environmental wellness.

Conclusion: The students were well aware of environmental wellness, but female students had better attitude and practice.

❖ **Title: "To quit tobacco chewing, I started cigarette smoking:" A Phenomenological Qualitative insight into the motivation to Quit Tobacco**

Mode of presentation: Poster; **Theme:** Mental and Geriatric Health

Presenting author:

Parmeshwar Satpathy, Assistant Professor, Department of Community Medicine, Dr. B C Roy Multi Speciality Medical Research Centre, IIT Kharagpur, West Bengal, India

Co – author :

- **Sharad Tiwari**, Deputy Director, National Mental Health Program, National Health Mission, Madhya Pradesh, India
- **Jasmin Panda**, Senior Resident, MKCG Medical College and Hospital, Berhampur, Odisha, India



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- **Sumanta Kumar Sahu** Junior Resident, Veer Surendra Sai Institute of Medical Sciences and Research, Burla, Odisha

Background: The cessation of tobacco use is a recognised public health policy problem in many nations and plays a critical role in reducing preventable morbidity and mortality. Tobacco dependence involves a variety of behavioural, cognitive, social, and physiological phenomena that make it difficult for most tobacco users to successfully quit after their first try.

Objectives: To gain understanding of and insight into the driving forces behind attempts to give up smoking in connection to the stages of the behaviour change model.

Materials and methods: This qualitative study was based on Alfred Schutz's social phenomenology framework. We conducted 16 in-depth interviews with patients registered at a Deaddiction centre in District Hospital, Bhopal, India. Each in-depth session lasted 25–30 minutes and we audio recorded them with consent. Qualitative data were transcribed in verbatim and appropriate codes were generated. Thematic analysis was done manually to derive appropriate themes and sub-themes.

Results: Out of a total of 16 patients, 10 patients (62.50 %) relapsed after the first quit attempt while six patients were willing to quit for the first time. Three key themes were derived: Barriers to quit tobacco, Reasons for quitting, and Methods to quit. The study explored three intrinsic (Self-realization, Monetary constraints and Concern for one's own health) and two extrinsic motivations (Family's health and Pressure from society) for attempting to quit.

Conclusion: Behaviour change has a crucial role to play in successful quit attempts. Treatment providers should encourage behavior change through intrinsic goals, compared to extrinsic goals, as they have a long-term and positive impact because they can activate autonomous motivation.

Keywords: Tobacco, cigarette, smoking, qualitative, phenomenology, behaviour change model

❖ **Title : A Comparative Cross-sectional study on Nutritional Status between Exclusively Breastfed and Non-exclusively Breastfed in 2 to 5 years Children visiting a Rural Health Training Centre under Calcutta National Medical College.**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr Avradeep Bhattacharya, 2nd year Post Graduate Trainee, Department of Community Medicine, Calcutta National Medical College.

Background: Breast feeding provides an infant with essential calories, vitamins, minerals and other nutrients for optimal, growth, health and development. WHO-CDS growth charts are now gold standard in determining nutritional status of children and development of children are achieved during this critical stage. **Objectives:** 1. To find out nutritional status among children between 2 to 5 years. 2. To identify the association of breast feeding with nutritional status of study subjects if any. **Materials and Methods:** A descriptive cross-sectional study was done in Immunization clinic of a rural health training centre Jagadishpur under Calcutta National Medical College for 3 months. The 30 children (2 to 5 years) each of exclusive and non-exclusive breastfed were selected by doing purposive sampling method. Care giver of children were interviewed by predesigned, semi structured, schedule and anthropometric measurements of children were done by using non stretchable measuring tape, weight machine. Data were analysed with SPSS version 23, which was carried out to find out association between breastfeeding and nutritional status of study subjects if any. **Result:** Total 60 study subjects selected among them 27 girls (14 were exclusively breastfed i.e. 52% and 13 non-exclusively breastfed i.e. 48%) and 33 boys of total



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study subjects (16 were exclusively breastfed i.e.48% and 17 were non exclusively breastfed i.e.52%).Among all study subjects underweight were 41.6%,stunted were 20% and wasted were 41.7%.There is significant association between breastfeeding status and weight for age($\chi^2=5.554$, $P=.018$).

Conclusion:There is epidemiological evidence of association with nutritional status of exclusively and non-exclusively breastfed child.Mother milk is best source to meet their requirements.

❖ **Title : A comparative study of random blood sugar on patients with vaginal infections visiting private women's clinic in post covid era.**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

Dr Reshmi Dutta Sarkar, FGO . FAM (PRESENTLY PURSUING FELLOWSHIP IN DIABETOLOGY)

Objectives: To identify underlying diabetes in women with vaginal infections.

Materials and Methods: A cross sectional random blood sugar was done on 70 patients visiting clinic with vaginal infections most patients were suffering from vaginal leucorrhoea, pruritis and discomfort. Discharge per vagina for more than 6 month they were having repeated vaginal infections and most of them took over the counter medicines. The age group was from from 30 to 60 years and no one was detected with diabetes before.

Results: A random blood sugar was done on all these 70 patients , 52% of the patients were detected with high blood glucose on random screening. They were advised to do Fasting blood sugar, HBAIC AND Post prandial blood sugar test. It was found about 20 percent have high HBAIC more than 6.5 to 8.5. The remaining 32 percent had mild diabetes .

On screening identified diabetes patient were counselled , given medications and diet lifestyle modifications were explained. Regular diabetes screening is essential in all women in our society.

Conclusion: This silent morbidity is spreading its roots deep in the society. Social awareness, regularly free random screening camps should be done to identify the diabetic patients. Women should be encouraged to do screening yearly. Life style diseases are griping the world like a leech and hence early detection is very essential to improve the quality of life.

Keywords—Vaginal Infections / Random Blood Sugarnaec Problems/ Hbaic

❖ **Title : A Cross Sectional Epidemiological Study on the Prevalence, Knowledge and Attitude on Substance Abuse Among Collegiates of North India**

Mode of presentation: Poster; **Theme:** Menatal & Geriatric Health

Presenting author:

Dr. HS Chohan, Prof & Head Center for Public Health

Co-authors:

- **R Kaur**; MPH Scholar
- **NL Gupta** · Prof. & Head, Psychology, Eternal University, Baru Sahib, HP-India

Background: Recent times have witnessed a gradual increase in substance use and abuse among younger population, with more people initiating substance use from an early age. The use of various licit and illicit substances among the school and college students is also on the rise with newer substances and multiple substance use also being documented. **Objectives:** To find out the prevalence



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of substance abuse among the college students. To assess the level of knowledge and attitude. To find out the association between level of prevalence and knowledge. **Methodology:** Cross-sectional descriptive study design was adopted to fulfil the objectives and it was a Quantitative method of data collection. **Results:** The overall prevalence of substance abuse among college students was found to be 30%. Regarding the prevalence of different substances abused: alcohol was maximum 23.8%, followed by tobacco 10.3%, cannabis 5.3%, opium 5.3%, heroin 3.3%, pharmaceutical opioids 2.8%, inhalants 2.5%, pharmaceutical sedatives 2.3%, injectables 1.8% respectively. Out of the total 30% students who were substance abuser, 63.4% were single substance users while 36.6% were multiple substance abusers. 55.5% of respondent had moderate level of knowledge. The attitude towards addiction was not affected by social stigma as majority 72% of respondents considered it as a social evil. The regular substance abuse was more among males as compared to females (89.1% vs 10.9%). Here 88.3% of regular substance users belonged to rural area and 11.7% to urban area. **Conclusion:** Consumption of licit and illicit substances has been increasing and the age of initiation of abuse is progressively falling. Lack of knowledge regarding substance abuse lead to increased prevalence of substance abuse. The common drugs of abuse amongst adolescents are tobacco and alcohol followed by illicit drugs like cannabis heroin, opium & injectables.

Key words: Attitude, Substance, Illicit, Abuse

❖ Title : A CROSS SECTIONAL STUDY ON ATTITUDE OF MEDICAL STUDENTS ABOUT GENDER INEQUALITY

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Mithun, Assistant Professor

Co-authors:

- **Dr Shobha**, Assistant Professor
- **Dr Ranganath TS**, Professor and Head

Introduction: Gender equality and women's empowerment have been recognized as crucial in the development of country. Gender inequality has a huge influence on people's lives, but its major consequence is that it acts to create biases in communities. In India, more than 55 percent of the women suffer from Domestic Violence. It was included under SDG5 to end gender inequalities. Even though, it is a common understanding that the education has a positive effect on the mindset of the society towards gender equality, this study tries to bring out the actual attitude of medical students on gender inequality. **Objectives:** To study the attitude of male and female medical students towards gender discrimination/ inequality

Materials and Methods: Study Design: Cross-sectional study

Study area: Undergraduate students of a medical college in Bengaluru

Study Population: 2nd year MBBS students

Study period: 01/08/2021- 31/10/2021

Sampling method: Universal sampling

Sample size: Students who were present at the time of the study. 202 students



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Data collection and Analysis: A validated questionnaire Gender Attitude Belief Inventory administered was self administered and Statistical analysis was done using SPSS version 20.0

Results: Among the study participants, 86(43%) were boys and 116(57%) were girls. 63% of the total participants considered themselves as a feminist statistically significant difference was observed among boys and girls ($p < 0.05$). According to GABI, around 33% of the participants belong to Liberal Feminist group followed by 11% participants belonging to Post Modern Feminist group.

Conclusion: Even though society is educated, the mindset of the people is still at the stage of infancy in the matters of Gender Equality. The idea of gender equality need to be inculcated in the thoughts of students from at least university level to eliminate a gender bias community in the future.

Keywords: Gender, Equality, feminism, medical, students

❖ Title : A Cross Sectional Study on Coping Behaviour of Oral Cancer Patients Attending a Tertiary Care Hospital, Kolkata

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author: Dr. Adhiraj Barman, Junior Resident, Community Medicine All India Institute of Hygiene and Public Health, Kolkata

Co-authors:

- **Dr. Bobby Paul**, Professor and Head, Department of Preventive and Social Medicine All India Institute of Hygiene and Public Health, Kolkata
- **Dr. Lina Bandyopadhyay**, Advisor Public Health (SAG), Professor (EQ), Department of Preventive and Social Medicine , All India Institute of Hygiene and Public Health, Kolkata
- **Dr. Anis Bandyopadhyay**, Associate Professor, Department of Radiotherapy , N.R.S Medical College and Hospital, Kolkata
- **Dr. Ranjan Das**, Director Professor and Director, All India Institute of Hygiene and Public Health, Kolkata

Background: In India, 20 per 100000 population are affected by oral cancer, accounting for 30% of all cancers. Over 5 people in India die every day because of oral cancer. Coping behaviour among such oral cancer patients have not been studied extensively in India.

Objectives: This study was formulated to estimate the predominant mode of coping behaviour among the oral cancer patients and to elicit the factors associated with their coping behaviour.

Materials and Methods: An Institution based cross sectional study was conducted in Radiotherapy O.P.D of a tertiary care hospital between November 2020 to October 2022 . Allowing a non-response and a design effect for systematic random sampling the minimum sample size came to 154 persons. Systematic random sampling technique was used where every 2nd patient visiting the OPD was selected. Domains of coping behaviour was assessed using Brief COPE Questionnaire. Technique used was face to face interview . Data analysis was done by SPSS 16.0 software. The study was approved by the institutional ethics committee of AIH&PH and N.R.S Medical College & Hospital, Kolkata

Results: Majority (66.9%) of the study participants were male, more than half (55.8%) of them were illiterate. Majority (almost 95%) of the patients belonged to tumour staging category 3 and 4 . Majority (79.2%) of study participants had a strategy of emotion focused coping , followed by 13% problem focused coping and 7.8% avoidant coping. Significant statistical association (p value ≤ 0.05) had been



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found across the domains of coping behaviour with age groups, caste, level of education ,Metastasis Staging and duration of treatment .

Conclusion: Inclusion of mental health professionals in the treatment of cancer patients will help them accept their diagnosis and adjust their life accordingly. Regular counselling of patients and their family members is to be given paramount importance.

Keywords: Oral cancer, Coping Behaviour, Determinants

❖ **Title : A Cross Sectional Study on Delay in Diagnosis and Initiation of Treatment of Tuberculosis**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

- **Dr. Ekta Vidyarthi**, Junior Resident, Community Medicine

Co-authors:

- **Dr S. D. Kandpal** (Prof & HOD)
- **Dr Sumeet Dixit** (Associate professor),
- **Dr Manish Kumar Singh** (Associate professor)

Introduction: Delayed presentation is a key contributor to the high incidence and spread of tuberculosis in developing countries. Delayed treatment commencement in Tuberculosis patients increases infectivity, leads to poor treatment outcomes, and deaths. It is seen that delay in diagnosis of tuberculosis is usually associated with female gender, poor TB knowledge, financial insecurities, and poor access to healthcare services among many.

Objectives: (1) To estimate the delay (days) in diagnosis of Tuberculosis patients.

(2) To determine factors associated in the delay of diagnosis in Tuberculosis patients.

Materials and Methods: This cross-sectional study design is planned to estimate the delay in diagnosis in Tuberculosis and factor associated with this delay. It is a part of ongoing study with a total sample of 371 out of which 105 Tuberculosis patients were enrolled for the present study. Two Tuberculosis units were selected by using multi stage random sampling. Newly diagnosed pulmonary and extrapulmonary Tuberculosis patients notified under Nikshay of all age groups were included and delay was defined as the number of days spent by the patient from the first appearance of TB symptoms to TB diagnosis.

Results: The study is presently under process and the results are awaited.

Conclusion: Conclusion will be drawn after the results.

Keywords: Tuberculosis, Patient's delay, Nikshay, Health seeking behaviour

❖ **Title : A Cross Sectional Study on Delay in Diagnosis and Initiation of Treatment of Tuberculosis**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Ekta Vidyarthi



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❖ **Title: A cross sectional study on obesity among medical interns in a tertiary health care public hospital in a metropolitan city.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Varun Jatin Wani, MBBS, MD. Senior Resident, Department of Community Medicine, Lokmanya Tilak Municipal Medical College and Lokmanya Tilak Municipal General Hospital, Sion, Mumbai – 400022, Maharashtra.

Co – author :

Dr. Sudam R. Suryawanshi, Professor and Head (former), Department of Community Medicine, Topiwala National Medical College & BYL Nair Charitable Hospital, Mumbai Central, Mumbai – 400008, Maharashtra.

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Co – author :

Dr. Sudam R. Suryawanshi, Professor and Head (former), Department of Community Medicine, Topiwala National Medical College & BYL Nair Charitable Hospital, Mumbai Central, Mumbai – 400008, Maharashtra.

Background: Medical interns are the doctors of the future who, after clearing the final MBBS examinations, are given a yearlong opportunity to observe, learn and assist in the running of healthcare services. Obesity is a rising problem in India, with a high proportion among young adults.

Objectives: To assess the prevalence of obesity among medical interns and associated risk factors.

Materials and Methods: Through this cross-sectional study, obesity among medical interns in a public hospital was studied. Data on socio-demographic data, history of illnesses, perceived stress, addictions, dietary patterns, lifestyle factors and anthropometry was collected.

Results: Total 102 interns consented to participate in the study, of which 7 interns (6.9%) were obese and 32 (31.4%) were pre-obese by BMI. Waist and hip circumference were measured, which showed that 39 (81.25%) males and 26 (48.15%) females had a high waist: hip ratio. Only 28 interns (27.45%) exercised adequately during internship. Among the interns, 33 reported the consumption of alcohol. Smoking was reported by 9 interns and one reported the use of cannabis joints. Among meals eaten by interns, breakfast showed the most variation, with 29 interns (28.43%) having breakfast regularly at a fixed time. There was a significant association between BMI & outside food consumption.

Conclusion: Despite being medical students who have cleared their qualifying examinations, a large proportion of interns are obese. Poor eating patterns, lack of exercise, addictions are associated factors. Health education and implementation of good lifestyle practices is needed among medical interns.

Keywords: Intern, Hospital, BMI, Obesity

❖ **Title: A Cross- Sectional Study on Stressors related to Medical Education among Indian Medical Graduate students in a Private Medical College of Durgapur, West Bengal.**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Sayanti Bandyopadhyay, Assistant Professor, Department of Community Medicine, IQ CITY Medical College, Durgapur, West Bengal



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Co – author :

- **Dr. Soumit Roy**, Assistant Professor, Department of Community Medicine, IQ CITY Medical College, Durgapur, West Bengal

Introduction: Healthy mind is essential for good academic performance and skill development. Stress is silently killing the mental stability of students. Indian Medical Graduate (IMG) students often face a huge stress related to academic pressure, interpersonal relationships etc leading high incidence of suicidal activities among them.

Objectives: To assess stress level related to stressors like academic, intra & interpersonal, teaching-learning, social, desire, group activities and to assess the correlation between these stressors among IMG students of IQ City Medical College, Durgapur. **Materials and Methods:** An observational cross-sectional study was conducted among 122 IMG students from November 2022 to January 2023. Stratified random sampling technique was used with a sampling frame from attendance registers and equal proportions from each professional year were included in the study. A 40-item validated questionnaire named Medical Student Stressor Questionnaire [MSSQ] was used to assess the level of stress as per six stressors: academic (13 items), intra & inter personal (7 items), teaching-learning (7 items), social (6 items), desire & drive (3 items), group activity (4 items). The stress level for each six stressors were categorised as per mean item score into mild (0-1), moderate (1.01-2), high (2.01-3), and severe (3.01-4). Informed written consent was taken from all participants and ethical clearance from institutional ethical committee was obtained.

Results: The proportions of high and severe stress according to academic, intra & inter personal, teaching-learning, social, desire & drive, group activity were 51.6% & 28.7%, 27% & 5.7%, 23.8% & 5.7%, 26.2% & 3.3%, 16.4% & 5.7%, 38.5% & 23.0% respectively. High positive correlation was noted between academic and group activity. Moderate positive correlation was noted between other stressors except between desire & drive and academic stress.

Conclusion: Alarming level of academic stress was noted among IMG students. Academic stress was highly correlated with group activity. Regular counselling of students as well as promotion of group activity-based learning was highly recommended.

❖ Title: A Cross Sectional Study to Assess the Performance of Health & Wellness Centre Under Ayushman Bharat Yojana in Bilaspur District

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Ashish Gahwai, PG Scholar

Co – author :

- **Dr Vivek Sharma**
- **Dr Sameer Kumar Paikra**

Introduction: Ayushman Bharat Yojana is a key initiative undertaken by the Government of India to achieve Universal Health Coverage which adopts a continuum of care approach and aims to address health holistically at all the levels



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Objective: To evaluate the HWCs and their services under Standard criteria in Bilaspur District, Chhattisgarh.

Material and method: A Community based Cross sectional observational study was carried out in 10 SC-HWC in which CHO were posted in District Bilaspur CG, selected by simple random sampling. Data was collected by face-to-face interview using Semi structured Questionnaire constructed based on HWC Guidelines 2022.

Result: In our study we observed that in 10% HWC, ANM were not posted and in 20% centers multipurpose workers were not available. We observed that Among available Workers 40% workers and 40% ASHA workers did not receive NCD training. 30% Centres were lack of space for Lab and Space for wellness activity. 40% centers had no space for pharmacy. We found that DVDMS was not available in 30% of centers.

Conclusion: Majority of health and wellness centers are functioning as per the guidelines laid down by the Government except a few services like wellness activities and lab services. Human resources need significant improvement. Study also found that Supply chain of medicines, vaccines and other articles need to be strengthened.

❖ **Title: A Cross Sectional Study to find out Prevalence of Common Dermatological Disorders among Medical Students of Teaching Hospital, Etawah district**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Arunima Sharma, PG JR 1 (UPUMS, Saifai)

Co-authors:

- Dr P.K. Jain, Professor, (UPUMS, Saifai)
- Dr Sandip Gupta, Professor & HOD, (UPUMS, Saifai)
- Dr Dhiraj Kumar Srivastava, Professor, (UPUMS, Saifai)
- Dr Rashmi Bhujade, Associate Professor, (UPUMS, Saifai)

Introduction: Dermatological problems are one of the main concerns as now people are more conscious towards their appearance. Thus, cosmetic appearance has a greater impact on people's emotional and psychological behaviour than their physical appearance, which predisposes them to psychiatric disorders. Nowadays, the younger generation is much more conscious towards their cosmetic appearance, which further adds to their stress and anxiety. So, this study was planned with the aim to find out the prevalence of dermatological problems. As a result, they can benefit from proper management of dermatological problems at an earlier stage, as well as proper education about disease, prevention methods to avoid psychological consequences later in life. **Objective:** To find out the prevalence of various skin problems among medical students and, to find out the prevalence of various hair problems among medical student and to find out it's associate of dermatological problem. **Material and Methods:** An observational study was done among all undergraduate medical students studying at teaching hospital, Etawah district. A pre-designed, pretested, structured questionnaire was used to collect information regarding their socio-economic status, pattern of skin diseases, lifestyle factors. The data thus collected were analysed using SPSS software version 24.0 **Results:** Overall prevalence of dermatological problem present in 414 out of 430. Hair problem was present in 221 Male & 168



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Female whereas skin problem was present in 207 Male & 146 Female out of total study participants. Statistically significant association was found between the hair problems and male gender as P-value was <0.05 using chi-sq test. **Conclusion:** According to results of our study both skin and hair problems was found more in male gender thus health education should be provided to improve the dermatological outcomes.

Keywords: Dermatological diseases, prevalence, medical students

❖ **Title: A cross-sectional observational study to assess the implementation of the Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) in public health facilities of Raipur city, Chhattisgarh.**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

Dr. Yogesh Kumar Singh, PG scholar, Pt. J.N.M Medical College Raipur (C.G.)

Co-authors:

- **Dr. Nirmal Verma**, Professor and Head of Department, Pt. J.N.M Medical College, Raipur (C.G)
- **Dr. Shailendra Agrawal**, PG Demonstrator, Pt. J.N.M Medical college, Raipur (C.G)

Introduction: Maternal health refers to health of the women during pregnancy, child birth and postpartum period. MMR still remains high even with improved access to maternal health care services. According to 2018-20 Sample Registration System, Maternal Mortality Ratio (MMR) of Chhattisgarh was 137. The Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) was launched in 2016, to ensure quality of antenatal care of pregnant women.

Objectives: To observe the implementation of PMSMA in the public health care facilities in Raipur city.

Material and Methods : A cross-sectional observational study.

Study Site-The study will be conducted at public healthcare delivery centers across the Raipur city, Chhattisgarh.

Study Tool - A pre-designed check-list as per the operational guideline of PMSMA.

Study Technique- Observation, Record review and interview method.

Results: The above study represents the service provider information in all the health centres had medical officers (100%) and staff nurses (100%), OBG specialists (20% centres), BEmOc & CEmOc trained medical officers (26.67% centres), involvement of private providers (26.67% centres), and counselors (20% centres) Most of the health centres had facility for blood test (93.33%), urine albumin and sugar test (86.67%), screening test for gestational diabetes mellitus (40%), ultrasound (6.66%), thyroid function test (20%). women with high risk pregnancy 46.16%.

Conclusion: If each and every pregnant woman in India is examined by a Medical officer/ specialist and investigated appropriately at least once during the PMSMA, the program can play a crucial role in reducing the number of maternal deaths in our country.

Keywords: PMSMA, High risk pregnancy



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❖ Title: A Cross-Sectional Study On Assessment Of Burden In Care Givers Of Dialysis Patients In A Tertiary Care Hospital

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Chimata Naveen, Dept of community medicine, Government medical college, Ananthapuramu.

Co-authors:

- * Dr.T. Madhu
- * Dr.Srinivas rao.

INTRODUCTION: Chronic kidney disease is a progressive condition that affects >800 million worldwide.¹The patients with end-stage renal disease (ESRD) require dialysis.**1.75 lakh people** in India are on maintenance dialysis², it is a lifelong procedure needing endless contribution by caregivers. caregivers can experience stress, burden and poor quality of life³.The present study was conducted to assess the care giver burden.

AIMS AND OBJECTIVES:

- 1.Estimate the burden among caregivers of dialysis patients.
- 2.To determine the factors influencing burden in care givers.

MATERIALS AND METHODS: A hospital based cross sectional study was conducted among 110 care givers of dialysis patients in a tertiary care hospital of a district. Consecutive sampling was used. Data was collected by interview method using a pre designed, semi structured questionnaire. Zarit burden scale used for assessing burden. Data was analysed by using percentages and proportions. Chi-square test used to test association. SPSS version 25 used.

RESULTS: Of 110 subjects, 23 (20.9%) perceived to have mild to moderate burden while 21(19.9%) experienced moderate to severe burden. Burden in males compared to females (60% vs 40% $p=0.04$) was higher.51% of caregivers belonging to Lower and upper lower socioeconomic class reported burden ($p=0.043$). Attendees with higher frequency of visit (p value 0.04).

CONCLUSION: In view of high prevalence of burden in this study there is a need to recognise and address the inevitable stress and subjective burden on informal caregivers of dialysis patients. Higher care giver burden was observed in attenders belonging to low socio-economic status.

Key words: Care giver,Dialysis,ESRD,Zarit burden scale.

❖ Title: A cross-sectional study on cardiovascular risk and its associated factors among residents above 40 years in Singur, West Bengal

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Anurag Mondal, Post Graduate Trainee, Department of Preventive and Social Medicine; All India Institute of Hygiene and Public Health, Kolkata.

Co-authors:

Biswas A¹, Sahu M²,Bhattacharya M³,Paul B⁴, Bandyopadhyay L⁵

¹Second year Post Graduate Trainee, Department of Preventive and Social Medicine; ²Associate Professor, Department of Preventive and Social Medicine; ³Professor, Department of Maternal and Child Health; ⁴Professor and Head, Department of Preventive and Social Medicine; ⁵Advisor Public



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Health(Professor) Eq. Department of Preventive and Social Medicine; All India Institute of Hygiene and Public Health, Kolkata.

Introduction: Cardiovascular diseases (CVDs) are the leading cause of death globally. Assessing the risk of developing CVDs in the future and the factors that are responsible for the increase risk among individuals can not only predict the chance of developing the disease but also reduce the global burden of the disease by giving ample time to correct the modifiable risk factors.

Objective: To find out the cardiovascular disease risk among residents of Singur. And also to find out the factors that are associated with increased cardiovascular risk.

Materials and Methods: A community-based cross sectional observational study approved by IEC of AIIPH&PH, Kolkata, conducted in field service area of RHU&TC, Singur, All India Institute of Hygiene and Public Health, Kolkata comprising of 64 villages from December 2022 to February 2023. A Two-stage Cluster sampling was done and 150 individuals were taken. A Pre tested pre validated semi structured scheduled , which includes -Global Physical Activity Questionnaire (GPAQ), WHO STEPS Instrument, WHO/ISH risk prediction charts, was used. Data is collected via Schedule Hardcopy and via EpiCollect 5. The data was cleaned with EpiInfo 7 and Microsoft excel and further analyzed via SPSS Ver.16.

Result: Among 150 individuals 1.33% (have >40% risk), 1.33% (have >30% risk), 9.33% (have >20% risk), 16% (have >10 % risk) and 72% (have <10% risk) of developing CVD's in the future. It is observed that there among is a strong association ($p < 0.001$) between high MET values (more physical activity status) and less risk scores .Also there is significant association present between BMI and CVD Risk($p < 0.001$). Also highly significant association is found between hypertensive status and CVD Risk($p < 0.001$).

Conclusion: Assessment of risk scores can reduce the incident of CVDs and can prevent the risk factors from growing in asymptomatic adults and is of great importance in resource scare settings.

Keywords: Cardiovascular, Cardiovascular Disease Risk, Risk Factors, WHO/ISH, Preventive Medicine.

❖ **Title: A cross-sectional study on delayed vaccination and its predictors among children under 5 years attending an immunization clinic of a tertiary care hospital, Kolkata**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Sanjukta Mondal, 1st year Junior Resident, Calcutta National Medical College and Hospital, Kolkata.

Introduction: Between NFHS-4 and NFHS-5 there was an encouraging change in the coverage of all basic vaccinations (from 84% to 88%). Delayed and Non-adherence to immunization make the children more vulnerable to infection.

Objectives: 1) To estimate the proportions of children having delayed immunization.

2) To assess the determinants of the delay among the children under 5 years of age.

Materials and method: A descriptive observational cross-sectional study was done in the immunization clinic of Calcutta National Medical College during December 2022 to February 2023, among 174 children aged 0-59 months using a pretested, predesigned, semi structured questionnaire and reviewing immunization card after obtaining informed consents from the care givers exiting the clinic. The sample size was calculated 174 based on 87.3% of "On Time Vaccination", 95% Confidence Interval, 5% allowable error.



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Results: Out of total study population 30.1% children had delay in receiving vaccines. On Chi square test significant association was found between delay and birth order ($p=0.000$), maternal education and socio economic status. The most common cause of delay was found to be sickness of child (40.1%) and both parents working(20%).

Conclusion: In spite of vaccines being provided free of cost under UIP, delayed vaccination remains a major challenge. Education and counselling of mothers are required to combat vaccine preventable diseases.

Keywords: vaccination delay, vaccination schedule, under 5 children

❖ **Title: A Cross-sectional study on Intention and Attempt to quit Tobacco among Current Adult Tobacco Users in a Rural Community of West Bengal**

Mode of presentation: Poster; **Theme:** Miscellaneous

Presenting author:

- **Kaustav Chakraborty**, Second year Junior Resident , Department of PSM (AIH&PH)

Co – author :

- **Dr Monalisha Sahu**, Associate Professor, Dept. of Preventive and Social Medicine, AIH&PH
- **Dr. Lina Bandyopadhyay**, Advisor Public Health(SAG), Professor(EQ), Dept. of Preventive and Social Medicine, AIH&PH
- **Dr. Madhumita Bhattacharyya**, Professor in pediatrics, Dept. of Maternal & Child Health, AIH&PH
- **Dr. Bobby Paul**, Professor & Head, Department of Preventive and Social Medicine, AIH&PH

Introduction: Tobacco use is one of the age-old social habits that affects the health of a community as a whole, which is responsible for various diseases like cardiovascular disease, CVA ,COPD , Cancer etc. Khaini , Bidi are the common used Tobacco products. According to GATS-2 29.6 % men, 12.8% women & 10.7% of all adults use smoke Tobacco & 29.6% men , 12.8 women & 21.4% all adults use smokeless Tobacco. GATS 2 revealed that 30.2 % adults at workplace, 38.7 % adults at home and 23 % adults at public places are being exposed to Second hand smoke in India and only 55% smokers and 50% smokeless tobacco users were planning or thinking of quitting tobacco and only 1/3rd of them attempted to quit

Objectives: To elicit the sociodemographic, Nicotine dependence and behavioral profile of adult tobacco users at Singur in the Rural field practice area of All India Institute of Hygiene and Public Health. To determine the prevalence of intention and attempt to quit tobacco among adult population of Singur ,West Bengal and to elicit the factors associated with intention and attempt to quit Tobacco among the study population

Methodology: A community-based cross sectional observational study approved by IEC of AIH&PH , Kolkata conducted in field service area (64,000 sq km) of Rural Health Unit and Training Centre Singur, All India Institute of Hygiene and Public Health, Kolkata comprising of 64 villages from December 2022 to February 2023. A Two-stage Cluster sampling was done and 166 individuals were taken. A Pretested prevalidated semi structured scheduled containing Fagerstrom test for Nicotine Dependence (FTND) questionnaire for smoking , Fagerstrom Nicotine Dependence Scale Smokeless Tobacco (FTND-ST), Predesigned , pretested semi structured questionnaire for sociodemographic, intention and attempt to quit were used for collection of data. The data and further analyzed via SPSS Ver.25. Other raw data was cleaned and analyzed using Microsoft excel and SPSS Ver.25 software



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Results: Till the date of Abstract submission data from 83 individuals have been collected Among which about 29 % individuals were from age group 30-39, 89.2% were male, 28.9% had primary level education, 38.6% had agriculture as their occupation, 45.8% were from middle socioeconomic status according to BG prasad scale version 2022, 69.9 % used smoke as tobacco form and 31.1 % used smokeless tobacco, 43.4% smokers had moderate dependence for nicotine, 84% smokeless tobacco users had high dependence for nicotine , Among all Tobacco users 65.1% had intention to quit tobacco, and only 26.5% of them attempted to quit tobacco in last 1 year.

Conclusion: Persons having high Nicotine Dependence have less Intention to quit tobacco

❖ **Title: A Cross-Sectional Study on Morbidity Profile of Printing Press Workers in Madhyamgram Municipality Area of North 24 Parganas**

Mode of presentation: Poster; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

Dr. Tanaji Mukherjee

❖ **Title: A Cross-Sectional Study on Prevalence of Obesity in relation with Physical Activity and Dietary Habits among Medical Students**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Kollabathina Malavya, Post-Graduate of Department of Community Medicine at Mamata Medical College, Khammam, Telangana.

Co-authors:

- Dr. B.P. Ravi Kumar, Professor and HOD
- Dr. Levi Anand, SR of the Department of Community Medicine

Introduction : According To WHO (2022), More Than 1 Billion People Worldwide Are Obese, 650 Million Adults, 340 Million Adolescents And 39 Million Children. Recent Studies Have Shown Rise In Number. WHO Estimates That By 2025, Approximately 167 Million People, Adults And Children Would Come Under The Category Of Overweight Or Obesity Due To Their Unhealthy Lifestyle.

Objectives : To Determine The Prevalence Of Obesity In Relation With Physical Activity And Dietary Habits Among Medical Students.

Materials And Methods : A Cross-Sectional Study Was Conducted Among 200 Medical Students Of Aged (17 To 22 Years) Of Mamata Medical College, Khammam, Telangana. The Responses Received From 161 Medical Students. Data Was Collected By Using A Pre-Tested, Semi-Structured, Self-Administered Of 45 Questions. Forms Which Were Incompletely Filled Were Excluded From Statistical Analysis.

Result : The Prevalence Of Overweight Or Obese Were 21.73%. And It Has Been Observed More In Males Which Is 26.22% And In Females 19%.

Conclusions : The Prevalence Of Obesity Was Found To Be High Among Medical Students. A Strategy To Be Developed To Modify Lifestyle Changes So As To Bring Reduction In The Obesity.

Keywords : Height, Weight, BMI, Obesity, Modified Kuppusswamy Scale.



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❖ Title: A Cross-Sectional Study on Satisfaction Level with Healthcare Delivery System among Patients Attending Different Outpatient Departments of a Tertiary Care Hospital, Kolkata

Mode of presentation: Poster; **Theme:** Miscellaneous

Presenting author:

Dr. Swapnajoy Nath, Post Graduate Trainee, Department of Com. Med., IPGME&R, Kolkata

Co – author :

- Dr. Moumita Mandal, Assistant Professor, Department of Com. Med., IPGME&R, Kolkata
- Dr. Kalpana Gupta, Post Graduate Trainee, Department of Com. Med., IPGME&R, Kolkata
- Prof. (Dr.) Mausumi Basu, Head of Department, Department of Com. Med., IPGME&R, Kolkata

Introduction: Patient satisfaction is one of the most important indicators of the performance of healthcare service delivery. It is a multi-faceted indicator used to measure the outcomes of care rendered by a healthcare facility. The outpatient department (OPD) is a vital cog in the hospital system as a majority of patients visiting a hospital are attended here. Often it is the first point of contact between the patient and the healthcare provider. Hence it is essential that the quality of services in the OPD be kept a high level.

Objectives: To assess the satisfaction levels of patients attending the outpatient departments of a tertiary care teaching hospital in West Bengal and to ascertain any areas of dissatisfaction.

Materials and Methods: A cross-sectional study was conducted among 225 patients attending the outpatient departments using a pre-designed, pre-tested, semi-structured schedule, which included sociodemographic information, PSQ-18 and domains such as availability of infrastructure, services and behaviour of health personnel for assessment of levels of patient satisfaction. A 5-point Likert scale ranging from “strongly agree” to “strongly disagree” was used to record responses of PSQ-18. Responses of other domains were categorized as ‘satisfied’ and ‘dissatisfied’.

Results: The overall satisfaction was 71.44% with a mean value of 3.572. Satisfaction was found to be highest in interpersonal manner 78% and lowest in accessibility and convenience 61.02%. Apart from the above domains included in PSQ-18, major areas of dissatisfaction were identified in long waiting times at pharmacy (78.2%) and OPD ticket counter (73.3%), instructions provided by pharmacists (68%), behaviour of hospital staff (64.9%) and lack of washroom facilities in OPD premises (53.8%).

Conclusion: Although overall satisfaction was found to be high among the patients, areas where improvements can be made were identified through the study. The findings can help health care providers and policy makers make objectively prioritized programs for improvement of healthcare services.

Keywords: Patient Satisfaction, Outpatients, Tertiary Care Centers, PSQ-18, Health Services

❖ Title: A Cross-sectional study on Smartphone use and Mindfulness among Undergraduate Medical Students of a Medical College in Kolkata

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:



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Dr. Aparajita Mondal, Post Graduate Trainee, Department of Community Medicine, Institute of Post Graduate Medical Education and Research, Kolkata

Introduction: Earlier smartphone were used for socialising with family and friends but now many users are getting addicted. Even medical students are inadvertently using these devices for non-academic purposes. Excessive smartphone use can impact their mindfulness, which in turn can hamper patient care.

Objectives: The purpose of the study was to assess the smartphone usage, to recognize the presence of mindfulness, to identify the socio-demographic associates of smartphone usage and presence of mindfulness, and to appraise the relationship between smartphone usage & presence of mindfulness among Undergraduate medical students of a Medical College in Kolkata.

Materials and Methods: The study was a descriptive type of observational study (Institute based), cross-sectional in design conducted from 1st October to 12th December, 2022 among undergraduate medical students of Institute of Post Graduate Medical Education & Research, Kolkata using a pre-designed, pre-tested and structured schedule which included Mindful Attention Awareness Scale. In the study smartphone use and mindfulness were taken as dependent variables whereas socio-demographic variables, presence of co-morbidities, addiction history were independent variables. Data were analysed using SPSSv25. Univariate binary logistic regression was performed to ascertain relationship between dependent and independent variables. Spearman's rho was performed to appraise the correlation between smartphone use and mindfulness.

Results: The participants usually spent 360 minutes per day on smartphone. Application maximally used was YouTube (26.9%). More than half of the participants were unmindful. While being a male had a higher odds of excessive smartphone usage, hostellites were noted to be more mindful. Duration of smartphone use had a positive correlation with mindfulness (Spearman's rho 0.108, p 0.026).

Conclusion: The students spent a major portion of the day in front of smartphone screens. Youtube was maximally used application. Substantial number of study population were found to be unmindful. Smartphone use had a positive impact on mindfulness.

Keywords: Smartphone, Mindfulness, Digital technology, Screen time, Undergraduate, Medical

❖ **Title: A Cross-sectional Study on the Respiratory Morbidity among Seed Processing Unit Workers in Hooghly district, West Bengal**

Mode of presentation: Poster; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

Dr. Akash Dasgupta, Post-graduate trainee (2nd Year), MD CM, Dept. of PSM, AIH&PH

Co-authors:

- **Dr. Monalisa Sahu**, Associate Professor, Dept. of Preventive and Social Medicine, AIH&PH
- **Dr. Lina Bandyopadhyay**, Advisor Public Health (Professor) Eq., Dept. Of Preventive and Social Medicine, AIH&PH
- **Dr. Madhumita Bhattacharyya**, Professor in Paediatrics, Dept. of MCH, AIH&PH
- **Dr. Bobby Paul**, Professor and HOD, Dept. of Preventive and Social Medicine, AIH&PH



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Introduction: Seed processing units, allied industry to the agricultural sector, have high dust setting along with use of pesticides for treatment and fumigation. Respiratory morbidity among these workers is a vital research area, which has not been studied in Indian context. The present study was undertaken to describe the prevalence of Respiratory morbidity among Seed processing unit workers.

Objectives:

- I. To estimate the prevalence of respiratory morbidity among seed processing unit workers in Hooghly district, West Bengal
- II. To determine the use of Personal Protective Equipment among them
- III. To find out factors associated with respiratory morbidity

Materials and Methods: A cross-sectional setting-based observational, descriptive study was performed from December '22 to February '23 in Seed processing plants in Hooghly district, West Bengal. Survey among 128 workers was conducted across 4 seed processing units out of total 17 in Hooghly district through simple two-stage cluster sampling. Face-to-face interview was followed by Anthropometric measurements and Spirometry. Self-reported Respiratory symptoms were recorded. Data was analysed using SPSS version 16.

Results: Mean age was 39.2 years and 42% of the study participants had Employees' State Insurance. 18% workers were migrants, mostly from neighbouring districts. Exposure to dust among workers had a median of 12.19 work-years. 71% workers were regularly using respiratory personal protective equipment (cloth covering nose & mouth or mask). 55% workers reported at least one respiratory symptom and 18% workers had spirometry-confirmed respiratory morbidity. Participants with higher age (>40 years), higher work-years of exposure (>5 work-years), higher pack-years of smoking (>1 pack-years) reported higher odds of symptomatic respiratory morbidity.

Conclusion: About one in five workers had spirometry-confirmed respiratory morbidity and one in two workers had symptomatic respiratory morbidity but only 42% workers had ESI and 29% workers were irregularly using respiratory PPE. Awareness drives regarding PPE, advocacy with employers regarding ESI and feasible solution towards protecting workers' health is warranted.

Keywords: Respiratory morbidity, Seed processing unit, Workers, Dust, Spirometry

❖ **Title: A Cross-sectional study on tuberculosis treatment outcome and its determinants among bidi workers having tuberculosis in a rural area of West Bengal**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Ajijul Laskar

Introduction: Bidi rolling is a popular small-scale industry in rural West Bengal and it causes serious occupational hazards to workers as they experience exacerbation of tuberculosis(TB),Asthma and other health problems.This study was conducted among bidi workers having tuberculosis to know about the TB treatment outcome & its determinants.

Objective:

- 1)To assess tuberculosis treatment outcome of the study subjects.



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2) To identify association of TB treatment outcome of the study subjects with its determinants, if any,

Methods & materials: A cross-sectional study was conducted in Samsrganj and Farakka Block of Murshidabad district for 7 months. A total of 95 bidi workers having tuberculosis were selected who were satisfying inclusion criteria by complete enumeration from TB register. Data was collected from TB register, interviewing and taking anthropometric measurements of study subjects. Data was compiled in MS Excel and Chi square test, risk ratio were calculated to identify the association of TB treatment outcome with its determinants.

Results: Most of the study subjects (49.47%) belong to 18-39 years, were females (55%), Muslims (81.05%) having normal BMI had low educational background (60%). 48.42% study subjects were tobacco users, 17.89% were alcoholic and 23.15% were diabetic. Majority (70.52%) suffered from pulmonary tuberculosis and 29.8% were suffered from extrapulmonary tuberculosis. 87.36% of the study subjects had successful treatment outcome, 12.63% had unsuccessful treatment outcome. There was statistically significant association between age ($p=0.003$), BMI (0.001), tobacco use ($p=0.013$), alcohol intake ($p=.001$) and diabetes ($p=.018$) with TB treatment outcome.

Conclusion: In this study, tuberculosis treatment success rate is 87.36% which is more than national rate. Here unsuccessful TB treatment outcome was more among geriatric age group, females, religion other than Hindu, low education, tobacco user, alcohol users, diabetic & underweight study subjects.

Keyword: Treatment outcome, Bidi worker, Tuberculosis

❖ **Title: A Cross-Sectional Study to assess the operationalization of Village Health Sanitation and Nutrition Day (VHSND) sessions of Raipur District, Chhattisgarh.**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

▪ **Dr. Sangram Keshari Sahoo**, 2nd year PG Scholar Department of Community Medicine, Pt. JNM Medical college, Raipur (C.G).

Co – author :

▪ **Dr. Nirmal Verma**, Professor and Head of Department, Department of Community Medicine, Pt. JNM Medical college, Raipur (C.G).

▪ **Dr. Shailendra Agrawal**, PG Demonstrator, Department of Community Medicine Pt. JNM Medical college, Raipur (C.G).

Introduction: VHSND would serve as a common platform to deliver Maternal, Child, and Nutrition services to the village population.

Objectives: To verify the infrastructure, availability of front-line workers, logistics, and the services delivered during the session. To assess the proportion of beneficiaries who received the services through VHSND sessions.

Materials and Methods: A cross-sectional study was carried out in 30 VHSND site of the Raipur district from Aug-to Nov- 2022, Data were collected by semi-structured questionnaires.



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Results: Among 30 VHSND sessions 93.3% were held as per microplan. 30 sessions were organized at AWC (93.3%) toilet facility, examination table & curtain to maintain privacy, (90%) provision for hand washing was available. 100% availability of BP instruments, stethoscopes, adult and infant weighing scales, MCP card, OCP and glucometers. Fetoscope was not available in most sessions so P/A examination & FHS auscultation not done in many sessions. Referral slip in 76%, Availability of VDRL kit 23.3%, HIV kit 63.3%; RDK 80%, Nischaya kit was 93.3%, Urstick 56%. Identifying HRP, danger signs, MAM & SAM not done properly in many sessions. Immunization conducted in all sessions but not delivered key messages to beneficiaries. Counselling to PW, lactating mothers & adolescent girl not done in any sessions site. No PRI member involvement in sessions site. IEC materials as per village counselling theme not done in many sessions site.

Conclusion: Study provided overview assessment of infrastructure, availability of FLWs, logistics and the services delivered during sessions, but still some lacuna in the services. Effective supervision & monitoring is required for better outcome.

Keywords: : VHSND session, Raipur, Chhattisgarh.

❖ **Title: A cross-sectional study to assess the perception of Sample Registration System Supervisors of Bihar towards Mobile Application-based recording of Verbal Autopsy.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Arnab Mani Babu, Senior Resident, Department of Community & Family Medicine, AIIMS Patna
Dr C M Singh, Dr Shamsad Ahmad, Dr Shibajee Debbarma, Department of Community & Family Medicine, AIIMS Patna.

Introduction: The first step in mortality surveillance is to count all deaths in a geographical area followed by determination of the causes of all or a representative sub-sample of deaths. The purpose of Verbal Autopsy is to gather cause-of-death information from populations where a high proportion of fatalities take place outside hospitals and where death certification is insufficient or non-existent. Recently, the Office of Registrar General of India has launched Mobile Application for conducting Verbal Autopsy as part of MINERVA project across the country.

Objective: To determine the perception of Sample Registration System supervisors towards Mobile Application-based recording of Verbal Autopsy for assessment of cause-of-death.

Materials and Methods: A cross-sectional study was conducted among SRS Supervisors who attended a two-day training for recording Verbal Autopsy using Mobile Application. The training involved in-house session as well as field visit. At the end of the training, a pre-designed, semi-structured questionnaire was administered to the participants. Statistical analysis was done using Jamovi (version 2.2.5).

Results: 51.9% of the study participants had good overall perception about Mobile Application-based verbal autopsy. There is no significant difference between study participants perception about mobile



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application based recording of verbal autopsy with their educational status, previous experience in conducting verbal autopsy and formal training.

Conclusion: At present majority of SRS Supervisors had good perception regarding usage of Mobile Application for recording of verbal autopsy to determine the cause of death. But in future, further studies needs to be done to know whether their perception continues like the same or changes after using it for a long period of time.

Keywords: Sample Registration System, Mobile Application, Verbal Autopsy, MINErVA.

❖ **Title: A cross-sectional study to evaluate quality of life among chronic kidney disease patients attending nephrology out-patient department in a teaching hospital of Kolkata**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Kalpana Gupta, Post graduate trainee

Co-authors:

- **Dr. Subhra Samujjwal Basu**, Associate Professor, Community Medicine, IPGME&R and SSKM Hospital
- **Dr. Afifa Ahmed**, Demonstrator, Community Medicine, IPGME&R and SSKM Hospital
- **Dr. Anamitra Chakraborty**, Post graduate trainee, Community Medicine, IPGME&R and SSKM Hospital
- **Dr. Swapnajojoy Nath**, Post graduate trainee, Community Medicine, IPGME&R and SSKM Hospital
- **Prof (Dr.) Mausumi Basu**, Head of department, Community Medicine, IPGME&R and SSKM Hospital

Background: CKD can seriously affect the quality of life (QoL) of patients, thus worsening their treatment outcomes. So, it is prudent to study their QoL to help them improve medical outcomes.

Objectives: To assess the QoL among CKD patients attending nephrology OPD in a teaching hospital of Kolkata; to describe their clinical and socio-demographic profile and; to find the association of their QoL with their clinical and socio-demographic profile.

Materials and Methods: A hospital-based descriptive type of cross-sectional study was conducted among CKD patients at the nephrology OPD of SSKM hospital, Kolkata. A total of 124 patients were selected through convenience sampling were interviewed using a pre-designed, pretested and structured schedule which included WHOQOL-BREF. QoL and health status were the primary end points of this study. Pearson's chi square test was done to find associations.

Results: Poor QoL was noted among 37.9% patients and 44.3% were dissatisfied with their health status. While QoL was associated with residence and stage of CKD, health status was associated with age, occupation and residence of the patient. Among all the domains, environmental domain had the highest mean score (50.45±14.14). This domain was associated with age, occupation, type of family, stage of CKD and time since diagnosis.



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Conclusion: A substantial portion of CKD patients had poor QoL. Stage of CKD and residence was related to the QoL of these patients.

Keywords: WHOQOL-BREF, quality of life, chronic kidney disease

❖ **Title: A cross-sectional study to assess the water, sanitation and hygienic practices among the households of a slum of Kolkata**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Saptarshi Majumdar

Introduction: According to both WHO and UNICEF good water, sanitation and hygienic practices are of utmost importance for improvement of the general health of the global population. But even after being of such great importance these practices still remain highly unaddressed in slums and backward areas of most parts of the less developed countries. (Bangladesh, Pakistan, India, etc)

Objectives: 1. To assess the water, sanitation and hygienic practices of the Households of the slum.
2. To find out if there are any association between the socio demographic profile and these practices.

Materials And Methods : A community-based cross sectional study was conducted in the urban slum for a period of 3 months. 96 households were selected by systematic random sampling. Data was collected by interviewing the female members incharge of the respective household with help of a modified version of a pretested, predesigned, semi structured questionnaire. Data was compiled on MS Excel and analysed by SPSS version23 software.

Results : Average age of the participants was 36 ± 10 . In 87 % cases females above 15 years of age had to fetch drinking water supplied by municipality tap twice daily. Again 82 % of the households stored their drinking water in plastic bottles and utensils. 58% Households had to share community latrines and there was significant association between poor sanitary practices and users of community latrines. Significant association was noticed between hygienic practices with variables like type of housing and number of family members.

Conclusion : There is an immense need for sensitization of slum population through various educational programs and workshops on water, sanitation and hygiene with direct involvement of participants should be conducted to raise awareness.

Keywords : Sanitation, Hygiene, Kolkata, WASH.

❖ **Title: A Multi-method Study on Risk perception of COVID-19 disease & COVID-19 vaccine & Vaccine hesitancy among COVID-19 vaccine recipients attending vaccination site in a tertiary care hospital in Kolkata.**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance



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Presenting author:

Dr. Shivashish Ghosh, PGT, Community Medicine, CNMCH.

Background: Risk perception, refers to people's subjective judgment about the likelihood of negative occurrences such as injury, illness, death, etc. High risk perception of COVID-19 vaccine leads to vaccine hesitancy. Low risk perception of COVID-19 disease leads to COVID inappropriate behavior such as refusal to wear mask or socially distance.

Objective: 1) To assess risk perception of COVID-19 vaccine and COVID-19 disease among vaccine recipients, attending tertiary care hospital. 2) To assess vaccine hesitancy among the study population.

Material & Methods: Multi-method study was done from 2nd February 2022 to 16th March 2022 at COVID-19 vaccination site at a Tertiary health care center. The quantitative part was cross-sectional with sample size 154 (footfall method). Systematic random sampling was done. Participants ≥ 15 years, who gave consent were included. Any adverse events following immunization cases were excluded. Pre-designed, pre-tested schedule was administered. Modified B G Prasad Scale 2021, spss version 24 was used. Mann-Whitney U, Kruskal-Wallis and Kruskal-Wallis post-hoc analysis was done. Qualitative analysis was used for vaccine hesitancy. Delay in getting 2nd dose was taken as proxy for vaccine hesitancy. The reasons for delay were coded and represented as free association.

Results: 64.94% of the participants had low risk perception for COVID-19 vaccine. 69.48% had high risk perception for COVID-19 disease. Those with higher levels of education had higher risk perception for COVID-19 disease than those with lower levels of education ($p= 0.039$).

Conclusion: Most participants had low risk perception for COVID-19 vaccine and high risk perception for COVID-19 disease. Those with more education had higher risk perception for COVID-19 disease.

Keywords: Risk perception, COVID-19, Vaccine, Hesitancy

❖ Title: A Pan India survey for measuring the readiness of Physicians to Identify and manage Intimate partner violence

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Athira Prathapan, (JR CFM Department)

Co-authors:

- Dr Shamshad Ahmad (Assistant Professor, CFM Department)
- Dr Pragya Kumar (Additional Professor, CFM Department)
- Dr Hari Priya H (SR, CFM Department)
- Dr Venkatesh Karthikeyan (JR, CFM Department)

Introduction: Intimate partner violence (IPV) is a type of violence that occurs between intimates and involves physical, emotional and sexual abuse, as well as exertion of power and control (WHO 2013). IPV is a common problem in medical practice that is associated with adverse health outcomes but health



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care professionals rarely screen for IPV and are less confident in managing IPV cases due lack of knowledge/training regarding the same.

Objectives: To assess the Preparation, Knowledge, Opinions and Practices regarding IPV on doctors who are practising across various health facilities in India.

Materials and Methods: This is a cross-sectional study conducted among the physicians practising across India via an online platform to measure their readiness to manage IPV. A validated tool "The Physician Readiness to Manage Intimate Partner Violence Survey" (PREMIST) was used for the same. The data were collected in the google form and analysed using the software SPSS version 25.0. Categorical variables are represented as percentage and frequencies, continuous variables as mean (SD) after checking for normality. Relevant tests of association are applied between dependent and independent variables. **Results:** Out of 359 respondents only 18.9% have received any kind of training regarding IPV. The mean (SD) perceived knowledge score is 3.82(1.54) and perceived preparation score is 3.86(1.54). The mean actual knowledge and practice score of the physicians are 16.6(6.55) and 10.9(8.93) respectively. There is strong positive correlation between opinions on workplace issues and legal requirements ($r=0.679, p\text{value}<0.001$), workplace-issues and self-efficacy ($r=0.694, p\text{value}<0.001$), Legal requirements and self-efficacy ($r=0.608, p\text{value}<0.001$) and negative correlation between knowledge score and practice score ($r=-0.229, p\text{value}<0.001$). **Conclusion:** Our findings suggest that there is an increased need in our health system to improve training for healthcare professionals and reorganise care models to promote IPV detection and response. Putting emphasis on interprofessional education and care teamwork would increase competence and ease the workforce's limits.

Keywords: Readiness, Intimate partner violence, Physicians, Knowledge

❖ **Title: A Pre And Post Interventional Study About Knowledge Of Diabetes Mellitus Among Non-Diabetic Patients Visiting Uhtc, Gudhiyari, Raipur**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Barkha Thakur, PG Scholar, Pt. J.N.M Medical college, Raipur (C.G)

Co-authors:

- **Dr. Nirmal Verma**, Professor and Head of Department, Pt. J.N.M Medical college, Raipur (C.G)
- **Dr. Mini Sharma**, Associate Professor, Pt. J.N.M Medical college, Raipur (C.G)

Introduction: Diabetes Mellitus is one of the major fast growing non communicable diseases (NCD) and a threat to global public health. Incidence of diabetes mellitus has been increasing in urban and rural areas of India and it will be one of the major causes of death in India in the 21st century. Diabetes prevalence has been rising more rapidly in middle and low-income countries. There is very little data on the level of awareness and knowledge about diabetes in developing countries like India.

Objectives: To assess the knowledge about type 2 diabetes mellitus before and after educational intervention among non-diabetic individuals.



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Materials and Methods: This was an analytical cross-sectional interventional study conducted in UHTC, Gudhiyari, Raipur. Total 150 subject were selected by random sampling method who are not diagnosed with diabetes mellitus. A pre- designed, semi-structured questionnaire was used for data collection.**Results:** Awaited

Keywords: Diabetes Mellitus, Awareness, Knowledge,

❖ **Title: A Scoping review on identifying intervention evidence from India on Hypertension**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr Priyanka Pawar, Research Fellow, GRID Council

Co-authors:

- **Dr Divita Sharma**, Research Associate, GRID Council
- **Dr Ritika Mukherjee**, Research Fellow, GRID Council
- **Dr Archisman Mohapatra**, Executive Director, GRID Council

Introduction:In India, hypertension (HTN) is the most important risk factor for death and disability. However, there are gaps in indigenous research outputs on interventions related to HTN in the Indian context.

Objective: To identify original research that has been published on testing, planning and/or evaluating interventions focused on management of HTN with scope for implementation at population level and undertaken in community and/or in health service organization settings

Materials and Methods:Three reviewers searched for relevant literature in PubMed and Web of Science. Articles on interventions related to HTN undertaken at the healthcare facility or community level in India between January 2013 to December 2022 were included. Information was extracted using the Template for Intervention Description and Replication (TIDieR) checklist. The Innovative Care for Chronic Conditions Framework (ICCCF) was used to guide analysis and reporting.

Results:34 articles were analysed. Thus, there was limited published research on HTN management interventions from India. The intervention strategies exclusively focused on community level (41.2%), healthcare organization (35.3%), policy level (nil) and multiple domains (23.5%). Majority (70.6%) of the studies assessed effectiveness of the intervention on HTN control. About 41.2% narrated interventions directed towards educating community about HTN and lifestyle modification. About 47.2% discussed interventions through community healthcare workers.

Conclusion: Given the need for multi-component interventions, focus should also be on collaborative efforts to not only determine the effectiveness but also process evaluation, scalability and sustainability of such interventions. Investments should be directed towards such research activities and publication should be promoted to increase the evidence base for interventions to be scaled and integrated with existing programs and policies.

Keywords: Hypertension, Intervention, Community, Primary care, India



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❖ **Title: A Study Of Assessing Knowledge, Attitude And Practice Of Materiovigilance Among Staff-Nurses In Medical College, Kolkata**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Sayantan Das Mazumdar

❖ **Title: A study on antibiotic prescribing patterns in primary and secondary health care facilities in Odisha, India**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Ashish Kumar Nayak, Project Scientist-B, ICMR- RMRC, Bhubaneswar.

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Introduction: Misuse and overuse of antibiotics is a common problem in public health care, which leads to wasteful drug spending, increased risk of adverse reaction and the emergence of antimicrobial resistance. Irrational and inappropriate prescribing practices lead to unsafe and ineffective treatment, illness progression and increment of healthcare expenses. The study aimed to understand antibiotic prescribing patterns using World Health Organization (WHO) prescribing indicators among outpatients in rural regions of Odisha, India and the need for Antibiotic Stewardship Programs (ASP). **Objectives:** This study aimed to evaluate antibiotic prescribing patterns at the outpatients for common acute infection of different CHCs and PHCs of Tigiria block Cuttack, Odisha, India. **Materials and Methods:** The study was carried out from July 2021 to July 2022. The study was conducted by collecting the prescriptions of daily visit outpatients and prescription registration books retained at the pharmacy store. **Results:** A total of 2058 drugs were prescribed from 1050 patient encounters. Overall, 63% of the prescriptions had at least one antibiotic and the average number of drugs per encounter was 1.96. The percentage of encounters in which an antibiotics and injections were prescribed was 79% and 21% respectively. Azithromycin (21.4%) followed by ofloxacin (11.27 %) and ceftriaxone (7.89%) were the most commonly prescribed antibiotics. The percentage of drugs prescribed from generic name and essential drugs list was 94.41% and 96.20% respectively. **Conclusion:** Our findings showed that the prescribing pattern of antibiotics in rural areas hospital of Odisha state deviation from the standard recommended by World Health Organization (WHO). This study offers support for the necessity as well as a path forward for the creation of an Antibiotic Stewardship Program in the rural region hospitals that may assist in developing institutional guidelines and introducing the prescribing of antibiotics with the help of culture and sensitivity tests.

Keywords: Antimicrobial resistance, Antibiotic prescribing patterns, Antibiotic Stewardship Programs



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❖ **Title: A study on assessment of tobacco use and perception regarding tobacco smoking and quitting among current smokers in rural territory of Darjeeling district: A mixed method approach**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

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Background: Tobacco use refers to use of any tobacco product. Cancer, cardiovascular diseases and chronic obstructive pulmonary disease continue to be the main health problems associated with cigarette smoking. The current smokers are at higher risk. Smokers mostly acknowledge the harm they are doing to themselves and many report that they do not enjoy it – yet they continue to smoke. **Objectives:** Assessment of tobacco use and perception regarding tobacco smoking & quitting among current smokers in rural territory of Darjeeling district. **Materials & Methods:** Observational study with cross sectional design, comprising mixed methods approach consisting of both qualitative & quantitative. The study was conducted at rural field area of NBMC (KCTE & Naxalbari) for a period of 6 months from September 2022 to February 2023. In dept interview was done taking around 25 study participants which comprises of current smokers using a pretested, pre designed semi-structured questionnaire. Permission was sought from study participants & IEC before conduction of study. **Results:** About 30% of the participants had low; 33% had moderate and 20% had high nicotine dependency. Most of the participants started smoking by peer influence & stress, continued as it made them to socialize. Relapses during their quit attempt was mainly due to work stress & family issues. Participants heard about the control of tobacco act but were unsure of the features in it. They perceived that no changes will happen if government bans production & selling of tobacco products. Anti-tobacco commercials in social media will have no use. Nicotine replacement therapy may help in quitting the habit.

Conclusion: The study concluded that people in low socio-economic status had high nicotine dependency with inadequate knowledge on tobacco control policies.

Keywords: tobacco, smoking, perception, quitting

❖ **Title: A Study on Association Between Cognitive Emotion Regulation Strategies and Problematic Smartphone Usage among Adolescents in a School of Jhargram District, West Bengal**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:



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Dr. Sayantika Barman

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Introduction: Despite the numerous benefits of smartphone usage, there is growing evidence that excessive or problematic usage can have negative effects on mental health, including the regulation of emotions. Adolescence is a critical period in human development. They are more susceptible to emotional dysregulation, and mental health problems. Thus, this study intends on finding the effect of smartphone usage on emotional regulation in adolescents.

Objectives: The objective of study was to identify the cognitive coping strategies among the study population when experiencing a negative or stressful situation and to find out association, if any, with problematic smartphone usage and cognitive coping strategies among the study population

Materials and methods: A cross-sectional study done from October 2022 to March 2023. The study was carried out among 137 adolescent girls aged 13-19 years who were selected by simple random sampling from a selected school of Jhargram district. A pre-validated pre-tested questionnaire was used for data collection. The data collection tool included questions regarding problematic phone usage and cognitive emotion regulation strategies. Statistical data was analysed by descriptive and inferential statistics using SPSS 16 version. Ethical approval was taken from institutional ethics committee of AIIPH&PH.

Results: The median age of the study participants was 15(14,16) years and most of them belonged to socio-economic class V. Most of them (73%) started using smart phone within 12-14 year of age and 45% used smartphones for more than 2 hours in a day. Among the study participants 49% students were problematic smart phone users. The factors associated with problematic smart phone usage were average use of smart phone per day ($p=.001$), smart phone use before sleeping ($p=.001$), outdoor exercise ($p=.011$), parental control outside home ($p=.002$) and maladaptive score ($p=.021$).

Conclusion: Persons who engage in problematic smartphone usage was found to have higher maladaptive coping strategies score.

❖ **Title: A study on awareness of cervical cancer among peripheral health workers of district Etawah**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Shobhit Singh, PG JR-1

Co-authors:



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- **Dr Sandip kumar** Professor & Head, Dept. of Community Medicine, UPUMS, Saifai, Etawah
- **Dr Ankur Baidya**, PG JR-1, Dr Alok Mani, PG JR 1

Introduction: Cancer of the cervix is a major burden on women's health worldwide. This can be largely prevented by early detection and timely screening tests. Awareness and education regarding this, is the key to curtail the rise of such cancers in the community. Screening helps in early detection of cervical cancer and better survival. Awareness and attitude of women towards cervical cancer screening may determine health-seeking behaviour.

Objectives: To assess the awareness regarding screening of cervical cancer among peripheral health workers of district Etawah.

Materials and Methods: A cross sectional, descriptive study was conducted with a pretested, Semi-structured questionnaire among health workers. Scoring for awareness and attitude for cervical cancer screening was done. Information was collected regarding awareness about female cancers, risk factors, signs/symptoms, early detection methods and services available for screening and prevention of cervical cancer.

Results: Only about 20 percent of the peripheral health worker's were aware of all common symptoms of cervical cancer (pain and bleeding during sexual intercourse, vaginal bleeding between periods, bleeding in post-menopausal women, and vaginal bleeding between periods).

Conclusion: Our study shows that the knowledge about carcinoma cervix screening is poor among health workers. Awareness of different aspects of cervical cancer was found to be low. Healthcare givers should be trained and promoted so that they can help in community screening and spread of knowledge of this screening facility for prevention of carcinoma cervix in the community.

Keywords: Cervical cancer, Knowledge, Cancer Awareness, Screening

❖ **Title: A study on awareness of medical and nursing students on HPV(human papilloma virus) and HPV vaccination**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

- **Dr. Nikita Singh**, Post graduate student

Co-authors:

- **Srikanta Patra**
- **Dr. Durga Madhab Satapathy**

Introduction: Cervical cancer is the second most common cancer among women and infection with high-risk human papilloma virus (HPV) is a pre-requisite for cervical cancer. But now with vaccines available, mortality and morbidity associated with cervical cancer can be reduced. Medical and nursing students who are going to join the health care delivery system have a role in educating and mobilizing the public for HPV vaccination.

Objectives: With this background, this study was conducted to assess the awareness of nursing and medical students on HPV, it's role in cancer cervix and HPV vaccines.

Methodology: This cross-sectional study was conducted from November 2022 to January 2023 among B.Sc. nursing (2nd & 3rd year) and MBBS (4th & 5th year) students studying in MKCG medical



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college hospital, Berhampur. Those students available and agreed to participate in the study were interviewed using a scientifically designed pre tested questionnaire. Data collected were compiled and analyzed using SPSS ver.17.

Results: Out of the 342 students interviewed, 270 (79%) were MBBS students and 72 (21%) nursing students while 155 (45%) were males and 187 (55%) were females. Around 64% (218) of students knew that cancer cervix is more common in multiparous. Only 18 (5%) of the total study population have taken HPV vaccine.

Conclusion: Most (95%) of the study population have not taken HPV vaccine and the most common reason being high cost of the vaccine. Majority opined they will take the vaccine if given free of cost at government health facilities.

Keywords: Cervical cancer, HPV, Vaccine, Awareness

❖ Title: A Study on Awareness Regarding Breast Cancer & Screening among Women Residing in an Urban Slum Area of Kolkata, West Bengal

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

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Introduction: Breast cancer is now the most prevalent cancer among women around the world. In India as per globocan data 2020 it accounted for 13.5% of all cancer cases and 10.6% of all deaths. Early detection can increase 5 years survival rate among high-risk population & it can only be possible if a woman knows her breast well, have adequate knowledge about warning signs & symptoms as well as available screening methods.

Objectives: To examine the knowledge and awareness of breast cancer and it's screening among women in an urban slum area of Kolkata, West Bengal.

Material and methods: A cross sectional, descriptive study was conducted from December 2022 to February 2023 among adult women of urban field practice area of All India Institute of Hygiene and Public Health, Kolkata, West Bengal. Participants were chosen by cluster random sampling. Data were collected by face-to-face interview with a predesigned pretested self-administered schedule and were analysed by SPSS 16 using descriptive statistics.



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Results: Among all study participants 91.1% & 15.6 % women have heard about breast cancer & breast screening modalities of any kind respectively, 14.1% women knows about breast self-examination & none of them have ever performed BSE. Major source of awareness was mass media, 60% population were not aware of risk factors. About symptoms 70% opted for breast lump, 64.4% for change in size of breast & nipple, and 62.2% for bleeding/discharge from nipple.

Conclusion: Majority of the participants have heard about breast cancer but 50% of them are not aware of risk factors & symptoms. Majority of them were not aware of BSE. Health professionals must promote awareness of breast cancer & BSE among vulnerable group.

Keywords: Breast cancer, Breast cancer screening, Breast self-examination, awareness.

❖ **Title: A Study on Burden of Malaria Infection and Associated Household Level Risks in an Urban and a Rural Area of West Bengal**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance
Presenting author:

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Malaria is one of the most critical public health problems in several parts of this country. As the transmission of malaria is influenced by individual and household-level risk factors, a community-level inspection of the disease predictors needs to be emphasized.

Objectives: To identify the household level environmental risk factors associated with burden of malaria infection.

Materials and Methods: A community based observational cross-sectional study was conducted in an Urban and a rural setting. Study period was from October 2020 to September 2022. Sampling unit was household. After calculation sample size came to be 330 households, 165 households for urban area and 165 households for rural area. Households were selected by PPS method. Study done by Face-to-face interview, review of medical records and observation of the households and surrounding environment with checklist. Ethical approval was taken. The analysis of data was done in Microsoft Excel and SPSS software.

Results: The burden of malaria infection was found 6.1% in the urban and 1.8% in the rural areas. In urban and rural areas 67.5% and 0.3% participants respectively never used a bed net during sleep. In urban area 10.3% households and in rural area 1.2% households not used any mosquito protective measures. In urban and rural areas around 76.4% and 72.1% households respectively found mosquito



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breeding places. In multivariable logistic regression analysis, factors having significant association with malaria were “household with ≥ 5 family members”, “households without mosquito protective measures”, “presence of mosquito breeding places around households”, “absence of window screens”, and “inadequate lighting condition of houses”.

Conclusion: This study provides housing is an important risk factor for malaria. Intensified efforts towards creating public awareness regarding breeding, resting places of mosquito and different control measures and also community mobilizing for removing breeding places may prevent malaria.

Keywords: Malaria, Households, Risk factors, Urban, Rural

❖ **Title: A Study on Frailty and its Associates Among Elderly residing in an Urban slum of Kolkata, West Bengal**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

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Background: Aging, a normal multidimensional process, causes a decrease in physical capacity, balance control and gait speed even in the absence of diseases. Increased chances of hospitalization and death if the elderly are not taken care of properly due to frailty. Since frailty increases among elderly due to various factors. This study aims to find out the relationship between frailty and its associates.

Objectives: To assess the frailty status of the study participants and to elicit the factors associated with it
Methods: A community-based cross-sectional study in an urban slum of Kolkata by two-stage cluster sampling, was conducted from December 2022 to February 2023 among elderly and was approved by the Institutional Ethics Committee of AIIPH and a face-to-face interview was done by pretested questionnaire and anthropometric measurements were taken, Frailty was assessed by the Fried Frailty Phenotype tool and data was analyzed by descriptive & inferential statistics.

Results: Median age of study participants was 64.5 years [IQR (60.0-70.0)] with 55.0% female participants. 35.0% were currently working, 53% were currently married. 47.5% of participants were having a habit of substance use. Frailty was found among 46.3% of study participants, it was found to be significantly associated with an increase in age [OR 1.2(1.01-1.3)], less in currently working than those who were staying at home [0.3(0.1-0.8)] and less among married people [0.23(0.092- 0.5)]. Among study



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participants, 43.8% were depressed and frailty was significantly associated with depression [6.87(2.5-18.4)]. Conclusion: This study tells us that frailty is a complex process associated with several factors age, working status, depression. The measures include like a review of reversible health conditions, nutritional, psychosocial education and health promotion at an early stage by primary health care by identifying the pre-frail and frail via screening periodically may reduce the frailty through community participation.

Keywords: Elderly, Urban, Frailty, Depression

❖ **Title: A Study on Knowledge & Attitude of Medical Students Regarding the Lesbian, Gay, Bisexual, and Transgender (LGBT) Community in a Teaching Hospital in Kolkata**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

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- **Dr. Arup Chakraborty**, Dept. of Community Medicine, Medical College, Kolkata
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Introduction: LGBT people form the basis of sexual & gender minority groups. In 2018, the Supreme Court of India decriminalize homosexuality but it is still taboo. Sexual & gender minorities face discrimination in their daily life, including in healthcare facilities. This negative attitude if present in medical students creates a barrier to providing quality care.

Objectives: To find out the knowledge, attitude, judgment, & experience of a medical student regarding the LGBT community & associated factors.

Methods: This institution-based Cross-Sectional Study approved by IEC of Medical College, Kolkata was conducted among 216 (calculated taking SD of attitude 13.6) medical undergraduates of Medical College, Kolkata from October 2022 to February 2023 after a pilot study. The sample was chosen by Stratified Random Sampling. Data were collected anonymously using a web-based questionnaire. Data were analyzed via SPSS software version 16.0 using univariate & multivariable logistic regression.

Results: Among 216 participants Knowledge is found to be insufficient in 75% of the participant. 66.7% of the participants had a negative attitude, and 73.6% of the participant has a negative judgment. 28.7% of participant has good experience with the LGBT community. Participants belonging to the Upper socio-economic Class & had contacts from the LGBT community have significantly higher odds of sufficient knowledge, positive Judgment, & good experience. The participant with contacts from the LGBT community has significantly higher odds of having a positive attitude.

Conclusion: Upper socioeconomic status, & the presence of personal contacts from the LGBT community mostly influence the knowledge, attitude, Judgment, & experience of a medical student regarding the LGBT community.



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❖ Title: A Study on Knowledge, Attitude, Practices, and Readiness to manage Domestic violence among Internee Doctors in a Teaching Hospital of Kolkata

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

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Introduction: 32% of women in India were victims of spousal violence as per NFHS-5. As a major part of the frontline health personnel, Internee doctors have the opportunity and responsibility of identifying and addressing domestic violence cases properly. So they must be adequately prepared to do so. **Objectives:** To assess the knowledge, attitude, practices, and readiness to manage domestic violence among internee doctors in a teaching hospital in Kolkata & to elicit the factors associated with it. **Methods:** This Cross-Sectional Study was conducted in a teaching hospital in West Bengal from October 2022 to February 2023 after getting ethical clearance from the IEC of Medical College, Kolkata. 157 internee doctors (Sample size calculated with 59% prevalence of knowledge) were chosen out of 257 by Simple Random Sampling. Data were collected by self-administered anonymous web-based questionnaire and analyzed by SPSS 16.0 using univariate and multivariate analysis. **Results:** Perception regarding practice and readiness to manage along with system support was insufficient in the majority of the participants. 49% of participants identified new domestic violence cases in the last 1 month & more than 70% of participants did not screen for domestic violence. Among 157 participants, the majority did not have any training regarding domestic violence. Knowledge is positively associated with Domestic violence training (p -value <0.05) and identification of new cases of domestic violence (p -value <0.05). For attitudes regarding domestic violence, the age category had a positive association (p -value <0.05). The practice was significantly associated with the identification of new domestic violence (p -value <0.05). Knowledge had a positive correlation with Readiness to manage (p -value < 0.01) **Conclusion:** Practice and readiness to manage domestic violence along with proper system support are insufficient. Training is positively associated with knowledge, attitude, practice, and readiness to manage domestic violence. Proper training with adequate system support is necessary to address the situation furthermore.

Keywords: Knowledge attitude practice, Domestic violence

❖ Title: A study on Menstrual Abnormalities among undergraduate students of Medical College Kolkata



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Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

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Co – author :

▪ **Dr. NIRMALYA MANNA**, Associate professor, Department of Community Medicine, Medical College and Hospital Kolkata

Introduction: Menstruation is a taboo subject among adolescents; lack of knowledge regarding the same has significant negative influence on young women, burdening them physically and mentally.

Objectives: This study aimed to identify the menstrual patterns, abnormalities, effects of these abnormalities on the student population in form of social withdrawal, sickness absenteeism, degrading academic performances.

Materials and Methods: A cross sectional study on Menstrual Abnormalities among 187 undergraduate students of Medical College Kolkata was conducted to illuminate menstrual problems and its effects on their regular activities. By simple random sampling technique participants were selected, and questionnaires were given to complete within 15 minutes. Questions were related to menstruation, variations in menstrual patterns, dysmenorrhoea and its severity, premenstrual symptom, family and medical history in relation to menstrual abnormalities, social withdrawal, monthly sickness absenteeism and degrading of academic performances. To detect the severity of dysmenorrhoea, a verbal multi-dimensional scoring system was utilised.

Results: The mean age of subjects at menarche was 13.19 ± 0.93 years with a range of 11-17 years. Of all the abnormalities, dysmenorrhoea was the highest with 84% of prevalence (4.8% of dysmenorrhic subjects had severe dysmenorrhoea). Followed by pre menstrual symptom with prevalence of 68.4%. Other menstrual disorders like irregularity, oligomenorrhea, Amenorrhoea, Polycystic ovary syndrome had prevalence of 9.1%, 4.8%, 5.9%, and 25.1% respectively. Social withdrawal (15%), College absenteeism (4.8%), Degrading of academic performance (7%) was reported among the students. In this study 16.6% of students took analgesics during their period and among them about 48.4% self medicate and don't take any medical advice regarding the same.

❖ **Title: A study on mental distress among the undergraduate students of Medical College, Kolkata.**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

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Co – author :

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Background: Medical students are reported to have high levels of mental distress that includes mental problems such as anxiety, depression and stress due to the highly competitive and exhaustive curriculum. In the post-pandemic era with a renewed perspective towards health system and popularisation of online classes, current batch of students are exposed to diverse sources of mental distress.

Objectives: Objectives of this study were to find out the socio-demographic and behavioural characteristics, medical history, family background and academic profile of the study participants, and to estimate the proportion of different varieties of mental distress among them, and to examine relationship of mental distress with sociodemographic, behavioural and academic profile.

Materials and Methods: A cross-sectional observational study was performed on 649 undergraduate students by census method using DASS 21. The data was analysed using IBM SPSS version 20.0. Results: The study participants are predominantly Hindu, urban, unmarried, hostelites, males from nuclear families and belonging to upper socioeconomic class according to Modified B.G Prasad Socioeconomic Status Scale (January 2022). The proportion of depression, anxiety and stress among study participants were found to be 49.61%, 58.86% and 33.13% respectively. Proportion of depression, anxiety & stress were significantly higher in the age group of 21 - 24 years. Those who preferred to study more at night had higher proportion of anxiety & stress. Stress was proportionately higher in students with addiction to gadgets too. Participants hailing from rural areas, hostelites and paying guests were relatively more depressed. Students who wrote one or more supplementary examinations were significantly less depressed and less stressed. 9.24% of the participants have extremely severe depression.

Conclusion: There is urgent need for emotional support and provision of personalized counselling for the MBBS students as unchecked mental distress can turn into severe psychological morbidity.

Keywords: Mental health, Mental distress, MBBS students.

❖ **Title: A study on perceived stress and its determinants among post graduate junior resident doctors of Medical College and Hospital, Kolkata**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Pratibha Das, PGT, Community Medicine Medical College and Hospital

Co-authors:

- **Dr. Nirmalya Manna**

Introduction: Stress is a highly prevalent problem among post graduate junior resident doctors in India. Stressed doctors are not only a threat to themselves but also to the patients. **Objectives:** To explore the residency related information and the perceived stress among the post graduate junior resident doctors of Medical College and Hospital, Kolkata. **Materials and Methods:** A cross-sectional study was conducted on perceived stress among 226 postgraduate junior resident doctors of Medical College and Hospital, Kolkata. By simple random sampling technique, participants were selected and questionnaires were given. Questions were related to the factors related to residency that stresses them. Perceived stress was assessed by using Perceived Stress Scale. **Results:** 21.2% (48) were in their 1st year, 59.3% (134) were in their 2nd year and 19.5% (44) were in their 3rd year of residency. Multiple responses were obtained as a response to the most stressful part of residency where 20.4% (46) cited 'patient management', 27.4% (62) cited 'academic presentation', 30.5% (69) cited 'undertaking thesis

work', 48.7% (110) cited 'working hours', 31% (70) cited 'completing syllabus', 15% (34) cited 'relation with colleagues' and 5.8% (13) cited 'toxic working environment' as most stressful parts of their residency. 64.6% (146) of the participants had moderate stress, 20.8% (47) of them had High Perceived Stress and 14.6% (33) of them had Low Stress. Statistically significant association was observed between gender (0.007) and the branch (0.02) with PSS.

Conclusion: Postgraduate resident doctors were under different degrees of perceived stress due to various aspects of their residency program. Actions must be taken to address the cited issues as the most stressful parts of their residency. Proper counselling must be arranged to curb the hazardous effects of being under such constant stress.

Keywords: junior resident doctors, perceived stress, branch of postgraduation, thesis, working hours

❖ **Title: A study on perceptions of undergraduate medical students regarding online teaching-learning activity during the COVID-19 pandemic in a teaching hospital of Kolkata**

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author:

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- **Basu M**, Department of Community Medicine, Institute Of Post Graduate Medical Education and Research, and Seth Sukhlal Karnani Memorial Hospital, Kolkata, West Bengal.

Introduction: Online learning had become an important component in the continuity of medical education starting from the times of COVID-19. The understanding of students' perceptions regarding this important teaching-learning mode needs thorough exploration for its efficient use. **Objectives:** To assess the perceptions of undergraduate medical students regarding online teaching-learning activity during the covid-19 pandemic in a teaching hospital of Kolkata. **Materials and Methods:** An observational study with cross-sectional design was conducted from August 2020-October 2022 on undergraduate medical students of IPGME&R, Kolkata using complete enumeration method with sample size of 645. Data were collected using a predesigned, pretested and structured self-administered questionnaire and analyzed using SPSS 25.0. Suitable descriptive statistics were done and binary logistic regression test was performed to find the factors associated with perceptions.

Results: Out of 664 forms sent, 645 responses were received and included in analysis. Half of the respondents (50.6 %) had satisfactory perceptions on online teaching-learning activity. 44.8 % of them were not satisfied in attending theory classes online, whereas 80.9 % were not satisfied in attending practical classes online. 88.7% rated the interaction with teacher during online classes as poorer than physical teaching-learning. Students who were in their final year, who belonged to a family where the head of family was engaged in semi professional work, who attended online classes for 1 or 2 days in a week, used mobile phone for attending online classes, had poorer interaction with



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teachers during online classes and preferred duration of each online class being 30 minutes had significantly higher odds of unsatisfactory perception.

Conclusion: Half of the undergraduate medical students had satisfactory perceptions regarding online teaching-learning activity during the COVID-19 pandemic. Students as well as faculty need to be oriented and sensitized to this mode of teaching.

Keywords: COVID-19, Online teaching, Undergraduate medical education, Medical Students

❖ **Title: A study on Prevalence of Postpartum depression among mothers attending immunization clinic in MKCG medical college hospital, Berhampur, Odisha**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

First author:

Dr Adyasha priyadarsini, Post graduate student

Co-authors:

- Dr Srikanta Patra, Prof. Dr Durga Madhab Satapathy

Introduction:- Postpartum depression (PPD) is defined as the onset of depressive symptoms within 6 weeks of childbirth. It is a non psychotic depressive episode of mild to moderate severity disturbing routine life of mothers. Proper counselling on child rearing and emotional support during the postpartum period will prevent them from these emotional and behavioural changes.

Objective:- With this background, this study was carried out

- To determine the prevalence of post partum depression.
- To evaluate the risk factors associated with post partum depression.

Methodology:-

This cross sectional study was conducted among mothers attending immunization clinic in MKCG medical college hospital, Odisha from December to February 2023. After taking written consent, Mothers (within 2 years following delivery) were interviewed using SRQ 20. A score of >7 in SRQ 20 is considered as having PPD. Data collected were compiled & analysed to determine the prevalence of PPD and its association with socio demographic factors using EXCELL & SPSS v 17.

Results:- Majority (90%) of the mothers were in the age group of 20-30 and were homemakers; 67.5% were primi. 32% mothers experienced poor sleep cycle & 47.5% were nervous & worried. Prevalence of PPD was found to be 17 %.

Conclusion:- Designated screening tools for PPD should be used more frequently in clinical practices & data on mothers with PPD should be routinely collected. More resources should be allocated for capacity building in maternal mental health.

Keywords:- Postpartum, Depression, SRQ 2

❖ **Title: A study on Quality of Sleep among the undergraduate students of district Etawah**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Ankur Baidya, PG JR-1



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Co-authors:

- **Dr. Vidya Rani**, Professor
- **Dr. Mohit Mishra**, SR, Dr Shobhit Singh, PG JR 1
- **Dr. Alok Mani**, PG JR 1

Introduction: Young adults are at high risk for sleep problems and daytime sleepiness according to the National Institute of Health. Sleep is a malleable period of non-cognitive detachment from and reverie to one's surroundings. It is an important physiological process with many restorative functions and is essential in maintaining the body's circadian rhythm. There are many adverse consequences of decreased sleep such as heart disease, diabetes, depression, falls, accidents, impaired cognition, and poor quality of life. **Objectives:** To assess the Quality of Sleep and to determine the factors associated with quality of sleep among undergraduate students in district Etawah. **Materials and Methods:** A descriptive cross-sectional study was conducted among 300 conveniently selected undergraduate students attending a degree college in district Etawah. A pre-tested structured questionnaire and Pittsburgh Sleep Quality Index scale was used to assess the quality of sleep and its associated factors. **Results:** The mean PSQI score of the study participants was 4.92 ± 2.70 and about 51 percent of the study participants had good sleep quality. Family size, Diet, Physical activity and Substance abuse were associated with sleep quality. In Multivariate analysis, study participants with vegetarian diet had 2.1 (95% CI=1.20-3.67) times and family size of up to 5 had 1.63 (95% CI=1.02-2.61) times more odds of having good sleep quality respectively. **Conclusion:** A global score of ≥ 5 on PSQI scale is indicative of poor sleep quality and the mean global score of study participants in this study was less than 5. Diet and Family size were the only predictors of sleep quality in multivariate analysis.

Keywords: PSQI, Sleep Quality, Undergraduate, Students.

❖ **Title: A Study on Risk Perception and Practice Towards Road Traffic Safety among Young Adults residing in an Urban Slum at Chetla, West Bengal**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Anasuya Biswas, Post Graduate Trainee, Department of Preventive and Social Medicine; All India Institute of Hygiene and Public Health, Kolkata.

Co-authors:

- **Mondal A**, Second year post graduate trainee
- **Bandyopadhyay L**, Department of Preventive and Social Medicine; Advisor public health (APH), Senior Grade Professor (Eq), Department of Preventive and Social Medicine
- **Sahu M³**, Associate professor, Department of Preventive and Social Medicine
- **Bhattacharyya M⁴**, Professor in Paediatrics, Department of Maternal and Child Health
- **Paul B**, Professor and Head Department of Preventive and Social Medicine; All India Institute of Hygiene and Public Health
- **Jaiswal Ajit A**, 3rd year Jr MD Community Medicine; All India Institute of Hygiene and Public Health Kolkata



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▪ **Bharti N.** 3rd year Jr MD Community Medicine ;All India Institute of Hygiene and Public Health Kolkata

Introduction: Road traffic injuries are a major epidemic. WHO has declared road traffic accidents as the number one cause of death among young adults. India has seen 20.6% deaths among 18-25 years and 25.7% deaths among 25-35 years individual in the year 2021 as reported by Ministry of road transport and highways. This study is aimed to learn and study risk perception and practice of road safety measures among young adults. **Objectives:** To assess risk perception and practice of road safety measures among young adults residing an urban slum, West Bengal and also to elicit the various factors associated with risk perception and practice of road safety measures among study participants. **Methods:** A cross-sectional study approved by IEC of AIH & PH, Kolkata was conducted among 168 young adults aged (18-29) selected by cluster sampling from December 2022 to February 2023. Data were collected by using a pre-designed pretested interviewer administered questionnaire & analysed using SPSS version 16.0 and Microsoft excel. **Results:** 63.3% participant has bad perception of road-traffic safety & its is significantly different as per education (p-value 0.003), alcohol abuse (p-value 0.039). Poor practice of following traffic rules during driving was found in 51.1% & it was significantly different as per education (p-value <0.001), occupation (p-value <0.001), presence of vehicle insurance & driving licence (p-value <0.001). Poor practice of following traffic rules while walking was found in 55.6% & it was significantly different as per education & occupation (p-value <0.001). **Conclusion:** Education, Occupation, Alcohol abuse, presence of Driving Licence, & Vehicle insurance was most significant predictor road-traffic safety perception, as well as practice of following traffic rules during driving & walking.

Keywords: Accident, Alcohol, Road traffic safety, Speed, helmet.

❖ **Title: A Study on Self-Medication Practices among Adult Patients Attending Out Patient Department in an Urban Slum of Kolkata.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

- **Dr. Md Ali Mallick**, 2nd year Junior Resident, Dept. of PSM, AIH & PH, Kolkata

Co – author :

- Sahu M, Associate Professor, Dept. of PSM, AIH & PH, Kolkata
- Paul B, Professor & HOD, Dept. of PSM, AIH & PH, Kolkata
- Bandyopadhyay L, Advisor Public Health Professor (Eq), Dept. of PSM, AIH & PH, Kolkata
- Bhattcharya M, ⁴Professor in Paediatrics, Dept. of MCH, AIH & PH, Kolkata

Introduction: Self-medication is an important public health problem across the world. High prevalence of self-medication is one of the important factors attributing to the development of multiple problems like antimicrobial resistance, uncontrolled blood pressure and diabetes, nephropathy, recurrent hospitalization. Self-medication without sufficient knowledge may lead to the irrational use of drugs causing serious negative health impacts and increased economic burden.

Objectives: To assess the burden of self-medication practices among adult patients attending an out-patient department in an urban slum of Kolkata & to evaluate knowledge and practices regarding self-medication among them as well as to elicit various factors associated with self-medication.

Methodology: A clinic-based cross sectional observational study approved by IEC of AIH & PH, Kolkata was conducted in OPD of urban Health unit & training center, Chetla.158 sample was selected by systematic random sampling and a pre-tested pre-validated semi-structured scheduled was administered. Collected data were analyzed by Microsoft Excel and SPSS Ver.16. Results: 67.9



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percent participant were found to have practiced self-medication. Participant belonging to 28-37 years practiced more self-medication in comparison to other age group. Self-medication practices was found more in male participants (p-value = 0.047), primary educated participants (p-value = 0.02). 40% of the participants had more knowledge regarding bad effects of self-medication & self-medication practices were found to be more in those participants with less knowledge regarding bad effects of self-medication (p-value 0.001).

Conclusion: The prevalence of self-medication is alarming and needs an intervention. Planning of health awareness program

Keywords: Self Medication, OTC Drugs, Polypharmacy.

❖ Title: A Study on the Clinico-Epidemiological Profile of Snake-bite Victim

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

- **Dr. Mrinalini Sai**, PG resident, Dept. of Community Medicine, VIMSAR, Burla.

Co-authors:

- **Dr. Subrat Kumar Pradhan**, Associate Prof. Dept. of Community Medicine, VIMSAR, Burla.
- **Dr. Sanjeeb Kumar Mishra**, Assistant Prof. Dept. of Community Medicine, VIMSAR, Burla.
- **(Prof) Dr. Sadhu Charan Panda**, (HOD) Dept. of Community Medicine, VIMSAR, Burla.

BACKGROUND: Snake bite is a neglected public health issue in many tropical and subtropical countries. It is potentially a life-threatening disease. Bites by venomous snakes can cause paralysis that may prevent breathing, bleeding disorders that can lead to a fatal haemorrhage, irreversible kidney failure and tissue damage that can cause permanent disability and limb amputation.

OBJECTIVES : To find out the clinico-epidemiological study of snake-bite.

MATERIALS AND METHODS: A Retrospective record review was undertaken in the Medical Record Room of VIMSAR, Burla. Eighty two case records of snake bites between April 2022 and October 2022 were studied.

RESULTS: Out total of 82 cases of snake bite, 58 were males (70.73%). The age of the patients ranged from 14 to 80 years and 46.43% of bites were predominantly seen in 20 - 40 years aged patients. A majority of the patients were from rural areas (52%) belonging to Sambalpur and Bargarh district. Most of the snake bites were neurotoxic (46.3%). Bite mark was seen in 20% cases. Symptoms like pain and swelling at bite site were seen in 13.39% cases. Most of them had bite on lower limb (74.39 %). Night time bites accounted for 56.09%. Majority of the cases were treated with ASV out of which 4 cases developed allergy. The mean period of hospitalization was 4 days. Five patients developed complications. Mortality was seen in 2.43% cases.

CONCLUSIONS: Snake bite cases were predominantly seen in males of age group 20-40 years. Most cases belonged to rural areas. The lower mortality is attributed to timely hospitalization and treatment with ASV.

Keywords : Snake-bite, Epidemiology, Anti-Snake Venom, Envenomation



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❖ **Title: A Study on Water, Sanitation and Hygiene (WaSH) Facilities and Common Morbidities among School Children in a Rural Area of Singur, West Bengal**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

▪ **Dr. Sujith Surendran**

Co-authors:

- **Dr. Lina Bandyopadhyay**, All India Institute of Hygiene & Public Health, Kolkata
- **Dr. Monalisha Sahu**, Department of Preventive and Social Medicine, All India Institute of Hygiene & Public Health, Kolkata
- **Dr. Madhumita Bhattacharyya**, All India Institute of Hygiene and Public Health, Kolkata
- **Dr. Bobby Paul**, Department of Preventive and Social Medicine, All India Institute of Hygiene and Public Health, Kolkata

Introduction : Access to WaSH facilities is a fundamental human right and despite significant progress, millions worldwide still lack access to basic WaSH facilities, leading to morbidity and mortality. This study looks to identify gaps and potential areas for intervention through further research.

Objectives : The study aimed to assess availability of WaSH facilities in the households and schools, personal hygiene practices, morbidities among school-going children in rural Singur and to find out their associations, if any.

Methodology : A cross-sectional study done from October 2022 to March 2023 among 214 school-going students aged 5-15 years, selected by simple random sampling from four selected schools in rural Singur. A pre-validated pre-tested schedule made using 'WHO WaSH indicators' was used to collect data which included WaSH facilities at household and school, personal hygiene practices and morbidities of the study participant. Data was analysed by descriptive and inferential statistics using SPSS-16 version. Ethical approval was taken from institutional ethics committee of AIIPH&PH.

Results : The median age of the study participants was 12(7,13) years and mostly belonged to socio-economic class V. All the participants had access to basic water, while 93.7% had basic sanitation and 79% had basic hygiene facilities at home. Only 77.3% and 32.8% of study participants had all three basic WaSH facilities at home and school respectively. Respiratory(59.7%) and gastrointestinal illness(22.7%) were the most prevalent of the morbidities in children, chi-square test found them to be associated with home & school WaSH facilities($p=0.008$). Personal hygiene practice was found to be associated with availability of WaSH facilities at home($p=0.001$) and school($p=0.009$).

Conclusion : The study underlines the importance of ensuring access to basic WaSH facilities for school-going children, crucial for promoting better health outcomes. Thus, advocacy is required to bring basic WaSH facilities at home and school for them.

Keywords: WaSH , School children , Morbidities , Personal hygiene

❖ **Title: A study to assess the Knowledge, Attitude and Practice regarding biomedical waste management among health care personnel of Urban PHCs in Berhampur, Odisha**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)



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Presenting author:

- **Dr. Priya Ranjan Patra**, Department of Community Medicine, MKCG Medical College, Berhampur, Odisha.

Co-authors:

- **Dr Srikanta Patra**, Department of Community Medicine, MKCG Medical College, Berhampur, Odisha.
- **Dr Durga Madhab Satapathy**, MKCG Medical College, Berhampur, Odisha.

INTRODUCTION: Biomedical waste(BMW)has a significant health concern for the health personnel, public as well as environment. Improper handling of BMW can cause life threatening conditions like HIV,Hepatitis B and Tuberculosis among the health care personnel. Also, improper disposal can contaminate the surrounding environment leading to major public health challenges.Therefore,it is important for those who are concerned with BMW management to have proper idea on how to deal with collection and appropriate disposal of biomedical wastes.

OBJECTIVES: To assess the knowledge,attitude and practice of healthcare personnel working in urban PHCs of Berhampur on BMW.

MATERIALS AND METHODS: This cross sectional study was conducted from Jan 2023 to Feb 2023 in the UPHCs in Berhampur.Study participants,who agreed to participate includes all the stake holders of BMW starting from doctors to sweepers working in the 9 UPHCs .Data collected using a standard checklist for practice and a pretested, semi-structured questionnaire was used to assess the socio demographic profile ,knowledge and attitude of the participants on BMW.

RESULTS: Among the participants 10.5% are Doctors, 21% are nursing staffs,14% are Pharmacists & 12.3% are lab technicians .Only 44.2% of the participants knew that BMW should not be stored beyond 48 hours.76.9% respondents disposed sharp materials in translucent bag and 92.3% respondents knew that needle stick injury may cause both HIV & Hepatitis B. Most of the participants agreed on periodic training for BMW management.

CONCLUSION: Doctors& Nursing staffs have better knowledge as compared to lab technicians and sweepers.For effective management of BMW periodic training is highly recommended.

❖ Title: A time to event analysis for factor effecting termination of exclusive breast feeding practices among women delivered at public health facilities in Patna District

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

Dr. Singh Bhavna Sanjay(JR, CFM department)

Co-authors:

- **Dr Pragya Kumar** (Additional professor, CFM department)
- **Dr Shamshad Ahmad** (Assistant professor, CFM department)
- **Dr Mounika Anant** (Additional professor, OBGY department)
- **Dr Haripriya H** (SR, CFM department)
- **Dr Mohit Bhardwaj** (JR, CFM department)



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Introduction: EBF is one of the most effective ways to ensure child health and survival. Earlier studies determined factors affecting breastfeeding which was based on retrospective study design and prone to recall bias. In this context we conducted quasi experimental study with the following objective.

Objectives:

1. To estimate the cumulative survival probability of exclusive breastfeeding and identify the predictors of breastfeeding cessation.
2. To determine the effect of video-based intervention on the cumulative survival probability of exclusive breastfeeding cessation.

Materials and Methods:

Total of 94 lactating mothers from 3 different centres, after taking consent for telephonic follow-up were included in study. After collecting baseline information and their knowledge and attitude regarding breastfeeding, participants were divided in two group, one group was shown 7 min video regarding importance and correct technique of breastfeeding along with routine counselling, while another group was only given routine counselling. Telephonic follow-up was done on day 15, 30, and at every month till 6 months of life.

Results: Interim result

Out of 94 participant, termination of exclusive breastfeeding was observed among 7 mothers (7.5%), neonatal death in 3 mothers (3.1%). Women with good, average and poor knowledge score regarding breastfeeding practices were 45.2%, 37.6% and 17.2% respectively. Women with good, average and poor attitude score were 37.6%, 41.9% and 20.4% respectively. There was no record regarding time of breastfeeding initiation in 43% mothers and only in 64% mothers' early initiation of breastfeeding was found (according to recall by participant).

Conclusion: till 3 months of completed follow-up, cessation of EBF was seen in very few mothers. Nearly half of mothers had good and one-sixth had poor knowledge score regarding EBF. There was no record of time of breastfeeding initiation in half of women.

Keywords: EBF (exclusive breastfeeding) & EIBF (Early initiation of breastfeeding)

❖ **Title: Acceptance and willingness to pay for the COVID-19 vaccine in the age group of 18-44 years in West Bengal**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Introduction: . Proper vaccination helps to prevent and control the spread of COVID-19. Even after the availability of vaccines in the market, concerns about vaccine safety and price of vaccines hinders its acceptance.

Objectives: To determine the acceptance and willingness to pay for the COVID-19 vaccine in the age group of 18-44 years in West Bengal and to find factors associated with acceptance of the COVID-19 vaccine in the study population.

Materials and methods: A cross sectional study was conducted among the age group of 18-44 years in West Bengal using a semi-structured questionnaire consisting of details about socio-demographic status, perceived health status, and COVID-19 experience; intention to receive the COVID-19 vaccine; and willingness to pay for the COVID-19 vaccine. The belief of the participants regarding the COVID-19 vaccine was assessed using the Health Belief Model (HBM) hypothetical approach towards vaccine acceptance and 'Willingness to Pay (WTP)'. MS Excel was used for compiling data and SPSS v20 was used for statistical analysis.

Results: Most (83%) of participants were willing to accept COVID-19 vaccine, 73.3% were ready to receive vaccine if adequate information is provided to them. More than 50% percent of participants reported that they would accept the vaccination against COVID-19, if more studies support the efficacy and safety of the vaccine. The common reasons for refusal of COVID-19 vaccine were concern about the vaccine side effects (70.6%) and disbelief in the efficacy of the vaccine (11.5%). Nearly 87% of participants were willing to pay for COVID-19 vaccine and 35.3% were willing to pay an amount less than or equal to INR 200.

Conclusion: Most of the participants were willing to pay an amount of INR 200 to obtain the vaccine, though a considerable number of participants wanted the vaccine to be provided free of cost to the general population.

Keyword: COVID-19 Vaccine, Acceptance, Willingness to pay

❖ **Title: Acceptance and willingness to pay for the COVID-19 vaccine in the age group of 18-44 years in West Bengal**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Rajesh Kumar Verma

❖ **Title: Adherence to antidiabetic medication and factors associated with non-adherence among patients with type-2 diabetes mellitus**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Dolly Goswami, (Post Graduate Student)

Co-authors:

• **Dr. Dhiraj kumar Srivastava¹(Professor), Dr Gaurav Kumar¹ (Post Graduate Student),**



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* **Dr Urvashi Mavi**¹ Department of Community Medicine, Uttar Pradesh University of Medical Sciences, Saifai, Etawah (U.P.)

Introduction: As per IDF Diabetes Atlas 2013, 382 million people globally are suffering from diabetes, with numbers expected to rise to 592 million by 2035. Its management is multifaceted, and adherence to pharmacotherapy is known to play a significant role in glycaemic control.

Objectives: To assess the non-adherence to anti-diabetic medications in diabetics and to study the factors responsible for non-adherence.

Materials and Methods: The cross-sectional survey was carried out among T2DM patients to assess adherence to medication. Adherence was measured by using the Medication Compliance Questionnaire that consists of a total of seven questions. Other data, such as patient demographics, treatment, outcome, and comorbidities were also collected from patient. IBM SPSS software, version 25 was used for statistical analysis.

Results: Result awaited, Data has been collected analysis is being done. result will be presented at the time of presentation

Conclusion: awaited

Keywords: Antidiabetic-medication, Diabetes Mellitus, International Diabetes federation (IDF).

❖ **Title: Adherence to antidiabetic medication and factors associated with non-adherence among patients with type-2 diabetes mellitus**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance
Presenting author:

Dr. Dolly Goswami, (Post Graduate Student)

Co-authors:

* **Dr. Dhiraj kumar Srivastava**¹(Professor), **Dr Gaurav Kumar**¹ (Post Graduate Student),

* **Dr Urvashi Mavi**¹ Department of Community Medicine, Uttar Pradesh University of Medical Sciences, Saifai, Etawah (U.P.)

Introduction: As per IDF Diabetes Atlas 2013, 382 million people globally are suffering from diabetes, with numbers expected to rise to 592 million by 2035. Its management is multifaceted, and adherence to pharmacotherapy is known to play a significant role in glycaemic control.

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Results: Result awaited, Data has been collected analysis is being done. result will be presented at the time of presentation

Conclusion: awaited

Keywords: Antidiabetic-medication, Diabetes Mellitus, International Diabetes federation (IDF).

❖ **Title: Administration Of Swarnaprashana In Children: A Public Health Initiative**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health



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Presenting author:

- **Dr. Arun Raj GR**, Department of Kaumarabhritya (Ayurveda Pediatrics), Parul Institute of Ayurved and Research, Parul University

Background: Swarna has been used all through these ages in various forms such as raw gold, pure metal, gold foils, red colloidal solution, Swarna Patra, Swarna Parpati and bhasma and other forms in varying dose and stands time tested. The procedure in which Swarna along with herbs are taken in the form of the practice of administration of Swarnaprashana in Indian children and how it may fill the gaps in public health system. **Methods:** The various research activities as well as published research papers available in databases concerning the practice of Swarnaprashana. **Results and Discussion:** The detailed analysis of the practice of Swarnaprashana in varied forms that are prevalent in Indian mainland will be made. Further on the available evidences on the scope of possible usage of Swarnaprashana as a minimal initiative in the area of public health will be discussed. **Conclusion:** The administration of Swarnaprashana may be adopted as a potential tool in combating minor public health issues in the country.

Keywords: Ayurveda, public health, swarnaprashana, children

❖ Title: Adolescent pregnancy and anemia: A descriptive analysis in a tertiary care hospital in Kolkata, West Bengal

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr. Kajari Bandyopadhyay, Assistant Professor (Community Medicine).

Co-authors:

- **Dipta Kanti Mukhopadhyay**, Professor (Community Medicine)

Background: Adolescent pregnancy is a major public health problem in India due to its deleterious consequences on maternal and child health outcome.

Objectives: To assess the proportion of adolescent pregnancy and its association with maternal anaemia among pregnant women attending a tertiary care hospital in Kolkata, West Bengal during 2020-2021

Materials and Methods: The secondary data captured at labour room logbook of College of Medicine & Sagore Dutta Hospital, Kolkata for the period of 2020-2021 has analysed. After obtaining permission from the concerned authority, the data were anonymised, checked for completeness and only complete responses were used for analysis. World Health Organization (WHO) definition was used for define adolescent pregnancy and anemia.

Results: Among the women who admitted during the study period, nearly 13.2% were adolescents. Among them, 7.4% were multipara and 17.4% were multigravida during their current pregnancy. The proportion of preterm labour was marginally higher among adolescents. Prevalence of anaemia among teenage pregnancy was higher compared to their adult counterpart (42% vs 39%). Mean haemoglobin level at admission for childbirth was lower among adolescents compared to their adult counterparts. Prevalence of mild and moderate to severe anaemia were 27.3% and 14.3% respectively among adolescents, whereas the same were 25.4% and 13.6% among adult counterparts, the difference being statistically significant.



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Conclusion: As adolescent pregnancy was found to be significantly associated with maternal anaemia, that group need special attention to prevent adverse consequences.

Keywords: Anaemia, Pregnancy, Adolescence

❖ **Title: Adoption of CPHC NCD platform in remote, tribal and left extremist wing affected Bastar Region of southern Chhattisgarh**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. B Santhosh

❖ **Title: Adult Vaccination: A KAP study among adults in a Tertiary care centre Odisha**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Biswajita Panda, PG 1st year, Department of Community Medicine, SCB Medical College & Hospital, Cuttack

Co-authors:

- **Dr Krishna Kar**, Department of Community Medicine, SCB Medical College & Hospital, Cuttack
- **Dr Pragyna Paramita Das**, Department of Community Medicine, SCB Medical College & Hospital, Cuttack

Introduction: A high burden of the vaccine preventable diseases, increasing elderly population, immunosenescence, and emerging drug resistance emphasize the need for robust adult immunisation. Despite vast improvement in childhood vaccination coverage in India, adult vaccination coverage is negligible. The recommended vaccines for adult age group are against Influenza, Typhoid, Hepatitis B, Pneumococcal vaccine, Tetanus, Human papilloma virus, MMR, Varicella, Hepatitis A. There are no national adult immunisation guidelines in India and though several medical societies have published adult immunisation guidelines, these vary, making it unclear who should receive which vaccine. Other barriers to adult immunisation include vaccine hesitancy, missed opportunity and cost.

Objective: To assess the knowledge, attitude, behavioural pattern of adults towards adult vaccination and to determine the factors influencing it.

Materials and methods: A cross-sectional study is being conducted at Immunisation OPD, SCBMCH, Cuttack from January 2023 to March 2023. All the adults coming to immunisation OPD for self-vaccination or vaccination of their children were included in the study. In case both parents are coming with the child, any one of them was interviewed. The participants were interviewed using a pre-designed, pre-tested, semi structured questionnaire through Epicollect. The data will be extracted into excel sheet and analysed using SPSS version 17.0

Results: As the study is still going on the result is awaited.

Conclusion: The conclusion will be drawn after completion of analysis.

Key words: Adult vaccination, behaviour, knowledge



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❖ Title: Adult Vaccination: A KAP study among adults in a Tertiary care centre Odisha

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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Introduction: A high burden of the vaccine preventable diseases, increasing elderly population, immuno-senescence, and emerging drug resistance emphasize the need for robust adult immunisation. Despite vast improvement in childhood vaccination coverage in India, adult vaccination coverage is negligible. The recommended vaccines for adult age group are against Influenza, Typhoid, Hepatitis B, Pneumococcal vaccine, Tetanus, Human papilloma virus, MMR, Varicella, Hepatitis A. There are no national adult immunisation guidelines in India and though several medical societies have published adult immunisation guidelines, these vary, making it unclear who should receive which vaccine. Other barriers to adult immunisation include vaccine hesitancy, missed opportunity and cost. **Objective:** To assess the knowledge, attitude, behavioural pattern of adults towards adult vaccination and to determine the factors influencing it. **Materials and methods:** A cross-sectional study is being conducted at Immunisation OPD, SCBMCH, Cuttack from January 2023 to March 2023. All the adults coming to immunisation OPD for self-vaccination or vaccination of their children were included in the study. In case both parents are coming with the child, any one of them was interviewed. The participants were interviewed using a pre-designed, pre-tested, semi structured questionnaire through Epicollect. The data will be extracted into excel sheet and analysed using SPSS version 17.0 **Results:** As the study is still going on the result is awaited. **Conclusion:** The conclusion will be drawn after completion of analysis.

Key words: Adult vaccination, behaviour, knowledge

❖ Title: Adverse Events Following Immunization with Japanese Encephalitis Vaccine among children attending the Immunization Clinic at a Tertiary Hospital in Eastern India.

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr Pravin Pisudde, Associate Professor

Co – author :

- **Dr Mamta Jadon**, Assistant Professor
- **Dr Yashika Garg**, Assistant Professor, Shweta Singh Chauhan



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❖ **Title: *Aedes aegypti* larval indices and the risk factors associated with dengue transmission in selected ward of Mysuru city, Karnataka**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr Shantanu Shrivastava, MPH Scholar, School of Public Health, JSS Medical College, Mysore

Co-authors:

▪ **Dr. Nimisha Bhatu**, MPH Scholar, School of Public Health, JSS Medical College, Mysore

Introduction: Dengue and Dengue Hemorrhagic Fever (DHF) is a rapidly spreading vector-borne infection across the globe. Dengue virus is transmitted by female *Aedes* spp. Mosquitoes, majorly by *Aedes aegypti*. Another species of *Aedes*, i.e., *Aedes albopictus* has also been a vector of DENV. Ground water tanks, septic tanks, and overhead tanks are usually their primary habitats as *Ae aegypti* breeds mainly in artificial water holding containers found in and around houses, construction places, and Industries. In this study, we have assessed the usefulness of adult abundance and larvae indices of the *Aedes* mosquito for estimating the risk factors and high-risk areas for dengue virus transmission.

Objectives:

1. To estimate the larval indices of *Aedes* mosquito in the selected ward.
2. To predict the risk factors associated with dengue transmission in selected wards.

Methodology: Thirty randomly selected households (n=100) in each of the streets comprising various levels (low, middle & high) of dwellings, vegetation coverage, water supply, and collection of garbage in the selected ward were inspected for the presence of water-holding containers in and around the house. All the containers holding water were examined for the existence of mosquito larvae.

Inclusion criteria: All the randomly selected households in the study wards were willing to participate in the study after signing the consent form.

Results: A total of 100 water-holding containers were inspected and 44 (44%) had at least an *Aedes* larvae or pupae. Water-holding containers supporting the breeding of *Aedes* larvae and pupae included discarded car tires, flower pots, and small and large plastic containers. The overall House Index, Container Index, and Breteau Index were 17.5%, 31.5%, and 44, respectively.

Keywords: Dengue, Vector-borne diseases, *Aedes aegypti*, Larvae, Transmission risk

❖ **Title: An appraisal of peer-reviewed published medical literature on Influenza, 2000-2021 from countries in South-East Asia Region**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Divita Sharma, Research Associate, GRID Council

Co-authors:

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Introduction: Influenza poses a major public health challenge in South-East Asia Region (SEAR). There is a need to generate priority-driven contextual evidence that could inform policy makers and program managers for response preparedness and impact mitigation. However, evidence generation from SEAR has been arguably low and needs a relook for alignment with priorities.

Objective: To explore trends in influenza related research published from SEAR for highlighting performance and gaps across priority research themes.

Methods and Materials: We undertook a bibliometric analysis. We searched Scopus, PubMed, Embase, and Cochrane databases for studies on influenza published from the 11 countries in WHO SEAR in the date range; 1 January 2000 –31 December 2021 in August 2021. Data was retrieved and analyzed based on the five priority streams developed by WHO Public Health Research Agenda for Influenza, regions and countries, study design and type of research. Bibliometric analysis was done on Vosviewer.

Results: Maximum number of publications were seen in Stream 2 i.e., limiting the spread of pandemic, zoonotic, and seasonal epidemic influenza which majorly included transmission, spread of virus and public health measures at global and local levels. The highest number of publications was from India followed by Thailand, Indonesia and Bangladesh. Bhutan, Maldives, DPRK, and Timor-Leste had the least contribution in Influenza research. The top most journal was PloS One which had maximum number of influenza articles published from SEAR countries. Research that generated actionable evidence i.e., implementation, interventions and on innovations related topics were less common. SEAR MS had inconsistent output across the five priority research streams, and there was a much higher scope for collaborative research. Basic science research showed declining trends and needed reprioritization.

Conclusion: SEAR member states must inculcate a culture of within and inter-country collaboration to produce evidence that has regional as well as global value.

❖ **Title: An assessment of knowledge and attitude towards Leprosy among Medical Officers, Ayush Medical Officers and Rural Medical Assistants working at government health centres in rural and tribal areas of Chhattisgarh state.**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

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Co – author :

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▪ **Dr. Prashant Jaiswal**, Assistant Professor, Department of Community Medicine, Pt. JNM Medical College, Raipur (C.G).

▪ Dr. Nirmal Verma, Professor and Head of Department, Pt. JNM Medical college, Raipur (C.G)

▪ Dr. Prashant Jaiswal, Assistant Professor, Pt. JNM Medical college, Raipur (C.G)

Introduction: Every child has the right to quality education. The right includes access to clean drinking water and sanitation while at schools. Safe and adequate water supply and sanitation in schools are pre requisites for the right to basic education for school children. It is linked to achievement of Sustainable Development Goals (SDG's) and in particular Goal 6 on clean water and sanitation by 2030



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Objectives: To assess sanitation and provision of water in middle and high schools of Raipur City, Chhattisgarh.

Materials and Methods: This was an institutional based cross-sectional study conducted in 20 schools of Raipur city. The schools were selected by random sampling method using lottery method of which 15 were middle schools and 5 were high schools. The study subjects of 400 (200 boys and 200 girls) were selected by cluster sampling which included students of 6th–10th standard. A pre-designed, semi-structured and self-administered questionnaire was used for data collection which consisted of information related to basic details and questions on sanitation and water.

Results: According to the study 14.5% students did not use toilets in schools due to some reasons. 80.25% of students always used soap for washing hands. 92% students always wash their hands before eating food. 70% schools use tap water as source of drinking water while only 30% use water bottles from home. 90% had container covered properly while 10% did not have container covered.

Conclusion: The study showed that there was some inadequate sanitation and inefficient provision of drinking water. The school health administration should intervene and improve these facilities to promote better school health. There should be willingness and reinforcement of school administration and staff to participate in the school health promotional activities along with their routine work, thus ensuring sustainability and better health.

Keywords: Health promotion, School health, Sanitation, Water.

❖ **Title : An assessment of Social Stigma due to COVID-19 during its 1st and 2nd Wave, in patients attending a follow-up clinic of a tertiary care hospital, Kolkata.**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Rashmi Singh, Calcutta National Medical College

❖ **Title : An epidemiological study on assessment of Diabetes risk and determinants among adult population in urban area of Diphu, Assam**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

▪ **Dr. Chetanjit Baruah**, Assistant Professor, Department of Community Medicine, Dhubri Medical College & Hospital, Assam

Co-authors:

Dr Beeva Baruah, Professor & Head, Department of Community Medicine, Diphu Medical College & Hospital, Assam

Introduction: India is the diabetes capital of the world. Diabetes is a lifestyle disease which affects all age groups. The prevalence of Diabetes is increasing alarmingly which is a cause of concern for public health.



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Objective: 1) To assess the risk of developing Diabetes among adult population using IDRS 2) To find out the association of socio-demographic factors and other risk factors among adult population with Indian Diabetes Risk Score.

Material & Methods: A community based cross sectional study was carried out among 200 adults aged 18 years and above who were non-diabetic by simple random sampling in urban area, Diphu, Assam from October 2021 to December 2021 using pre-designed semi structured questionnaire. Data was analyzed using SPSS version 20.0 software. Logistic regression analysis was done to determine the predictors of risk of diabetes. **Results:** Among 200 participants, 53.0% were at moderate risk and 35.5 %were at high risk of having diabetes. On multiple regression analysis, age, marital status, education, fruit consumption, blood pressure, BMI and physical activity were found to be significant predictors of risk of developing diabetes.

Conclusion: Individuals who are at risk for developing diabetes should be identified by screening so that appropriate interventions can be done to prevent/delay the onset of diabetes.

Keywords: Diabetes, IDRS, Prevalence, Screening

❖ **Title : An evaluation of patients' satisfaction with the Outpatient department services of a tertiary care centres of eastern India: A cross-sectional study**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Sarita Kumari,

Co-authors:

- **Dr Shamshad Ahmed**
- **Dr Pragya Kumar**

Introduction: Outpatient department usually serves as the first point of contact between patients and the healthcare facility. The service quality of OPD's corresponds to the image of the hospital. The patient's perception of the quality of services is determined by intangible aspects such as the staff's politeness and cooperation, the cleanliness of the environment, etc. Based on this assumption, this study was devised to assess Level of satisfaction as well as determine the patient profile and level of perception of OPD services.

Method: This study followed an observational cross sectional study design. Convenient sampling technique was applied to collect responses from 255 OPD patients aged 18 to 65 years. Statistical analysis of the data was done using SPSS version 21 software.

Result: Mean age of patients was 36 (+14.2) years. Nearly three-fourth of the patients (72.2%) were highly satisfied with the general services of the hospital. Majority patients (87.1%) were satisfied with the doctor's behaviour. About 8% of the patients suggested that there should be improvement in the behaviour of the staffs. About 16% of the patients were not satisfied with the waiting time.

Conclusion: Based on the above results the patients were satisfied with OPD services. However, few significant gaps were identified through the study finding which necessitates focused improvement for boosting the health care service delivery.

Keywords: OPD services, Patients' satisfaction, Quality of services, doctor patient relationship.



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❖ **Title : An observational study on the Knowledge, Beliefs and Practice of Menstrual Hygiene among Adolescent Girls residing in the urban slums of Guwahati City**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

▪ **Dr. Devika Barman**

Co-authors:

- **Dr. Jutika Ojah, Professor and Head**, Department of Community Medicine, GMCH
- **Dr. Mehzabin Haider Hazarika, Assistant Professor**, Department of Community Medicine, GMCH
- **Dr. Pahari Gogoi, Lecturer (MSW)**, Department of Community Medicine, GMCH

Introduction : Adolescence is the period of transition between childhood and adulthood, and in a girl it is marked by several physiological, behavioral and psychological changes, the most important milestone being the onset of menstruation (menarche). Many adolescent girls residing in the slum areas are still unaware of what actually happens during menstruation, leading to several misperceptions and faulty hygiene practices.

Objectives : To assess the knowledge of menstruation and menstrual hygiene, its beliefs, practices and associated reproductive health problems among adolescent girls residing in the urban slums.

Materials and Methodology: A community based cross sectional study was done among 150 adolescent girls aged between 10-19 years in 10 out of the 99 registered urban slums of Guwahati city using simple random sampling method. A predesigned, pretested semi-structured proforma was used to collect the sociodemographic and individual information of the respondents by doing house to house survey.

Results : Out of the 150 adolescent girls, who attended Menarche, 80.66% had knowledge about menstrual cycle, 80.75% practice good menstrual hygiene, 72.67% had false beliefs and 90.67% had food restrictions related to menstruation; Out of 46 girls who suffered from menstrual related health problems, 30.43% presented with RTI, and 17% with UTI. **Conclusion :** From the above study, it is seen that the though the knowledge and practice of menstrual hygiene among adolescent girls in the urban slums is improving, yet it is influenced by several false beliefs and taboos within the society, which may result in serious implications on their reproductive health and overall well-being necessitating crucial assistance.

Keywords : Adolescent girls; menstruation; slums; hygiene practices; false beliefs; RTI; UTI

❖ **Title: Anti typhoid treatment hindering transmission of tuberculosis in household contacts of sputum positive index tuberculosis patients**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

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Co – author :

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- **Dr Mohammad Shameem**, Professor, Department of Pulmonary Medicine, Jawaharlal Nehru Medical College and Hospital, Aligarh Muslim University

Introduction Active Pulmonary Tuberculosis patients during their initial symptomatic phase tend to transmit TB to close contacts. Most of these patients present to healthcare with symptoms of fever and cough from which a substantial amount of them are diagnosed with Typhoid owing to misinterpretation of Widal values. These drugs used in Typhoid treatment however also have excellent Anti Tubercular activity.

Objectives 1. To estimate the prevalence of Tuberculosis patients presenting with fever and are treated against Typhoid fever. 2. To establish a relationship between patients treated against typhoid fever and transmissibility of tuberculosis.

Materials and Methods: In this cross sectional study, we recruited 103 tuberculosis-affected index cases that contained 405 households from 2 rural district microscopy centers and 3 urban district microscopy centers belonging to Aligarh. Index cases and their household contacts were contacted 6 months post the index cases' diagnosis and data was obtained. We used chi square tests to identify the relationship between index patients who were treated for typhoid fever in their symptomatic period preceding their diagnosis with tuberculosis and the chances of them transmitting tuberculosis to their households.

Results: Out of the 103 index cases, 65.05% were treated against typhoid after which they were eventually diagnosed with tuberculosis. 2 patients among this group of 67 patients transmitted tuberculosis to their households whereas 7 index cases among the remaining 36 patients transmitted tuberculosis to their households. This was statistically significant with a p - value of 0.009. The Odds ratio was -1.91 (CI: -3.54 - -0.29) which signified that index cases who were treated against typhoid fever had lesser odds of transmitting tuberculosis compared to those index cases who were not being treated against typhoid fever.

Conclusion: Typhoid fever, remains a disease that is overdiagnosed owing to misinterpretation of Widal values. This leads to tuberculosis patients who present with fever being falsely diagnosed and treated against typhoid fever. However, this treatment with fluoroquinolones during the initial active stage of TB reduces the transmissibility of index case, thereby protecting the households from TB.

Keywords: Communicable Diseases, Tuberculosis, Typhoid, Household Contact Investigation

❖ **Title: Assessing the usage of Family Planning methods among eligible couples: analysis of cross-sectional data from NFHS 4 and 5**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Co – author :

- **Dr. Akshata M A**, Junior Resident-II, KGMU

Background:

India was the first country in the world to adopt Family Planning Methods. It has undergone many transformations in terms of policy and implementation of programme. The main objective of Family Planning program was to achieve population stabilization, and reduce maternal, infant, and child mortality and morbidity. Yet the population of India stands second in the world.



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Objectives: To know the trends in usage of Family Planning methods by the eligible couple as per National Family Health Survey (NFHS) 4 and 5.

Methods: Factsheets of NFHS-4 and NFHS-5 were retrieved from the official web-site of Ministry of Health and Family Welfare and the data under the category of 'Family Planning' were analysed to look for the trends in prevalence of eligible couple using Family Planning methods and unmet needs for Family Planning in them.

Results: The contraceptive prevalence rate among the eligible couple increased from 54% (NFHS-4) to 67% (NFHS-5). Also, among sexually active unmarried women aged 15-49 years, the use of condoms/*Nirodhs* increased from 12% in 2015-16 to 27% in 2019-21. The unmet need for family planning methods has decreased from 13% in NFHS-4 to 9% in NFHS-5.

Conclusion: Though there is an increase in the usage of Family Planning methods as compared to NFHS-4 survey owing to the increased literacy among females, knowledge as well as better availability of modern methods of family planning. Still, we are challenged with the fast-growing population, almost negligible decline in child marriage and teenage pregnancy. Hence this needs to be effectively dealt with.

Keywords: NFHS, Family Planning, Eligible couple.

❖ **Title: Assessment Of Clients' Satisfaction With Intra-Natal Services Provided In Semi-Urban And Rural Areas Of Aligarh.**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author :

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Introduction: Continuous efforts are being made to decrease maternal and child mortality and morbidity. To provide quality services, it is necessary to consider clients' perspective and their level of satisfaction as participation of end users is definitive in determining the quality. This study attempts to record the feedback given by them. There is lacunae of quantitative studies especially within the Indian healthcare system.

Objectives: To estimate the level of satisfaction with intra-natal services among recently delivered females undergone institutional delivery and to determine its associated factors.

Materials and Methods: This community-based cross-sectional study was conducted among 405 postpartum females with institutional delivery within the past 3 months. Population Proportionate to Size sampling was used to determine sample size from each of nine areas. Pretested and pre-structured proforma was developed and used using SMSS scale (Hindi-version). The permission for study was obtained from institutional ethics committee. Appropriate statistical tests were applied.



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Results: Mean age of the respondents was 25.16 years. 61.7% were from rural background and 39.5% belonged to lower middle class. 33.6% were illiterate and only 5.6% working. 53.6% women's husbands were unskilled workers. Primi-gravida were 37.5% and 30.4% delivered at CHC.

Majority (79.3%) were satisfied with the services. Among the sub-domains satisfaction rates were: Perception of Health Professionals(69.6%), Comforting(50.6%), Information and Involvement in Decision Making(51.1%), Meeting Baby(64.4%), Postpartum Care(53.4%), Hospital Room(74.6%), Hospital Facilities (74.9%), Respect for Privacy(84.2%) and Meeting Expectations(69.1%). Education of mothers and husband, Place and mode of delivery had a statistically significant association with mother's satisfaction.

Conclusion: Domain specific areas give scope for areas that can be improved and provide better overall quality.

Keywords: satisfaction, intra-natal, institutional delivery.

❖ **Title: Assessment of Clinico-Biochemical Profile and Perceptions of Polycystic ovarian syndrome (PCOS) among Urban and Rural Adolescents girls : A Comparative Study**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting Author :

Dr. Sushree Priyadarsini Satapathy, Bhimo Bhoi Medical College and Hospital

Co-authors:

- Dr. Rabinarayan Dash, Bhimo Bhoi Medical College and Hospital

Background- PCOS is not a specific endocrine disorder having a unique cause rather it is a complex disorder wherein numerous genetic variants and environmental factors interact, combine & contribute to its pathophysiology.

Objectives- 1) To find out the differences in clinical manifestations , hormonal & biochemical abnormalities among urban and rural adolescent girls with PCOS. 2) To assess the perceptions about PCOS among the study respondents. **Methodology-** It was a Cross-sectional study conducted for a period of 4months i.e (February – May 2022) among adolescent girls(10-19 years) of age attending O&G OPD of BBMCH, Balangir with a sample size of 236.

Results- The prevalence of PCOS among adolescent girls attending O&G OPD in our set up was 14.7%. The Prevalence of PCOS was more among urban area compared to their rural counterparts. The clinical manifestations of PCOS were seen more in rural respondents compared to urban in contrary the biochemical and hormonal abnormalities of PCOS were more common among urban respondents which was found to be statistically significant with P value<0.05. The perceptions regarding PCOS, its treatment, its effect on fertility & pregnancy were found to be better among urban adolescent girls compared to their rural counterparts. This difference of the perceptions among the urban and rural respondents was found to be significant with P-Value<0.05 and chi- square value= 43.6538 & 20.291 respectively. Both urban and rural respondents had no idea regarding the long term sequelae of PCOS.

Conclusion- Proper generation of awareness is must among them.

Keywords- Adolescents, Comparative, Knowledge, PCOS, Rural ,Urban W-H Ratio



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❖ Title: Assessment of dialysis services (Under Jeevan dhara scheme) in Bijapur District of Chhattisgarh.

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Co – author :

Dr. Sudhanshu Patel, PG Scholar, Pt. JNM Medical college, Raipur (C.G)

Co-authors:

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- **Dr. Kamlesh Jain**, Professor, Department of Community Medicine, Pt. J.N.M. Medical college, Raipur (C.G)
- **Dr. Prashant Kumar Jaiswal**, Assistant Professor, Department of Community Medicine, Pt. J.N.M. Medical college, Raipur (C.G)

Background: Dialysis services under Jeevan dhara scheme are the services provided by the government to the patients in need of kidney treatment, either within the premises of District Hospital or in a location nearby. Government provides the services as per PPP model.

Objectives: Evaluation of the centre as per the guidelines of Jeevan dhara scheme at District hospital Bijapur of Chhattisgarh. Evaluation of patients and knowing their satisfaction levels.

Primary Objective- To assess the functioning of dialysis centre under the Jeevan dhara scheme.

Materials and Methods: This was a centre based evaluation conducted in 8 divisions of Chhattisgarh. The centres were actually chosen on the basis of location of dialysis centre, all the centres were evaluated by two institutes namely, Pt. J.N.M. Medical college and AIIMS Raipur. 5 patients were chosen randomly and were evaluated using a pre- designed, self- administered, semi-structured questionnaire. The data collection was done for the centre too and the questionnaire used consisted of information related to basic details, knowledge and practices on dialysis service.

Results: Awaited

Keywords: Renal damage, Dialysis, centre evaluation, patients care.

❖ Title: Assessment of Diphtheria Surveillance System, Patna, Bihar, India 2022

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance
Presenting author :

Dr. Paresh Vasant Kantharia, World Health Organization, New Delhi, India

Introduction: Diphtheria, vaccine-preventable, with case-fatality rate of 5-10% continue to be a public health issue in India, reporting >9600 cases (43% of global burden) in 2019. In Bihar, diphtheria was included into existing case-based vaccine-preventable disease surveillance in 2012 to identify cases, its epidemiology and guide public health actions. With COVID-19 pandemic disrupting routine services including surveillance during 2020-21, there was a need to assess the surveillance system.



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Objectives: We assessed diphtheria surveillance system in Patna, Bihar to describe the epidemiology, identify strengths, weaknesses and provide recommendations.

Materials and Methods: We analyzed the cases reported during January 2020-July 2022 for descriptive epidemiology, assessed the selected system attributes (simplicity, acceptability, completeness, timeliness, representativeness, and stability). We selected two blocks (purposive sampling), reviewed records for May-July 2022, interviewed key informants, medical officers, health care workers and private practitioners.

Results: Patna reported 5 diphtheria cases (all male) including one death during January 2020-July 2022; 3 were <5 years, all non-migrants, hospitalized, 4 received 3 doses of diphtheria containing vaccine, treated with antibiotics and 3 received diphtheria antitoxin. Four cases were reported within 72 hours of symptom onset, investigated within 24 hours of reporting, 2/5 (40%) cases were not reported by first contact. All 32 key informants interviewed were aware of reporting process and 26 (81%) knew case definition. During review, all expected 13 forms were available, all completely filled and submitted timely; feedbacks provided for 7 (54%). Reporting network included both government and private facilities with nodal officers and 6/15 (40%) staff received training during last one year.

Conclusion: Diphtheria surveillance system of Patna was simple, stable, acceptable, timely, useful in detecting cases with good reporting network and data quality. We recommended district to expand reporting network for migrant and minority populations, review reports, share feedbacks regularly and periodic sensitization.

Key words: Diphtheria, Vaccine-preventable disease, Vaccine, India

❖ Title: Assessment of Drug Adherence among Hypertensives of an Urban Field Practice Area of MKCG Medical college, Berhampur A Cross-sectional Study

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Amaresh Sahoo, Postgraduate Resident

Co-authors:

- **Dr Anil Kumar Sahu**, Prof. Dr Durga Madhab Satapathy

Introduction: Poor adherence is an important barrier for adequate blood pressure control among the hypertensives. Non-adherence to BP-lowering medications not only reduce treatment benefits, but also can distort assessment of the efficacy of treatment.

Objectives: To assess drug adherence among hypertensives of an urban field practice area of MKCG Medical college, Berhampur, Odisha.

Methodology: A cross-sectional study is being conducted since Feb 2023 & will continue till March 2023 among the hypertensives attending UPHC Ankuli, Berhampur with a sample size of 98. Data is being collected using a pre-validated semi structured questionnaire based on MMAS-8 by Google Form. The data will be analyzed using MS Excel & SPSS v17.

Results: As per the data collected till date, 39.1% belonged to age group of >60 years. About 60.9% have been diagnosed with HTN since more than 3 years. Most of the patients tend to miss their



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medications on time, with forgetfulness being the main reason (79.7%). While 58% are careless while taking medications, 43% stopped taking medications after feeling better and 61% stopped medications due to side effects.

Conclusion: The results of the study tell us that adherence to anti-hypertensive drugs was low. Various reasons for non-adherence were identified. Hence, it is necessary to impart proper health education & counselling to the patients as intervention measures to combat non adherence.

Key words: Drug Adherence, Antihypertensives, Hypertension

❖ Title: Assessment of effectiveness of a Verbal Autopsy training of Sample Registration System Supervisors of Bihar

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

- **Dr. S S V Prasad**, Junior resident, Department of Community and Family Medicine, AIIMS Patna.

Co-authors:

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- Dr. Shamshad Ahmad, Associate Professor, Department of Community and Family, AIIMS Patna
- Dr. Shibajee Debbarma, Assistant Professor, Department of Community and Family Medicine, AIIMS Patna

Introduction: Verbal Autopsies in India are conducted by Sample Registration System Supervisors under the Office of Registrar General of India (ORGI) as part of MINErVA project. VA consists of structured interview of preferably a close family member of the deceased and a narrative outlining the symptoms and circumstances leading to the death. A good VA consisting of a well-documented narrative is thus essential for identifying the exact cause of death.

Objectives: To assess the existing knowledge of SRS Supervisors and to assess the effectiveness of a two-day Verbal Autopsy training.

Materials and Methods: A pre-post-test cross-sectional study was conducted among all SRS Supervisors who attended the two-day Verbal Autopsy training. The training involved in-house sessions as well as field visit. A pre-designed, semi-structured questionnaire was administered for collecting the necessary information. Statistical analysis was done using SPSS version 22. Categorical variables expressed in percentages, while continuous variables expressed in mean(SD). Chi-square test was used to assess the association between categorical variables. Paired t-test was used to assess the effectiveness of the training. p-value <0.05 was taken as statistically significant.

Results: Out of total 52 supervisors, around 52% had previous experience of conducting VA, while only 42% had previous formal training. Half of the participants had good existing knowledge regarding VA with mean score of 6.5 while post-training, there was an improvement as 80.8% of the supervisors were found to be having good knowledge with a mean score of 8.10. The difference was found to be statistically significant.

Conclusion: Training on Verbal Autopsy for SRS Supervisors helps in improving their existing knowledge as well as in conducting the interviews. Refresher trainings at regular intervals will thus help in improving



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the quality of VA narratives recorded by Supervisors and will ultimately lead to determination of exact causes-of-death.

Keywords: Verbal Autopsy, Sample Registration System, MINErVA, VA training.

❖ **Title: Assessment of emotional intelligence and its association with mental health among medical students of a teaching hospital in western UP: a cross sectional study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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- **Dr Sandip Gupta**, Professor , UPUMS, Saifai
- **Dr Dhiraj Kumar Srivastava**, Professor, UPUMS, Saifai
- **Dr Rashmi Bhujade**, Associate Professor, UPUMS, Saifai

Introduction: Mental health is a state of mental wellbeing that enables people to cope-up with stress of life, realize their abilities, learn well and work well, and contribute to their community. Mental health includes emotional, psychological and social well being. On everyday basis a medical professional observes both positive and negative emotions. Emotional intelligence (EI) refers to ability to monitor interpersonal and intrapersonal feelings and emotions .EI has often been linked to better mental health. Thus EI becomes an important asset to medical undergraduates.

Objective: To find out the association between EI and mental health of first year medical undergraduates of UPUMS, Saifai, Etawah.

Materials and Methods: A cross sectional study was done by using Google forms among 170 medical students. DASS21 and Quick Emotional Intelligence Self Assessment questionnaire were used to assess emotional intelligence and mental health. Data was analyzed by using SPSS version 25 and chi square test was applied to find association between emotional intelligence and mental health.

Results: EI was found normal among 52 participants and mental health issues were found in 105 participants. Statistically significant association was found between EI and depression component of mental health as the p value was found to be <0.05 using chi square test.

Conclusion: According to results of our study, percentage of both EI and mental health among medical students was found low, so, efforts can be taken for improvement of both domains and we can prevent depression by incorporating more interactions between students and their mentors and thereby improving their emotional intelligence.

Keywords: mental health, emotional intelligence, medical students

❖ **Title: Assessment of Fever and Maculopapular Rash Surveillance for Measles and Rubella in Neemuch and Kargone districts of Madhya Pradesh, India, September 2022**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:



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Introduction: India is committed to eliminate highly contagious viral disease measles and control rubella by December 2023. Hence, a robust fever rash (FR) surveillance for measles and rubella (MR) remains a key strategy.

Objective: We described the FR cases and assessed surveillance for timeliness, completeness, data quality indicators, to give evidence-based recommendations for strengthening surveillance.

Materials & Methods: We collected data from surveillance information and management system, weekly reports and outpatients/inpatient records of Neemuch and Khargone districts for the reference period of January-June 2022. We randomly selected reporting units (RUs) of each district and interviewed nodal/key persons through semi-structured questionnaire. We performed descriptive analysis with frequencies and proportions.

Results: Total 81 cases reported by 32%(26/81) RUs, and the non-measles non-rubella discard rate is 4.14/100,000 population (standard \geq 2). Among the cases, median age was 3(Range 0-62 years), 44(54%) were female. Of the cases, five and four serum specimens tested positive respectively for measles and rubella and 6(67%) cases received age-appropriate dose of MR vaccine. Total 86%(224/260) weekly reports submitted by RUs, 96%(216/224) reports submitted timely. In randomly selected five RUs of each district, all nodal person were aware about FR surveillance, but 60%(6/10) nodal persons were engaged in other activities. Along with this 60%(6/10) and 30%(3/10) nodal persons were not collecting information from all departments/medical officers (MOs) and changed/on leave respectively.

Conclusion: Only one third RUs reported the cases. All nodal person were aware about FR surveillance. Majority of weekly reports were submitted timely, but more than half nodal persons were engaged in other activities and not collecting data from all departments/MOs. Few nodal persons were changed/on leave. On our feedback, district FR surveillance review done by health authorities. We recommended periodic surveillance review and district/block level FR surveillance orientation workshop for health officials and workers.

Key words: Measles-Rubella, Surveillance, India

❖ **Title: Assessment of Fever and Maculopapular Rash Surveillance System for Measles and Rubella in Madhya Pradesh, India, September 2022**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

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Co – author :

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- **Kevisetuo Anthony Dzeyie**, National Public Health Support Network, WHO, India
- **Subramanya BP**, National Public Health Support Network, WHO, India

Background: Measles and Rubella (MR) are highly contagious viral diseases, which claimed >140000 deaths globally in 2018. During 2017–2021, annual MR incidence decreased from 62% and 48% respectively in India. To accelerate the national goal of MR elimination by 2023, India introduced case-based FR surveillance in 2018.

Objectives: Describe the FR surveillance data in identified districts and assess surveillance system for timeliness, completeness, and data quality to provide evidence-based recommendations. **Material and Methods:** We conducted surveillance assessment in Jabalpur, Rewa and Vidisha district of MP for the period of January–June 2022. We collected data from surveillance information and management system, weekly reports, outpatient and inpatients records of the districts. We also randomly selected reporting units (RUs) and used a semi-structured questionnaire for surveillance gaps reason analysis. **Results:** The three districts reported total 304 FR cases including 16 measles and 10 rubella laboratory confirmed cases, 55% (167) were male, median age was 3 years (range:0-60). Of these FR cases, 23% (70) were notified by selected RUs; 86% (60) documented in weekly reports. The non-measles non-rubella discard rate was 5.3 per 100,000 population (standard \geq 2). During the time period, 5%(18) reports were received late and 15% (57) reports were not submitted. Of the 30 nodal officers interviewed, awareness gaps were found for case definition, timeliness of reporting in FR surveillance 27% (8), 30% (9) and 23% (7) in the three districts respectively. **Conclusion:** One fifth reports were either not submitted or submitted late, with incomplete data and more than a quarter nodal/key persons were unaware about FR surveillance. On our feedback, district MR surveillance review was conducted by health authorities. We recommended periodic surveillance review and district or block level MR surveillance orientation workshop for health officials and workers.

Key words: Measles-Rubella, Elimination, Surveillance System Assessment, India

❖ Title: Assessment Of Growth Trends In Normal And Low Birth Weight Babies Until 12 Months In Municipal Areas Of Berhampur: A Community Based Longitudinal Study

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

- **Dr. Kalyani Mandal**, PostGraduate Student

Co – author :

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- **Dr. Durga Madhab Satapathy**, Professor & HOD



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Introduction Low birth weight is defined as weight at birth of < 2500 grams (5.5 pounds), irrespective of the gestation age of the baby WHO estimates 23.4% of all births are low birth weight babies. Prevalence of LBW in India is 16.4% in NFHS 4.

Because of the importance of neonate's growth as important index of neonates' health status, this study was conducted.

Objectives:

- To assess growth parameters in normal weight and LBW babies for 12 months in municipal areas of Berhampur.
- To compare the growth trends among normal weight and LBW neonates for 12 months in municipal areas of Berhampur.

Materials and methods:

A community based longitudinal study was conducted in the urban areas of Berhampur. After ethical clearance and parents' consent, 52 LBW and 52 matched normal birthweight babies born in MKCG, attending immunization OPD from 15th January 22 to 14th March 22 were selected using purposive sampling. The subjects were followed up till 12 months. A semi structured questionnaire, infantometer, digital infant scale, shakirs tape and measuring tape were used. Data was analyzed using SPSS and graphs were made using MS Excel.

Results:

Among 52 LBW babies, 52% were male and 48% were female babies. Among normal weight babies, 54% were male and 46% were female babies. The anthropometric measures (weight, length, head, circumference, MUAC) of LBW infants was significantly lower than their normal weight counterparts at baseline, 3,6,9 and 12 months. LBW shows higher growth rates in the first 6 months, followed by parallel trend with normal birthweight babies in 9 to 12 months.

Conclusion:

This study suggests that LBW babies can catch up growth with normal birthweight babies. Regular growth monitoring is essential for LBW babies to detect signs of growth faltering at the earliest.

❖ Title: Assessment of Internet addiction, Quality of sleep and Depressive Symptoms among Medical Students at a Tertiary Care Hospital in Maharashtra, India: A Cross-Sectional Study.

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

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Introduction: In today's world, the online platform has taken over an important chunk in our daily lives. Gaming and social media have made people entangled into the world wide web of suffering, creating havoc in their mental health. The budding medical students who will be the future helm bearers of the



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society, are also victims to this addiction. It leads to sleep disturbances and poor academic performance.

Objectives: objectives of this study are to assess the proportion of medical students with internet addiction, quality of sleep and depressive symptoms and to find out whether internet addiction is associated with quality of sleep and depressive symptoms.

Materials and Methods: With the Institute's Ethical Committee approval, a cross-sectional questionnaire-based study was carried out among the medical students of a tertiary care hospital in Maharashtra. With the prevalence of internet addiction among medical students of 24% (literature), the sample size was calculated as 291. After obtaining informed consent, the internet addiction, quality of sleep and depressive symptoms were assessed among the students using Young's Internet Addiction Test (YIAT), Pittsburgh Sleep Quality Index (PSQI) and Patient Health Questionnaire-9 (PHQ) respectively. The data is kept confidential and will be entered in Microsoft Excel and statistical analysis will be done using Jamovi software version 2.3.21. The group proportions, and difference in proportions will be assessed by Chi-square test and p value will be found for statistical significance. Pearson's correlation coefficient will be used to assess the association between internet addiction, quality of sleep and depression.

Results: Results are awaited.

Conclusion: Based on the results, we would be able to conclude whether medical students with potential internet addiction have psychological problems. We can then tailor timely remedial action to combat internet addiction among the doctors of tomorrow. Because only when the doctors are hale and hearty, they can bring about a positive change in the society.

Keywords: Internet Addiction Disorder; Depression; Academic Performance; Students.

❖ **Title: Assessment of knowledge and breastfeeding practices among mothers admitted in postnatal ward in KGMU, Lucknow: A cross-sectional study**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

- **Dr. Ritika Chaturvedi**, Junior Resident, Department of Community Medicine, KGMU

Co-authors:

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Dr. Maviya Khan, Junior Resident, Department of Community Medicine, KGMU

Background: The World Health Organisation recommends mothers to exclusively breastfeed infants for the child's first six months of life to achieve optimal growth, development, and health. Appropriate feeding practice is the most cost-effective intervention to reduce childhood morbidity and mortality. This study assesses the knowledge and breastfeeding practices among mothers attending postnatal ward.

Methods: An institution based cross-sectional study was conducted at postnatal ward of King George's Medical University, Lucknow during breastfeeding week among 89 mothers admitted in postnatal ward. A pretested semi-structured questionnaire was used. Data was analysed through SPSS Version 26.

Result



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Out of 89 mothers, knowledge about exclusive breastfeeding (82.4%) and frequency of breastfeeding (58.8%) was more among >30 years age group compared to younger age group mothers. There was good positioning among multipara (60%) than primipara (46.3%). Poorer attachment was more evident among primipara (55.6%) compared to multipara (40%). Formula feeding was more prevalent among caesarean section delivery (71.7%) and primipara (72.2%).

Conclusion The results of study indicate younger age group requires counselling to enhance their knowledge on breastfeeding and disadvantage of formula feed. Assessment of attachment and positioning showed that it was poor in primipara compared to multipara, which can be improved by effective counselling during ANC visits.

Keywords: Breastfeeding, knowledge, practices, mother, infant

❖ **Title: Assessment of Knowledge regarding Nutritional Information on Food labels among the Migrant Tamil Population residing in an urban area of Kolkata, West Bengal**

Mode of presentation: Poster; **Theme:** Public Health Nutrition

Presenting author:

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Background: Nutritional information on Food labels is advocated for encouraging consumers to make informed food choices when buying the pre-packaged foods in order to reduce the excess intake of HFSS foods, thereby reducing the Noncommunicable disease risk. The literature review suggested that migrants are at greater risk of NCD based on their dietary patterns.

Objectives: The objectives were to estimate proportion of participants understanding and checking before buying the nutritional information on Food Labels of Ultra-processed foods and also to identify the factors associated with them.

Materials and Methods: A Cross-sectional study was conducted among Migrant Tamil participants from December 2022 to February 2023 residing in Dhakuria lane, Kolkata by simple Random Sampling using interviewer administered questionnaire which assessed their understanding of the nutritional information in Food labels and whether they check them before buying. The study was conducted after obtaining approval from Institutional Ethics Committee of AIHPH. The data was analysed using descriptive and inferential statistics using SPSS 16 version.



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Results: The median age of the study participants was 36.0(IQR: 28-53) years and majority (82.3%) belonged to middle and Upper middle class. 53% participants had completed Pre-primary and primary level of education. Of them, only 23.5% understood the nutritional information on Food labels and 12.7% checked them before buying. The factors significantly associated ($p < 0.00$) with both understanding the nutritional information in Food labels and checking them before buying were Female gender, >10 years of schooling, Socio-economic class, children in the family

Conclusion: Front of Packet Labelling (FOPL) would be the policy measure in improving the consumers in making informed choices but emphasis should be given to the language and understanding regarding them as two-third of the population are in primary level of education.

Keywords: Ultra-processed foods, Migrant, Food labels, FOPL

❖ **Title: Assessment of knowledge, skills and challenges of Accredited Social Health Activists (ASHAs) in healthcare delivery in rural Haryana – a mixed method study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Archismita Santra

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Introduction: In India, ASHAs are integral part of health care delivery system over past two decades. Understanding facilitators and barriers for their routine actions is necessary for rationalizing their roles and responsibilities.

Objectives: Our study aimed to evaluate the knowledge, skills and identify challenges faced by ASHA for delivering health care services in rural Haryana.

Materials and Methods: This was a cross-sectional mixed method study conducted in rural Ballabgarh block in district Faridabad. Study area consisted of more than 100,000 population covered by 93 ASHAs. The knowledge of 86 ASHAs were assessed using structured questionnaire. Their cumulative knowledge was scored as good, moderate and poor on various domains. Five selected skills were assessed by on-site observation and scored depending on the steps followed as mentioned in the checklist and categorized as correctly done or partially correctly done or wrongly done. Two FGDs, and five IDIs were carried out among ASHAs, block ASHA co-ordinator and female MPW to understand facilitators and challenges for ASHAs.

Results: The mean age of ASHAs was 38.6 years (SD 0.68), majority of them being married and educated higher than tenth standard. The ASHAs on an average, contributed to 29% of their monthly family income. The cumulative knowledge of the ASHAs was moderate in all domains such as maternal health, child health and family planning, other ailments. They particularly had poor knowledge regarding anemia in pregnancy, low birth weight of newborns and use of growth chart. Majority of the ASHAs



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correctly performed the five skills such as weight measurement using Salter's weighing scale, temperature measurement, ORS preparation, advising mothers on proper attachment during breastfeeding, counselling pregnant women about antenatal care. The overall evaluation of input, process, output, outcome and impact indicators was satisfactory reflecting well on the performance of ASHAs. Qualitative study highlighted the major concerns of ASHAs which are delayed payment of salaries, inadequate material in ASHA kit, inability to use ASHA-PAY app and the need for refresher trainings among ASHAs at frequent intervals.

Conclusion: Study observed satisfactory level of knowledge and acquired skills by ASHA during their routine work. However, administrative issues such as payments of salaries, insufficient supplies remains key challenges for ASHA.

❖ **Title: Assessment of laboratory facilities In primary health centres (PHCs) of Ganjam district through NQAS**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

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Co-authors:

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Introduction: NQAS assesses quality of services provided in government health facilities under 8 areas of concern in four departments, namely, OPD, Laboratory, NHP and General Administration. Laboratories in PHCs provide routine investigations and diagnostic tests that are easily accessible and free to the public thereby reduces the burden on the referral units.

Objectives: To assess quality of laboratory services at the PHCs of Ganjam district and give evidence based recommendations.

Materials and Methods: Study tool- pretested NQAS checklist approved by unicef

Sample size- purposive sampling to achieve the required target for NQAS certification set by government of India for PHCs.

Data collected by visiting 20 PHCs, through staff interview, record review and observation as per the checklist.

Data compiled and analysed in Ms Excel.

Results: After the preliminary assessment, it was found that only 7 facilities had scored above 50. Two areas of concern specifically, quality management and outcomes, had least scores in 60% and 70% of the PHCs respectively. Recommendations were then given to be carried out with the help of district administration. These were followed up telephonically at regular intervals. A mock round of assessment showed an increase in scores based on these recommendations.

Conclusion: Catering to the above mentioned objectives, based on assessment we realised with minimum efforts at the PHC level and without major intervention from the block or district administration, the quality of the laboratory services can be improved, like demarcating testing area and ensuring SOPs for the tests in the lab.

Keywords: Assessment, NQAS, Laboratories, quality



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❖ Title: Assessment of mental health among adolescent school children (8th to 10th standard) in Mumbai: A cross-sectional study

Mode of presentation: Poster; **Theme:** Menatal & Geriatric Health

Presenting author:

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Co-authors:

- **Dr Rupali Sabale**, Assistant Professor, Seth GSMC and KEMH, Parel, Mumbai

Introduction: Mental health conditions account for 16% of the global burden of disease and injury in adolescents worldwide. Adolescence is a crucial period for development of mental and physical health, the consequences of failing to address this extend to affect their quality of life as adults. Despite such relevance, the mental health needs of children are often neglected. **Objectives:** To assess mental health problems and to study its association with various sociodemographic variables **Materials and Methods:** Strengths and Difficulties Questionnaire (SDQ) and socio-demographic questionnaires were used to collect the data via self-reporting method. A total of 561 students participated, from the 3 schools selected via cluster sampling. Study duration: November 2021 to February 2022. **Results:** As compared to previous studies, high proportion of mental health problems (27%) were observed in current study across four domains; emotional problems (23%), conduct problems (16%), hyperactivity problems (22%) and peer problems (22%). Chi square test was done to assess the association between the mental health problems and various socio-demographic variables. Statistically significant association was found in the following: Broken family, parent's education, having a sibling, sibling relation, duration of residence, parent relations, perception of family environment, substance misuse in family, traumatic event in recent past and availability of open spaces to play. **Conclusion:** This higher proportions of mental health problems in the current study population may be attributed to the pandemic, school-closures, and online classes during the pandemic restricted adolescents to their homes resulting in lack of adequate peer interactions and social engagements common for the age. Further evaluation will be required to get conclusive answers regarding mental health problems of students.

Keywords: Mental health, SDQ, Adolescent, School children, Sociodemographic factors

❖ Title: Assessment of Mental Health status among Geriatric Population in Raipur City, Chhattisgarh

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

- Dr Nirmal Verma- Professor & Head
- Dr Shubhra A Gupta-Associate Professor

Introduction: According to WHO, More than one-fifth of geriatric population suffer from a mental or Neurological disorder globally. The incidence of Depression and Anxiety disorders in geriatric population



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has been found to be 7% and 3.8% respectively. The literature regarding prevalence of Mental disorders in Chhattisgarh is scarce.

Objectives: To determine the prevalence of mental health issues such as Depression and Generalised anxiety disorder among the geriatric population aged above 65 years in Raipur city, Chhattisgarh.

Materials and Methods: A cross-sectional study was conducted among 276 people of age above 65 years residing in Raipur city, Chhattisgarh by Multi-stage Random Sampling. Study tools used were Goldberg General Health Questionnaire (GHQ-12), Yesavage Geriatric Depression Scale (YGDS), Generalised Anxiety Disorder (GAD) Scale.

Results: GHQ-12 showed that 23.1% were definite case of Mental health issues whereas 68.8% were Probable cases. 4.35% had severe depression whereas around 8% had moderate depression. 3.26% had severe anxiety whereas 7.25 % had Moderate anxiety levels.

Conclusion: More than one-tenth of the geriatric population in Raipur city were found to be in Depression and Anxiety. It was found that geriatric mental health is indeed a neglected issue with poor sensitivity amongst the elderly, the caregivers, and the administration.

Keywords: Mental health, Geriatric, Depression, Anxiety, Chhattisgarh

❖ **Title: Assessment of mHealth Interventions in India: A Systematic Review**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Background: mHealth interventions are widely used and, especially in places with low resources, have positive benefits on the processes of providing health care. A variety of mobile functions provide potential for mHealth interventions.

Objective: To evaluate the health effects of mobile health interventions in India.

Material and Methods: This systematic review and meta-analysis was conducted in accordance with the PRISMA guidelines. Studies conducted in India, and published between April 1, 2011, to March 31, 2021, were considered. A literature search was conducted using a combination of the MeSH terms in different databases to identify peer-reviewed publications. Risk of bias were assessed using the RoBS 2 for RCTs, ROBINS I for Non randomized trials and meta-analysis was performed using RevMan



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Results: Thirteen out of 1350 articles were included for the final review. mHealth interventions used for maternal and child health improved utilization of the prenatal services like intake of complete dose of Iron folic acid supplements, both doses of tetanus toxoid and attending four or more antenatal check-ups. No strong evidence of differences regarding institutional delivery were found. Studies for economic evaluation showed positive economic impact concerning the societal perspective. Most of the interventions conducted for the chronic disease showed impact on clinical outcomes, patient and provider satisfaction, app usage and improvement in the health behaviour.

Conclusion: The review provided a comprehensive overview of mHealth technology in all health sectors in India. However, due to a smaller number of studies for a single set of interventions, meta-analysis for all the impacts was not conducted.

Keywords: Text Messaging, Mobile Applications, Smartphone, Cell phone, Health Impact Assessment

❖ Title: Assessment of Nutritional Status of Women Domestic Workers in Aligarh

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Introduction: Domestic workers are those workers who perform work in or for a private household or households. Their work may include tasks such as cleaning the house, cooking, washing and ironing clothes, taking care of children, or elderly or sick members of a family, gardening, guarding the house, driving for the family, and even taking care of household pets. It is an important source of employment specially for female from lower socioeconomic class. Malnutrition is a common health problem among women throughout the world especially among the low economic groups. There has been a dearth of study among these working females, therefore this study was conducted with the aim to investigate the socioeconomic, nutritional status and anthropometric status of women domestic workers in urban Aligarh.

Objectives:

1. To assess the socio economic status and nutritional status of female domestic health workers in Aligarh
2. To find the association between nutritional status and various food groups in the study population.

Materials And Methods: The cross sectional study was conducted among 400 selected female domestic workers working in Aligarh City, through semi structured and pilot tested questionnaire. The data was entered in the SPSS-20 for the analysis purpose. The association between different food groups and monthly income of respondents was not found to be statistically significant.



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Results: More than half of women belong to 19-45 age groups (59%) . Half of them (50.5) were Hindu by religion. Most of them (49.4%) belong to OBC caste. Almost 3/4th (72%) were married. Most of them (65.7%) are illiterate and 56.5% have monthly income of 2000-5000. Majority of the respondents (i.e. 89.3 percent) have consumed less than five food groups, while only 10.7 percent of them consumed more than 5 food groups. Most of the respondents in all the income ranges have consumed less than five food groups. Around 90 percent normal weighted respondents.

Conclusion: There is dire need to focus on female domestic workers regarding health and nutrition counselling. Also, they need to be made aware of the various health related schemes the government is providing them for their upliftment.

Keywords: nutrition status, domestic workers, food groups

❖ **Title: Assessment of Pre-natal care utilization among pregnant women attending the ANC clinics of UPHCs of Bidhannagar, West Bengal**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

Dr. Aditi Ajit Jaiswal, Resident, Department of Preventive and Social Medicine

Co-authors:

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- **Dr. Bobby Paul** (Professor & Head, Department of Preventive and Social Medicine, All India Institute of Hygiene and Public Health, Kolkata, West Bengal, India)

Background: Prenatal care utilization, one of the most important aspects in a mother's life, is a vital indicator of maternal health status. It has been seen that worldwide more than half of the women die annually due to pregnancy-related complications and about 90–95 % of them come from developing countries

Objective: this study aims to assess Pre-natal care utilization among pregnant women attending the ANC clinics and explore the barriers in its provision.

Materials and Methods: It's a Mixed Methods study done during March-June 2022. Quantitative component done amongst 154 participants, selected by systematic random sampling. Qualitative component comprised of 4 KIIs and 3 IDIs among healthcare workers and pregnant women respectively; selected by purposive sampling. Patient satisfaction score, evaluated by PSQ-18; and HIV/AIDS knowledge by 7 item questionnaire, score above median, taken as cutoff for satisfactory knowledge. Statistical data, analyzed by descriptive and inferential statistics using SPSS 16 version.

Results: The median [IQR (25-75)] age of participants was 24 (16-27) years. Majority of them were Hindu (67.5%), and 107 (69.5%) of them belonged to socio-economic class of 3 and above. Adequate pre-natal care utilization was seen in 27.9% of the participants. Poor knowledge regarding HIV/AIDS was seen in 55.2%. Significant association was noted between PSQ 18 score and pre-natal care utilization.

KIIs showed lack of infrastructure & manpower, prejudiced opinion and misconception regarding contraceptives as major barriers in delivering services. IDIs portrayed lack of amenities, privacy, waiting area, medicines as major issues; lack of support from spouse and social stigma prevented them from availing family planning services.



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Conclusion: Appropriate IEC regarding pre-natal care utilization, improvement in infrastructure and increase in staff will be beneficial.

❖ **Title: Assessment of Quality of Life among People with Type-2 Diabetes Residing in Urban Jodhpur**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. kumari harshita, Junior Resident

co-authors:

Rustagi N¹, Saurabh S², Naveen K H³, Thirunavukkarasu P³

¹Additional Professor, ²Assistant Professor, ³Associate Professor

Introduction: The primary objective of healthcare is to enhance the patient's quality of life (QoL) and general wellbeing. Assessments of quality of life allows for collaborative decision-making and assist physicians in providing interventions to reduce the burden of care when feasible. **Objective:** This study aims to assess the quality of life among people with type-2 Diabetes in Urban Jodhpur. **Materials and methods:** One urban ward in Jodhpur was randomly selected and patients with type-2 Diabetes aged > 30years were enumerated. Validated questionnaires including the World Health Organisation- Quality of Life (WHO-QoL) was used for assessing QoL. Physical health, psychological health, social relationships and Environmental QoL are various sub-domains under WHO-QoL. Appropriate statistical tests for comparing non-parametric data were used. **Results:** The median (IQR) of total score for QoL was 98(89-107). The median (IQR) score for physical health, psychological health, social relationship, and environment related QoL was 81(63-88); 81(69-94); 75(69-81) and 81(75-94) respectively. The QoL score was statistically higher in people with type-2 Diabetes having better self-management score (p=0.02). There was statistically significant (p = 0.03) difference in QoL score between underweight, normal weight, overweight and obese BMI categories with lower mean score for underweight and obese categories. Years of schooling was found to be significantly (p=0.01) associated with QoL. **Conclusion:** Among socio-demographic features, BMI, gender, Diabetes Self-Management Questionnaire (DSMQ) and years of schooling were significant predictors

Keywords: "Quality of life", "type-2 diabetes"

❖ **Title: Assessment of quality of medical certification of cause-of-death (MCCoD) in a teaching hospital in Pune**

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author:

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Co-authors:

- **Rhea Roy**, Final Prof MBBS Student, AFMC Pune



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Introduction: Globally, 50% of death certificates are filled erroneously. This is due to systemic factors and lack of adequate training of doctors. The underlying cause of death (UCoD) recorded on death certificate is assigned corresponding ICD-10 code. Mortality statistics derived from database with high proportion of Garbage Codes related to unacceptable UCOD of non-specific aetiologies are unreliable as cause-specific mortality burden due to several diseases is underestimated.

Objectives: The study was undertaken to assess the quality of medical certification of cause-of-death (MCCoD) practices in a teaching hospital in Pune

Materials and Methods: ICD-10 codes assigned to UCoD for all deaths recorded between 01 January 2018 to 31st December 2022 were examined against the WHO Garbage Code list and the proportion of garbage codes assigned was estimated. A sample of 500 death certificates was assessed using a validated MCCoD rapid assessment tool and the proportion of major and minor errors made in filling death certificates estimated. The process of medical certification of death was recorded in a subsample of deaths using participant observation technique to detect systemic causes for certification errors.

Results: Garbage codes were assigned as UCoD in 33% of all deaths. 82% of death certificates were detected to have any errors while major errors were found in 51%. Most common errors were omission of time intervals, clubbing of causes and assignment of intermediate cause of death as underlying cause. Systemic causes of errors included inadequate training, certification by other than attending doctor and short hospitalisation prior to death.

Conclusion: Regular refresher training of doctors and audit of MCCoD practices is required to improve quality.

Keywords: Death Certificate, Quality, ICD-10, garbage code

❖ **Title : Assessment of School-Going Children for Diseases and Deficiencies using Rashtriya Bal Swasthya Karyakram (R.B.S.K.) Screening Tool in East Singhbhum District of Jharkhand – A Comparative Cross-Sectional Study**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

First author:

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Co-authors:

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- **Dr Jarina Begum**, Prof & Head, Department of Community Medicine, Manipal TATA Medical College, Jamshedpur, Jharkhand

Introduction: It is essential to safeguard and improve the health of children and adolescents. Rashtriya Bal Swasthya Karyakram (R.B.S.K.) an initiative aimed at screening children between the ages of 0 – 18 years of age for the assessment, early identification, and intervention of 4D's – Defects at birth, Deficiencies, Diseases and Developmental Delays including Disabilities.

Objectives: To assess the prevalence of Diseases and Deficiencies and to determine the association between various biosocial factors and health conditions among school-going children. **Material and Methods:** A comparative cross-sectional study was conducted in two schools in East Singhbhum district of Jharkhand state, India. 105 students were selected from each school. Multi-stage random sampling



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technique was used. Descriptive statistics were presented as mean \pm standard deviation for quantitative data and frequency with percentages for categorical data.

Results: Out of study population of 210 children, 83 (39.5%) were found to have one of the listed Deficiencies, 52 (49.5%) from Government and 31 (29.5%) from Private School. 67 (32.0%) were found to have one of the listed Diseases, 36 (34.3%) from Government and 31 (26.0%) from Private School. In terms of age, Anemia in early-adolescence was seen in 33 (27.1%) children while in late-adolescence it was 26 (29.6%), which was not statistically significant. Anemia was more in Government School, about one-third of the children screened, compared to Private School.

Conclusion: Prevalence of Diseases and Deficiencies amongst school-going children can help the Government and Non-Government bodies in the planning of area-specific services

Keywords: Adolescent Health, Rashtriya Bal Swasthya Karyakram (R.B.S.K.)

❖ **Title : Assessment of Self-care practises among patients with Type 2 diabetes mellitus attending Urban Health Training Centre of a Tertiary Health Care Institute in Central India- A Cross sectional study**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

First author:

Dr Anju George

Co-authors:

- Dr.Prashant Bagdey
- Dr.Ashok Jadhao
- Dr.Kalaivani M

Introduction: Diabetes is a chronic, metabolic disease characterized by elevated levels of blood glucose. The most common is type-2 diabetes.

Self-care is multidimensional and includes healthy diet, exercise, blood glucose monitoring, foot care and smoking which have to be practiced in order to achieve an optimal glycaemic control and avoid complications. Hence this study was conducted to assess self-care practises and glycaemic control among type-2 diabetes patients.

Objectives:

- To assess Self-care practises among known type-2 diabetes patients.
- To study association between self-care practises and glycaemic control among study participants.
- To study the socio-demographic characteristics of study participants.

Material and methods: A Cross-sectional study was conducted among 100 known type 2 diabetes patients attending UHTC of a tertiary health care institute between January-February 2023 by interviewing them using structured-questionnaire assessing their self-care practices using summary of diabetes self-care activities (SDSCA) scale.

Results: Mean age of diabetic patients among study subjects was 61.52 ± 9.9 years. 68% participants have poor self-care practice scores. A healthy eating plan on a daily basis was followed by 59% of the participants, daily exercises for 30 min were followed by 59%, and regular blood sugar monitoring was done by 80%. Regarding adherence to medications, 95% participants took recommended



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medicines on daily basis. There was a statistically significant association between self-care practises and glycaemic control.

Conclusion: Self-care practices among diabetic patients were poor among 68% patients and there is a need for improving them across all assessed domains.

Key words: Self-care; Type II Diabetes

❖ **Title : Assessment of vaccine cold chain management system in Ganjam District of Odisha**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr Swamy SVN, Mkcg Medical College Berhampur

Introduction: Vaccination is the most effective medical strategy in controlling infectious diseases. Improper storage & transport of vaccine will reduce potency and increase risk of AEFI. Cold .Knowledge & practice of stakeholders at cold chain points is vital for success of the immunization program.

Objectives:

1. To assess the infrastructure, logistics & functioning of Cold chain points (CCPs) at PHC & CHC levels.
2. To study the knowledge and practice of Vaccine Cold Chain handlers.

Materials and methods: A cross-sectional study carried out at PHCs & CHCs from Jan–Mar'23 included 22 and 51 CCPs at CHC/SDH and PHC level respectively. To enable proper representation, 20% of the CCPs were chosen randomly. Consent was taken from stake holders. Study tool was the observation checklist and a validated questionnaire. Analysis was done using SPSS version 17.

Results: Majority of the VCCHs are in the age group 40-60 years, 96% are females. Majority (65%) as worked as VCCHs for more than 5 years. Only 50% CCPs has elevated platform for conditioning of icepacks, 62.5% CCPs has dedicated room with adequate space 56.3% CCPs has tap water facility for preparation of icepacks inside cold chain room, 93.8% CCPs has inside ILR temperature between +2°C to +8°C. Only 43.8% has immunization calendar displayed.

Conclusion The cold chain room infrastructure was found inadequate at three CCPs. Designated VCCH was available at 5 CCPs. CCP in-charge was staying in/near the campus in only 3 CCPs. VCCHs knowledge on sensitivity of vaccines, VVM and shake test was not good. VCCHs need regular hands-on training for improvement of CCP functioning.

Keywords: VCCHs, CCPs, ILR, immunization, vaccination

❖ **Title: Assessment of work burnout in post graduate students of a medical college in district Etawah**

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr. Alok Mani, PG JR 1 (UPUMS, Saifai)



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Co-authors:

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Introduction: Stress is the term used to describe external demands (both physical and mental) placed on a person's physical and psychological health. The study for postgraduation in medical science is hard and difficult that puts a lot of strain on student's mental health and leaves them vulnerable to high levels of stress.

Objective: To assess the work burnout and determine the factors associated with it among postgraduate medical students of medical college in district Etawah

Material & method: A descriptive cross-sectional study was conducted among 179 resident doctors enrolled for various post graduate courses at medical college in Etawah district of Uttar Pradesh. A pre tested structured questionnaire was used to collect information on socio demographic characteristics and the Perceived Stress Scale was used to measure stress level of the study participants

Results: Most of the study participants (72.1%) had moderate level of stress and about 12.8 percent of the study participants had high level of stress. Approximately 63 percent of the study participants were from clinical branches of post-graduation course, among them 74.1 percent had moderate level of stress, 15.2 percent had high level of stress and 10.7 percent had low level of stress. About 63.7 percent of study participants were working for more than 48 hours in a week, among them 69.3 percent had moderate level of stress, 18.4 percent had high level of stress and 12.3 percent had low level of stress.

Conclusion: Almost three quarters of the study participants had moderate level of stress and most of them were from the clinical branches. Males in comparison to females constitute larger proportion among those with high level of stress.

Keywords: Postgraduate, student work burnout, stress

❖ Title: Association of high-risk factors in pregnancy with pregnancy outcomes in rural Ballabgarh, Haryana: a secondary data analysis

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Introduction: Adverse outcomes during pregnancy or childbirth are associated with high-risk factors during the time of antenatal period.



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Objectives: To estimate the burden of high-risk pregnancy and its association with pregnancy and birth outcomes

Materials and Methods: It was a retrospective cohort study conducted in rural Haryana. The study participants were pregnant women registered in health management information system (HMIS) from 1 January 2018 to 31 December 2020, i.e., 3 years. Participants with missing data were excluded. The calculated sample size was 6928. The outcomes were adverse maternal or fetal, such as, abortion, stillbirth, low-birth weight baby, preterm delivery, post-term birth and caesarean section (CS). There were two groups of pregnant women, one without high risk factors (non-exposed) and another with high-risk factors during the course of the pregnancy (exposed). They were followed up till termination of pregnancy or childbirth and their outcomes were recorded.

Results: We included 6402 participants in the study. The mean (SD) age of the pregnant women was 27.5 years (SD- 4.2) with 48.0% belonging to the age-group of 30 to 34 years. The prevalence of high-risk pregnancy was 37.0%. Previous h/o abortion was significantly associated with stillbirth (OR-3.89, 95% CI- 1.19-12.75). History of CS was significantly associated with having LBW baby (OR-1.42, 95% CI- 1.08-1.87), preterm delivery (OR-1.78, 95% CI- 1.41-2.25) and CS (OR-15.78, 95% CI- 12.40-20.09). Twins/multiple gestation was significantly associated with having LBW baby (OR-5.72, 95% CI- 2.36-13.91), preterm birth (OR-6.61, 95% CI- 2.68-16.26) and CS (OR-3.56, 95% CI- 1.45-8.75).

Conclusion: High-risk pregnancy like previous LSCS were found to be significantly associated with LBW baby, preterm delivery and CS outcomes. More focused intervention is needed at all levels of health care which in turn prevents the poor foetal outcomes thereby significantly reducing both IMR and MMR rates in India.

Keywords: High risk pregnancy, Pregnant women, Pregnancy outcomes, outcomes of high-risk pregnancy

❖ **Title: Awareness and Behavior regarding Mosquito Borne Diseases and Its Correlates among Urban Slum Residents of Burdwan Municipality, West Bengal.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Aprajita Jha, Junior Resident, Department of Community Medicine, Burdwan Medical College and Hospital.

Co-authors:

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- **Dr. Md Samsuzzaman**, Assistant Professor, Department of Community Medicine, Burdwan Medical College and Hospital.
- **Dr. Pranita Taraphdar**, Professor and head, Department of Community Medicine, Burdwan Medical College and Hospital.

Introduction: Mosquito-borne diseases are major public-health problems in overcrowded, polluted areas like slums even after implementation of various measures under the umbrella of National Vector-



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Borne Disease Control Program. Thus, information about awareness of slum-dwellers and their behaviors towards mosquito-borne diseases are essential for their prevention.

Objectives: To assess awareness and preventive and care-seeking behaviors towards mosquito-borne diseases among urban-slum residents of Burdwan Municipality in Purba-Bardhaman district and to check the presence of potential mosquito-breeding places in and around their houses.

Materials and methods: A community-based, cross-sectional descriptive study was conducted among 226 urban-slum residents, selected through random sampling, with a pre-designed, pre-tested schedule from October 2022 to February 2023. **Results:** Satisfactory level of awareness was 42% about diseases caused by mosquitoes, 38% about mosquito-breeding places, 68% about prevention of mosquito borne diseases. Few (3%-37%) had satisfactory awareness about symptoms of malaria, dengue, chikungunya, filariasis and JE. About 90% and 87% used mosquito nets and vaporizers/coils for personal protection respectively. Only 29 families had history of mosquito-borne diseases in last six months where 66% sought health-care after 48 hours of symptoms onset and 83% sought health-care through govt. health-system. 70% had open-drains around their households. Relationship between level of awareness regarding diseases caused by mosquitoes is statistically-significant with gender ($p=0.007$) and education ($p=0.003$) and awareness regarding symptoms of malaria is statistically-significant with education ($p=0.03$). Relationship between level of awareness regarding preventive measures against mosquito-borne diseases is statistically-significant with education ($p=0.00$), occupation ($p=0.03$) and also with use of personal protective measures ($p=0.00$).

Conclusion: There is a need to conduct awareness programs regarding mosquito-borne diseases, mainly in slum-areas and to enhance the community-participation in implementing preventive measures for the same.

Keywords: Mosquito-borne diseases, Awareness

❖ Title: Barriers of adherence to anti-hypertensive medication among adults of rural Varanasi

Mode of presentation: Postal; **Theme:** Non-Communicable Diseases

Presenting author:

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Co-authors:

- **Dr. Sangeeta Kansal** (Professor, Department of Community Medicine IMS, Banaras Hindu University)

Introduction: Hypertension is the major risk factor for cardiovascular morbidity and mortality. Hypertension is inadequately controlled in most of the patients mainly due to poor adherence to treatment. Adherence is a behaviour-related dynamic phenomenon, and its degree varies over time, place and population, and not much is known about the underlying reasons for poor treatment adherence.

Objectives: To find out the barriers of adherence to anti-hypertensive medication among adults of rural Varanasi.



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Materials and Methods: A cross-sectional study was done in the rural population of Varanasi adopting a mixed methods approach. The study adopted cluster sampling technique for quantitative part and purposive sampling for qualitative part. Hypertensives who are currently on pharmacological treatment for ≥ 1 year and belonged to ≥ 30 years age group were included in the study. Adherence was assessed using Medication Compliance Questionnaire. Healthcare providers were interviewed using 5 item interview guide for their perspective on barriers to adherence.

Results: A total of 400 respondents were considered in analysis sample. Most of the respondents belonged to age category of 60-69 years (32.8%). Of the total respondents, only 41% were adherent to anti-hypertensive medications, out of which only 64.1% had adequately controlled blood pressure. Factors significantly associated with adherence to treatment includes age-group [$\chi^2(4)=13.24$; $p=0.01$], place of treatment [$\chi^2(1)=6.615$; $p=0.01$], possession of prescription [$\chi^2(1)=25.6$; $p<0.01$], presence of co-morbidities/complications [$\chi^2(1)=5.2$; $p=0.022$], knowledge on complications [$\chi^2(1)=23.083$; $p<0.01$] and perception on curability of hypertension [$\chi^2(1)=10.6$; $p=0.001$]. Interviews done among healthcare providers revealed that the single most important factor affecting adherence to anti-hypertensive medication is the non-availability of drugs in the health centre.

Conclusion: Many barriers were reported by patients and the healthcare providers, that is significantly associated with adherence to anti-hypertensive medication. Appropriate health interventions and motivation to empower patients regarding the importance of treatment adherence for NCD control and prevention of complications should be imparted at every point of care.

Keywords: Barriers, hypertension, adherence, Varanasi, anti-hypertensive

❖ Title: Birth preparedness and complication readiness among pregnant women visiting a tertiary care government hospital in Delhi, India

Mode of presentation: Postal; **Theme:** Reproductive & Maternal Health

Presenting author:

Dr. Kriti Vaish, Senior Resident

Name of co-authors with designation: Dr. Neelam Roy (Director Professor & HOD), Dr. Sanjeet Panesar (Associate professor)

Introduction: Currently in India, 97 women die from pregnancy or childbirth-related complications for every 100000 live births. Birth preparedness and complication readiness (BPCR) is a key component of globally accepted safe motherhood programs, which helps pregnant women, their families and community to effectively plan for normal birth and deal with obstetric complications or any emergencies related to it.

Objectives: To find out awareness and practices regarding BPCR among pregnant visiting ANC clinic at a tertiary care government hospital in Delhi.

Materials and Methods: It was a cross-sectional study conducted among 220 pregnant women, irrespective of gestational age visiting the hospital. Information was gathered using a pre-designed, pre-tested, semi-structured questionnaire by an interview about BPCR. Descriptive analysis was done and tests of significance were applied to determine association.

Results: Awareness about dangers signs during pregnancy and childbirth and symptoms indicating onset of labour were all found to be poor, none of subjects were aware of all the signs. About 24% were aware about the government services available for pregnant women and 78 (35.4%) knew about



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ambulance service but had not arranged for it as a mode of transport. One hundred thirty eight women (~63%) believed that they should save money for the incurring costs of pregnancy, while 86 (39%) were saving money for the same. Eighty four women (38.2%) agreed that it is necessary to identify a blood donor; however, only 75 (34%) had identified one. Out of 220 participants majority (90%) had arranged for a birth attendant. The BPCR index for the current study was 42.3.

Conclusion: Efforts should be targeted to increase the awareness about various components of BPCR along with increased involvement of community health workers and health-care providers to help pregnant women in availing antenatal care services and hence reduce maternal and neonatal mortality.

Keywords: antenatal women, birth preparedness, birth preparedness and complication readiness, BPCR, complication readiness, India, reproductive health

❖ Title: Burden and Correlates of Common Non-Communicable Diseases among People Living with HIV Attending a Tertiary Care Hospital in West Bengal

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

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Co – author :

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- **Dr. Pankaj Kumar Mandal**, Professor and Head, Department of Community Medicine Tamralipto Government Medical College & Hospital
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- **Dr. Ranjan Das**, Director Professor and Director All India Institute of Hygiene and Public Health, Kolkata

Background: The longevity of People living with Human Immune Deficiency Virus (PLHIV) is increasing with the advancement of anti-retroviral therapy (ART). Non-communicable diseases (NCDs) among aging PLHIV are adding on to their morbidity burden, which have not been studied extensively in India.

Objectives: This study was formulated to estimate the burden of common NCDs among PLHIV and to elicit the care-seeking practices and factors associated to NCDs.

Materials and Methods: A cross-sectional study (part of a broader mixed-methods research) was conducted, in the ART centre of SSKM Hospital, Kolkata between November 2020 to October 2022. Estimated sample size was 282 (20.7% prevalence of any NCD, 5% absolute error, 10% non-response). Finally, 279 adult PLHIV, on ART for at least 6 months was systematically selected and interviewed with a schedule, after taking written informed consent. Self-reported NCDs, socio-demographic and behavioural factors, anthropometric measurements were recorded. The study was approved by the institutional ethics committee of AIH&PH and IPGMER & SSKM Hospital, Kolkata.

Results: Mean age(\pm SD) of the participants (N=279) was 44.6(\pm 10.5) years. Amongst them, 62% was male, 46.6% had current addiction with predominance of smokeless tobacco use. Majority had



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inadequate fruits and vegetable intake (98.2%) but adequate physical activity (76.3%). At least one NCD was present among 29.8%, 5.4% had multimorbidity, diabetes mellitus (14.0%) and hypertension (13.3%) was most prevalent. Private health facilities (59.0%) were preferred for NCD care seeking. Participants with higher age (Adjusted Odds Ratio with 95% Confidence Interval (aOR)_{≥45 years} 3.5(1.9-6.4)), inadequate physical activity (2.7(1.4-5.1)), obesity (9.1(1.4-58.2)) were associated with NCDs.

Conclusion: More than one among every fourth PLHIV were suffering from at least one NCD. Considerable proportion had addiction, inappropriate dietary intake, preference over private health care adding on to their out-of-pocket health expenditure. Comprehensive HIV/ NCD care with lifestyle modification approach need to be implemented.

Keywords: Non-communicable diseases, People living with HIV, Burden, Correlates

❖ **Title: Burden of Oral Precancerous Lesions and Its Associated Factors Among Truck Lorry Drivers in Kolkata, West Bengal**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Mohammed Adil Hussain M

Co-authors:

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- **Aditi Ajit Jaiswal**, Junior Resident, Dept of Community Medicine, All India Institute of Hygiene and Public Health, Kolkata

Introduction: Eighty percent of total smokeless tobacco users in the world are from India and Bangladesh. The habit of smoking and chewing tobacco is associated with various types of oral mucosal lesions and conditions, many of which pose a potential threat to cancer growth. Early detection of a premalignant or malignant oral lesion reduces morbidity and improves the patient survival. Truck Drivers have long and irregular working hours, lack of job security, and low income are a few reasons for stress in this group of people. They get addicted to various substances such as tobacco, alcohol, drugs etc. Hence, this study is conducted on Truck drivers as they are at a very “high risk” for oral cancer.

Objectives: The objectives are to estimate the prevalence of Oral Precancerous lesions among truck lorry drivers in Kolkata and to elucidate the pattern of lesions causing habits among the study participants. **Methods:** A descriptive cross-sectional study was done among 170 truck lorry drivers who were stationed across Kolkata in different lorry sheds were selected using Systematic Random Sampling from December 2022 to February 2023. Face to face Interview was conducted using a pre-designed, pre-tested, structured schedule followed by clinical examination of the oral cavity. The collected data was analysed using descriptive and inferential statistics using SPSS 16 version. Institutional Ethics Committee clearance was obtained.



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Results: The median age of study participants was 40.6 years. 100% study population was Male and most of them belonged to middle and lower class (86%). 35% of the study participants were illiterate. 91% of the participants were using tobacco products in one form or the other. 6.47% of the study participants were diagnosed with oral precancerous lesion. The factors associated with them are smokeless tobacco consumption ($p < 0.001$), alcohol consumption ($p < 0.01$), on oral health literacy ($p = 0.22$). **Conclusion:** There is a strong need to implement High-risk targeted screening for oral cancer along with public advocacy through radio, media on Oral health which can help identify oral precancerous lesions at an early stage. Strict Implementation of The National Oral Cancer Awareness Program is required to increase public and professional awareness of oral cancer.

Keywords: tobacco, oral precancerous lesions, truck drivers, early diagnosis

❖ **Title: Burden, predictors and care-seeking behaviour of unintentional burn injuries among adult women: A cross-sectional study in slums of Kolkata**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Najir Hosen Sarkar

❖ **Title: Clinical profile of hemodialysis patients attending a tertiary care hospital in Assam**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Champak Pathak, Department of Community Medicine, Gauhati Medical College, Guwahati, Assam

Co-authors:

- **Dr Jutika Ojah, Professor and Head**, Department of Community Medicine, GMCH
- **Dr Rahul Sarmah**, Assistant Professor, Department of community medicine, GMCH, Guwahati, Assam

Introduction: Chronic kidney disease (CKD) is one of the major complications of diabetes and hypertension. Most CKD patients eventually require renal replacement therapy, which adds additional financial and psychological strain on the patient and their family

Objectives: To assess clinical profile and to find the socio demographic correlates of CKD patients undergoing hemodialysis attending GMCH

Materials and Methods: A record-based descriptive analysis was conducted in the dialysis center of GMCH from the month of November 2022 to January 2023. During the study period a total of 136 CKD patients underwent hemodialysis. Out of them 120 patients had complete data in their record file and only those were included in the study. The data was analyzed using MS excel.

Results: Among 120 CKD patients who underwent hemodialysis, 92 (77%) of the participants were men & 28 (23%) were women. The majority of the patients, 68 (56%) were between the ages of 41 and 60. Total 112 (93%) subjects presented with hypertension followed by Diabetes mellitus (30%). Total 12 (10%) were sero-positive for viral marker HCV and 8 (7%) for HIV.



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Conclusion: End stage renal disease(ESRD) patients in the study group were relatively young and comprised mostly men. Hypertension was the most common disease present in the study group. Awareness regarding CKD needs to be increased to general public so that early symptoms and sign related to the disease can be understood and early health seeking can be encouraged.

Keywords: Chronic kidney disease, Hemodialysis, End stage renal disease

❖ **Title: Clinicoepidemiological profile of COVID-19 patients admitted in a tertiary care center in Central India.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

- **Dr. Avinash Gawande**, Associate Professor .Dr. Uday Narlawar, Professor & HOD, GMC, Nagpur.

Introduction: India is the second country with the highest Coronavirus Disease-2019 (COVID-19) case burden in the world. In India, Maharashtra state has the highest number of cases. During September 2020, more than 37% of new fatalities reported are from Maharashtra.

Objective: To study the clinicoepidemiological profile of COVID-19 patients admitted in a COVID-19 designated tertiary care centre in Central India.

Materials and Methods: This is a record based, retrospective cross-sectional study. Data were collected from case sheets of 194 COVID-19 positive patients treated at designated COVID-19 hospital in Nagpur. The epidemiological, demographic, clinical, laboratory, radiological and treatment data of 194 Real Time-Polymerase Chain Reaction (RT-PCR) confirmed COVID-19 patients during September 2020 was collected. The Fisher exact test or Chi-square test was applied to compare categorical variables as appropriate.

Results: Among the 194 laboratory confirmed COVID-19 patients, majority of the patients belonged to the age group of 41-60 years. The most common co-morbid condition found was hypertension followed by diabetes mellitus. The most common symptoms were fever and cough followed by breathlessness. The mean time from the onset of symptoms to hospital admission for discharged is more than death cases. There was a strong association between increasing age and the need for intensive care. Total 80% patients above 60 years of age had abnormal Chest X-Ray (CXR) findings during hospitalisation. Furthermore, the maximum number of deaths occurred in the age group of more than 60 years of age.

Conclusions: The findings suggest that increased value of serum Lactate Dehydrogenase (LDH) and Urea can be used as predictors for mortality rate. Patients aged more than 60 years and patients associated with comorbidities are more prone for severe disease with Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) pneumonia and this subset of patients requires urgent medical attention.

Keywords: COVID-19, Mortality, Urea, Comorbidities.



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❖ **Title: Clinico-epidemiological profile of patients admitted to a de-addiction centre in tertiary care Hospital of Southern Odisha**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Sarojini kesh, Post Graduate Resident, MKCG MCH

Co-authors:

- **Dr. Durga Madhab Satapathy**, Professor and HOD, MKCGMCH
- **Dr. Soumen Kumar Pradhan**, Assistant Professor, MKCGMCH
- **Dr. Jasmin Nilima Panda**, Senior Resident, MKCG MCH

Introduction: The substances abuse has become one of the major public health problems of present society. Recently there has been an increase in the incidence of substance abuse throughout the world including India. The proper assessment of the current trends and pattern of substance abuse can be helpful in more effective intervention of this menace.

Objectives: To study the clinico-epidemiological profile of patients admitted to a de-addiction centre in tertiary care Hospital of Southern Odisha

Materials and Methods: It is a cross sectional study conducted at the deaddiction centre of MKCG Medical College and hospital from January to March, 2023. Study participants includes 200 patients admitted to deaddiction centre. A predefined pretested semi-structured questionnaire was used to assess various socio-demographic and clinical variables and pattern of abuse among patients. Data collected was entered and analysed using Epicollect version 5 and MS Excel.

Results: Out of all the 200 patients 190(95%) were male and majority (80%) were admitted for alcohol dependence. 70% belongs to urban area whereas 30% belongs to rural areas. 46% were educated upto primary level, 24% were educated up to secondary level, 15% were graduates, 8% were post graduates and 7% were illiterates. Majority of the patients started substance for peer pressure (80%) followed by family related stress and enjoyment.

Conclusion: A comprehensive preventive program targeting young adults needs to be formulated and strict laws against sales of illicit substance should be implemented.

Keywords: substance abuse, patient profile, hospital

❖ **Title: Clinico-epidemiological Profile of patients attending Non-Communicable Disease (NCD) Clinic of Urban Healthcare Training Centre (UHTC) of AIIMS Patna – A Retrospective Observational Study.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

- **Dr G VENKATESH**, Junior Resident CFM AIIMS PATNA

Co – author :

- **Dr C M Singh Professor** CFM, AIIMS PATNA.
- **Dr Pragya Kumar** Addl. Professor CFM
- **Dr Shamshad Ahmad** Associate Professor.



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Introduction: NCDs were responsible for an estimated 40.5 million (71%) of the 56.9 million deaths worldwide in 2016. This study will explore patient profiles along with symptom distribution and trend. **Objectives:** To evaluate the clinical-epidemiological characteristics among patients attending the Non-Communicable Disease (NCD) Clinic of AIIMS Patna.

Materials and Methods: Study Design: A Retrospective Cross-Sectional Study in The NCD Clinic, UHTC in AIIMS Patna is conducted with the patients attending the NCD clinic in the urban field practice area following one month of IEC approval. Sample Size: Patient records collected via Google Form from January 2019 to April 2022 and routine data collection in the NCD clinic of UHTC was channelized through Google Forms and data will be exported as a CSV file further data is imported into software and analysed.

Results: The frequencies of female distribution 52%, Male 48% and in Age group it is Neonate 2.2%, under 5 children 13.8% and remaining age group 84%. Distribution of key symptom seen is Pain 20.5%, Cough 9%, Common cold 7.2%, Injury 5.7%, Animal Bite 5.6%, Fever 5%, Antenatal care 3.2% and remaining symptoms seen. **Conclusion:** In this study the female distribution is more along with adult Age group. Distribution of key symptoms largely is pain and cough compared to remaining symptoms and almost the same trend is seen. Therefore, effective measures should be taken in patients attending NCD clinics and proper treatment of key symptoms along with effectively understanding the trend is much needed.

Keywords: Clinico-epidemiological Profile, NCD, UHTC.

❖ Title: Clinico-social profile cases admitted to NICU at tertiary level health care system in Odisha

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

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Co-authors:

- **Dr Anil Kumar Sahu**, Department of Community Medicine, MKCG MCH Berhampur, Odisha
- **Dr Durga Madhab Satapathy**, Department of Community Medicine, MKCG

Introduction: Neonatal death constitute major proportion of under-five mortalities in India. Tertiary level neonatal intensive care unit (NICU) being a referral centre plays a major role in providing treatment to sick newborns. **Objective:** to review the clinic social profile of neonates admitted to NICU at MKCG MCH Berhampur, Odisha. **Materials and methods:** This cross-sectional observational study was carried out in MKCG MCH Berhampur, odisha. The total population study of all neonates admitted into the neonatal intensive care unit (NICU) during the period of July 2022 to december 2022. Their clinic-social profile was analysed. **Results:** A total of 2146 neonates admitted to NICU, 1295 were males, 849 were females and 2 were born with ambiguous genitalia. 1140(53.1%) belongs to general category, 543(25.3%) OBC, 325(15.1%) SC, 138(6.4%) ST. 1039(48.1%) Low birth weight (LBW) case of whom 258(24.8%) were very low birth weight (VLBW). 617(28.7%) were premature babies. 10(0.4%) had been delivered at home, rest (99.5%) were institutional deliveries. Respiratory distress (35.8%), Hypoxic ischemic encephalopathy (HIE) (33.4%) was most common cause of admission. 96(4.4%) had congenital anomalies (CA). 514(23.9%) could not survive in neonatal complications. **Conclusion:** Appropriate antenatal care and proper natal care including regular training of natal care providers specially on the



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case of partograph and timely referral can reduce not only the burden of case load at tertiary level health care centre, but will also go a longway in decreasing the neonatal mortality of the region.

Keywords: LBW, NICU, Preterm, CA

❖ **Title: Community-based Interventions to Improve Control of Hypertension- A Scoping Review**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Ashwathi Prakash,

❖ **Title: Comparison of the prevalence of selected symptoms suggestive of COVID-19 sequelae since diagnosis among recovered COVID-19 patients with those in seronegative household members**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Aquilin Gloria Reginald, Junior Resident, Centre for Community Medicine, AIIMS New Delhi

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Introduction: COVID-19 recovered patients presents with varieties of sequelae. Symptoms suggestive of COVID-19 sequelae may be new onset following initial recovery or persisting initial illness. These symptoms are non-specific; could also be found in general population. To ascertain the COVID-19 sequelae, these symptoms were compared with general population using seronegative household contacts as proxy.

Objective: To compare the prevalence of selected symptoms suggestive of COVID-19 sequelae since diagnosis among recovered COVID-19 patients with those in seronegative household members.

Methodology: A community-based cross-sectional study was conducted among 382 laboratory confirmed adult recovered COVID cases and 265 household members who were never laboratory diagnosed with SARS CoV-2, residing in 22 villages of Ballabgarh block, Faridabad, Haryana. An interview schedule was administered and blood specimen collected between February and April 2021. Serum samples of household members underwent qualitative assessment of total antibodies using ELISA.

Results: Among household members, 118(44.5%) were seronegative. Comparison of symptoms suggestive of COVID-19 sequelae was made between 118 seronegative household contacts and 382 recovered COVID-19 cases.

The symptoms assessed were fatigue, hair loss, sleep difficulties, decreased appetite, headache, myalgia, breathlessness, chest pain, joint pain, anxiety, depression, dizziness, persistent cough, sore



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throat, palpitations, anosmia/hyposmia, taste disorders, skin rash, fever, diarrhoea and vomiting. Among these, fatigue (OR 3.8, CI 1.70-8.52), hair loss (OR 3.3, CI 1.54-7.07), sleep difficulties (OR 3.0, CI 1.26-7.18) and decreased appetite (OR 8.89, CI 1.19-66.20) were found to have significant association with cases compared to seronegative household contacts.

Conclusion: Fatigue, hair loss, sleep difficulties and decreased appetite can occur in recovered COVID-19 cases as COVID-19 sequelae.

Keywords: COVID-19 sequelae, long COVID

❖ **Title: Compliance to self-care practices and glycaemic status among Indian Type-2 diabetes patients with health insurance coverage.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Souvik Manna, ESICMCH, Alwar

Co-authors:

- **Dr Purabi Phukan**, ESICMCH, Alwar
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Background- Health insurance coverage can help overcome the barrier of cost of diabetes care, but it is the quality of self-care that determines the success of diabetes treatment, especially for Type-2 diabetes.

Objectives: This study was conducted among type-2 diabetes patients insured under ESIC Scheme with the aim of determining compliance to self-care practices, status of glycaemic control and risk of development of diabetes-related complication.

Methods- In the study, 100 diabetes patients were interviewed as per the calculated sample size. Data was collected on socio-demographic, biochemical profile, and diabetes self-care.

Results: Mean age was 55.1±10.8 years. Majority (96%) reported quarterly follow-up visits. Although most had reported treatment compliance (95%), blood-sugar monitoring (74%), restricted diet (66%) and physical activity (61%), their biochemical profile revealed poor glycaemic control (HbA_{1c} >7%) in 82.4% (mean 8.5±2.08), high BMI (54%) and WHR (77%), high LDL (47.4%), TG (42.1%) and Cholesterol : HDL ratio (31.6%). Serum creatinine was >1.3gm/dl in 8.2% patients.

Conclusions: Results showed that health insurance improved treatment adherence and glucose monitoring, but it did not translate into effective glycaemic control. Risk of cardiovascular complications observed in many patients. This indicates that successful treatment outcome will require more than providing health insurance. As insured patients came for regular follow-up, insurance can improve on building a robust system of patient centric care with lifestyle interventions. Also, further studies are required to compare quality of care in insured versus non-insured patients.

❖ **Title: Consumption of Dietary Supplements among Undergraduate Medical Students of a Medical College in West Bengal during COVID-19 pandemic**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance



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Presenting author:

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Introduction: Since body's immunity plays an important role in prevention of infection, the use of dietary supplements (products that provide nutrition) has been steadily increasing globally during the COVID-19 pandemic.

Objectives: The objective of this study was to determine the dietary supplement intake amongst medical students of a medical college in West Bengal during COVID-19 pandemic and to determine the factors influencing its intake.

Methodology: A cross-sectional study was conducted using a semi-structured questionnaire consisting of socio-demographic details, dietary supplement consumption pattern and reasons for its use. Fear of COVID-19 Scale was used to assess the fear of COVID-19 and its association with dietary supplement intake. SPSS v.20 was used for statistical analysis.

Results: Out of total 370 participants, majority (85.1%) consumed dietary supplements. The most commonly consumed dietary supplement, vitamin and mineral were fortified juice (36.4%), Vitamin C (24.6%), and Zinc (31.4%) respectively. About 29% reported that boosting general immunity, COVID-19 protection and healthy lifestyle are the main reasons for consumption of dietary supplement. Dietary supplements were mainly (49.5%) purchased from pharmacy. Family and friends (38.1%) were the common source of information about dietary supplements. Significant increase in dietary supplement intake during the pandemic was found among males while there was no significant association between fear of COVID-19 and intake of dietary supplements.

Conclusion: In our study 85% of the participants consumed DSs and it was significantly more among males. Vitamin C, Zinc and fortified juice were the most frequently used DS. They were used for boosting general immunity to prevent COVID-19 infection. Although consumption of DS was found to be significantly more amongst males, there was no association between fear of Covid-19 and intake of dietary supplements.

Keywords: dietary supplements, COVID-19, FCV-19S, medical students

❖ Title: Control of an epidemic caused by Covid19 in absence of a suitable vaccine - an observation during recent pandemic

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Bidisa Sarkar



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Background: India, in early to mid 2020, saw a surge of Covid19 cases, when new cases and Covid19-related deaths were ever-increasing. Healthcare workers were overworked. Medical scientists worked hard to come up with effective vaccines and drugs to combat the situation. It was observed that there was clustering of most cases around certain infected ones whereas few/nil cases around others, in the same community. That generated the question - what could be the underlying factors for this transmission pattern?

Viral load is an important determinant for increased transmission of HIV among their close contacts; based on this, the role of viral load in transmission of Covid19 has been explored.

Objective: 1. Initial viral load plays a role in Covid19 transmission
2. Ct-value based segregation of cases helps in control of transmission

Materials and Methods: Mapping helped understand the distribution of all primary cases and their linked secondary cases. Infected families were visited and interviewed to understand the sequence of events. Ct-values were obtained records from the laboratories. Based on initial observation, a Covid control strategy was suggested to Ahmedabad district health authority. With their help, all laboratory-confirmed patients with higher viral load were quarantined institutionally during June 2020. This was accompanied by contact tracing of infected cases of previous 5 days.

Results: Initial observation established that higher viral load is an important determinant for increased transmission of cases. This model of Covid19 control ensured Ahmedabad witnessing a declining trend of new cases within next 3 weeks, whereas cases continued rising in the other districts, where this was not implemented.

Conclusion: Ahmedabad model of Covid19 control may be an effective strategy, in combating infectious disease outbreaks, particularly in absence of vaccines.

❖ **Title: Coping Styles Among Medical Students In Manipur: A Cross-Sectional Study**

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr. Jyothi S, Department of Community Medicine, RIMS, Imphal, Manipur University

Co-authors:

- **Annastasia A Sangma**
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- **B S Akoijam**

Background: Many studies have talked about the prevalence of stress among medical students. Students from different states of the country are admitted every year in the two govt tertiary care



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medical colleges in Manipur who have diverse socioeconomic, cultural, and educational backgrounds and are exposed to a new environment. This sudden change would expose them to stressors that could hamper the students' life. It is important to know how to cope with these stressors

Objectives: To assess the coping strategies among medical students in Manipur and to determine the association between independent variables and coping strategies.

Materials and Methods: A study was conducted in two tertiary care centers in Manipur from October to November 2022 among medical under graduate students. participants were selected using convenient sampling. Data were collected using DASS-21, PCI scale and SBQ-R through google forms. Descriptive statistics, Chi square test and Independent-t test were applied using SPSS vn.26 and $p < 0.05$ was considered statistically significant.

Results: Among the 425 students, prevalence rate of depression, anxiety and stress were 38%, 48% and 24% respectively and 13% had suicidal risk. There is association between gender and presence of depression ($p = 0.008$) and anxiety ($p = 0.000$). People who have depression, anxiety and stress used more of the avoidance coping style ($p = 0.001$) and less of the proactive coping ($p = 0.037$) and emotional support seeking style ($p = 0.044$).

Conclusion: Different coping styles are used by students including the detrimental ones which are more frequently used by the students with stressors. Hence there is a need to create awareness regarding how to cope with the stressors in the environment.

❖ Title: Correlates of Adverse Obstetric and Perinatal Outcomes among Postnatal Mothers Admitted in Burdwan Medical College, West Bengal: a cross-sectional study.

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Co-author:

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Introduction: High risk pregnancy is broadly defined as one in which mother, fetus or newborn is or will be at increased risk for morbidity or mortality before or after delivery. According to WHO, globally about 830 women die from pregnancy or childbirth-related complications every day. About 20-30% of all pregnancies belong to high-risk category, which is responsible for 70–80% of perinatal mortality and morbidity.

Objectives: To estimate the proportion of high-risk pregnancy and to identify the correlates of adverse maternal and perinatal outcomes of pregnancy among the study subjects.

Materials and Methods: An Institutional based, cross-sectional descriptive study was conducted among 240 mother admitted at postnatal ward of Burdwan Medical College & Hospital from November 22-January 23. 10 mothers were selected each day by SRS method and data were collected by predesigned, pretested, semi-structured schedule. Multivariable logistic regression was done to find out the risk factors associated with high-risk pregnancy.

Results: Proportion of High-risk pregnancy was 45.8% among the admitted mothers. History of previous caesarean section 32.7%, PIH 29.1%, GDM 25.5% and severe anaemia 18.2% were found to be the most common risk factors associated with the prevalence of high risk Pregnancy. Multigravida



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(AOR=7.28), less than 20 years and more than 35 years age group (AOR=46.29) and lower socio-economic class (AOR=4.60) were associated with high-risk pregnancy.

Conclusion: Proportion of high-risk pregnancy was comparatively high among the study participants. Regular ante-natal check-up, health education and early detection of HRP are needed to improve the obstetric and perinatal outcome.

Keywords: High-risk pregnancy, adverse obstetric & perinatal outcome, postnatal mother.

❖ Title: Coverage and quality of Home-Based New-born Care and barriers in its implementation in rural block of Odisha- A mixed method study

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

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Introduction: Almost half of under-5 mortality happens within 28 days of life, and most neonatal deaths happen in the first seven days of life. Reducing preventable neonatal deaths can be possible with effective interventions such as visiting trained community health care workers at home after delivery as demonstrated by the Gadchiroli study. HBNC was implemented in India in year 2011. However, many studies have found a low coverage of HBNC. Evidence related to barriers in its implementation is not studied widely. There is also inadequate evidence regarding coverage of HBNC in Odisha.

Objectives: To assess the coverage and quality of HBNC services and barriers in its implementation in a rural Block of Odisha

Materials and Methods: The study was conducted in the Tangi Block of Khordha District of Odisha. We randomly selected two villages from each of 24 sub-centres in this block. After obtaining written informed consent, We did in depth interview of ASHAs (till data saturation) and mothers of infants age of 42 days to 90 days (sample size = 61) residing in the study area and assessed the HBNC forms filled by the ASHA workers. Based on literature review and existing guidelines, a framework was developed for evaluation of the HBNC program. The study was approved by the institutional ethics committee.

Results: We found that 16.67% (CI 9.39%-24.01%) of infants didn't receive any HBNC visits whereas 13.33% (CI 4.71%-21.89%) of infants received six or more HBNC visits, 13.33% of infants received the first HBNC visit on day three of life, and two new-born died within 42 days of life. Majority of the forms filled by ASHA workers had no mention of any danger signs to any children and weight of the new-born. The major barriers to conducting HBNC visits were inadequate knowledge regarding



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counting respiratory rate, non-functioning of equipment, poor training, and improper knowledge regarding usage of the booklet.

Conclusion: Low coverage and quality were observed in this study and barriers related to implementation was mostly related to training and unavailability of logistics. There is need of capacity building and robust monitoring mechanism to garner the benefits of the HBNC program in this area.

Keywords: New-born care, ASHA, Qualitative study, Home based care

❖ **Title: Coverage and yield of opportunistic screening for hypertension in public health facilities, Raipur, Chhattisgarh, India, 2022**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

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Background: The National Program on Hypertension employs population-based screening (in the community) and opportunistic screening (all out-patient attendees in health facilities) to improve the detection of hypertension. However, we need more evidence on coverage of opportunistic screening across various levels of the public health system.

Objectives: To estimate the coverage of opportunistic screening at various public health facilities in Raipur district, Chhattisgarh.

Materials and Methods: We conducted a cross-sectional study in five public facilities in September 2022. We selected 1/1 district hospital (DH), 1/6 community health centers (CHC), and 3/30 primary health centers (PHC) by simple random sampling. We extracted data from eligible (≥ 30 years) attendees from the outpatient department (OPD) register and the screened individuals from the non-communicable disease (NCD) clinic register. We excluded antenatal mothers and individuals with known hypertension. We interviewed all staff nurses involved in hypertension screening to explore the challenges against opportunistic screening. We determined the coverage of opportunistic screening by facility type, age, and gender and expressed it as a percentage.

Results: Of the 2472 eligible OPD attendees, 681 [28%, 95% C.I: 26-30%] were screened for hypertension. The coverage was higher in PHCs [322/778, 41%] and CHC [305/745, 41%] than in DH [54/949, 6%]. The coverage increased with age ranging from 21% (191/910) among 30-39 years to 41% (195/479) among ≥ 60 years. Male (307/1154) and female (374/1318) OPD attendees were screened equally. The challenges staff nurses faced include a lack of dedicated staff for screening, a lack of electronic devices for data entry, and a lack of awareness among the beneficiaries.



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Conclusion: Less than one-third of the OPD attendees were screened for hypertension in Raipur, with less coverage among younger adults. Sensitizing staff nurses on the importance of screening younger adults and providing dedicated staff nurses can improve the coverage of opportunistic screening.

Keywords: Coverage, Hypertension, Screening

❖ **Title: Coverage Of Birth Dose Hepatitis-B Vaccine Among Children Under 2 Years Of Age Attending Immunization Clinic In A Tertiary Care Hospital, Odisha**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

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Co-authors:

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- **Dr Chumki Rani Nanda**, Department of Community Medicine, SCB Medical college & Hospital, Cuttack

Background: Viral hepatitis is recognised as a major public health problem in India recently. Out of all, Hepatitis B and C contribute about 96% of the total mortality in India. Complete immunization against Hepatitis B including birth dose is of utmost importance to prevent vertical transmission from mother to child in a developing country like India where prenatal diagnosis of HBsAg is almost negligible. In Odisha coverage of Hepatitis B birth dose is around 91%, however 7 districts including Cuttack, have reported below 85% coverage as per HMIS, November 2022. Being the oldest health hub of Eastern India, the results of Cuttack is quite disappointing. With this background, the study was conducted to assess the coverage of Hepatitis-B birth dose in our hospital OPD.

Objective: To assess the coverage of Hepatitis-B birth dose among children under 2 years attending immunization clinic in a tertiary care hospital in Odisha.

Materials and Methods: It was a facility based cross-sectional study conducted from December 2022 to February 2023 in immunization OPD of SCB Medical college and Hospital, Cuttack. Children less than 2yr coming for vaccination were included in the study. The total sample size was calculated to be 125. A simple random sampling method was adopted till required sample size is reached. Informed consent was taken and data were collected from reliable informant. The data were entered in MS Excel and analysed using IBM SPSS ver.17. A p-value of <0.05 was taken as statistically significant.

Results: The Hepatitis-B coverage was found to be around 85.6%. The vaccination was higher among Male infants (75%) than female. Children of educated parents received birth dose vaccine at appropriate time than the uneducated one. Mothers who attended VHND/UHND session, the coverage was higher. Detail analysis of all the parameters is pending. It will be presented in the Conference.

Conclusion: In our study, the Hepatitis-B birth dose coverage was lower than the State coverage. Uptake of birth dose of Hep-B vaccine is highly dependant upon their socioeconomic and demographic variables.



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❖ **Title: Data driven approach is essential for emergencies like pandemic & to monitor progress towards national /sub-national health priorities**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Vaishali daggar,

❖ **Title: Data Envelopment Analysis- A Tool for Assessing the Efficiency of Anganwadi Centres under Rural Health and Training Centre in North India**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Mili Sengar, TS MISRA MEDICAL COLLEGE LUCKNOW

Introduction: The Integrated Child Development Services scheme is the largest program for promotion of maternal and child health and nutrition in India. The scheme was implemented in 1975. The services are made available at Anganwadi Centres (AWC) and are delivered by Anganwadi Workers (AWW) at grassroots level

Objectives: to use Data Envelopment Analysis (DEA) technique to evaluate the efficiency of all AWCs located under the RHTC (Rural Health and Training Centre) area of a medical college in North India. **Materials and Methods:** Data on physical structure and logistics (input variables); percentage of beneficiaries receiving supplementary nutrition and health check-ups (output variables) was collected from thirty-one Anganwadi centres which were located under catchment area of Rural Health Training Centre (RHTC). Each anganwadi centre was taken as a Decision Making Unit (DMU). Efficiency scores were calculated using DEAOS free online software. **Results:** DMUs 14th and 20th were found to be most efficient (100%) and DMU 2nd was the least efficient (45%). DMU 14 and 20 showed performance level which was superior to all other DMUs. DMU 14th and 20th were therefore considered 100% efficient. DEA showed that total output increases and/or input decrease were required for making the inefficient DMUs efficient.

Conclusion: Most of the Anganwadi centres were inefficient and the findings of the study showed that an improvement in the infrastructure and logistics are likely to improve the performance of AWCs as well as health-related output.

Keywords: DEA, Envelopment, DMU, efficiency

❖ **Title: Depression among elderly and their perceived social support in a community development block of Purba Bardhaman District, West Bengal: A Cross Sectional Study**

Mode of presentation: Postal; **Theme:** Public Health Nutrition

Authors:

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Introduction: Elderly depression is a major public health concern and it causes significant morbidity and mortality burden worldwide. Social support plays major role in maintaining well-being in elderly. Lack of adequate evidence about depression in elderly is a contributory factor for weak or inconsistent mental health care at community level. **Objectives:** To estimate the prevalence of depression among elderly residing in Bhatar community development block of Purba Bardhaman district, West Bengal and to assess the level of perceived social support among them. **Materials & Methods:** A community based, cross-sectional study was conducted in Bhatar community development block of Purba Bardhaman district, West Bengal, during the period of August 2022 to January 2023. A calculated sample of 238 elderly people, were selected by simple random sampling and interviewed with a pre-designed, pre-tested schedule containing Geriatric Depression Scale (GDS-15) for assessing depression, Katz index for independence in activities of daily living (ADL) and Multidimensional Scale for Perceived Social Support (MSPSS) to assess level of perceived social support. Multivariable logistic regression was done to find out predictors of elderly depression. **Results:** Out of 238 study participants, 160 (67.2%) were suffering from depression. Prevalence of mild, moderate & severe depression was 49.2%, 14.6% & 3.4% respectively. Low, medium & high level of perceived social support was found in 36.6%, 44.1% & 19.3% study participants, respectively. Impairment in activities of daily living [AOR: 5.045 (2.145-11.868)], presence of financial dependence [AOR: 2.977 (1.330-6.665)], pre-existing one or more co-morbidities [AOR: 2.044 (1.114-3.749)] and educational status below secondary level [AOR: 0.379 (0.199-0.720)] were found to be the significant predictors of elderly-depression. **Conclusion:** Prevalence of depression is high among elderly, along with low perceived social support in them. Health promotion, awareness generation about social security schemes and family support will be crucial to prevent elderly depression.

Key Words: Depression, Elderly, Perceived social support.

❖ **Title: Determinants of Anemia in women aged 15-49 years residing in rural area of District Faridabad– A mixed method study**

Mode of presentation: Postal; **Theme:** Reproductive & Maternal Health

Presenting author:

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Co-authors:

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- **Dr. Deepanjli Batra** Post Graduate Resident at ESIC, Faridabad

Background: As per the data released by NFHS -5, 57% of all women who were between the age group of 15-49 years are anemic which makes it a major health problem.



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Objectives: 1. To estimate the prevalence of anemia in rural women aged 15-49 years. 2. To explore factors leading to anemia in rural women aged 15-49 years, its perceived severity and health seeking behavior.

Materials and Methods: A Sequential Mixed method (quantitative followed by qualitative) was conducted in a village in Faridabad district, Haryana among women aged 15-49 years for 6 months. For Quantitative study, records of 401 women of 15-49 years age were obtained from laboratory reports of PHC between Jan 2021 to July 2022. Proportion of Anemic women was estimated from this data. For Qualitative study, a FGD was conducted at an Anganwadi Centre of Dhouj with 12 women to explore the factors causing anemia, perceived severity and health seeking behavior. Inductive and deductive analysis was done and major themes identified.

Results: The prevalence of anemia was 85.3%; with mild, moderate and severe cases being 17.9%, 57.2% and 10.2% respectively. The themes for factors leading to anemia were reported as lack of knowledge about anemia, its burden, signs and symptoms, consequences, nutritional factors, IFA supplements and place of treatment, low perceived severity, problem in consuming pill, dissatisfaction with quality of available health services i.e., side effects of IFA tablets, far distance and unavailability of services and poor health seeking behavior with lack of self-care and negligent attitude towards their health and well-being.

Conclusion and Recommendations: Lack of knowledge, low perceived severity and poor health seeking behavior were identified as the major contributory factors. Grass root workers and the VHNDs can be utilized as a medium for generating awareness regarding intergenerational cycle of anemia and its implications on the health of women.

❖ **Title: Determinants of musculoskeletal and ocular discomfort among zari embroidery workers: A cross-sectional study in a rural area of West Bengal**

Mode of presentation: Postal; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

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Introduction: Zari is an even thread made of copper or silver or electroplating on bronze or any cheap metal. Zari workers bear the long-standing working hours, poor lighting and ventilation, and having to sit in one posture continuously leads to strain in different areas like the eyes, spine, neck, arms, shoulders, and the tip of fingers leads to various musculoskeletal as well ocular discomfort.

Objective: To determine the determinants of musculoskeletal and ocular discomforts among embroidery workers in the Uluberia-I block of West Bengal.



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Methodology: This cross-sectional community-based study was conducted among 330 embroidery workers from September 2021 to October 2022. A cluster sampling method was used to select 30 villages followed by 11 participants chosen randomly from each village. Data was collected with help of an interview schedule and necessary instruments. Univariate and multivariable logistic regression was done to find out the determinants of musculoskeletal and ocular discomfort among the study participants.

Results: Among 330 study participants, 36.1% were male and 63.9% were female with a median age of 40(32,40) years. Out of the total participants, 271(82.1%) and 189(57.2%) reported perceived musculoskeletal and ocular discomfort while working in the past 12 months and 6 months, respectively.

Increasing stress (aOR=1.34, $P<0.001$), female sex (aOR=2.72, $P=0.04$), 5-9hr & >10hr working/day (aOR=3.59&8.03, $P=0.004$ & $P=0.001$) and ≥ 30 yrs of working duration (uOR=2.68, $P=0.02$) found as risk factors for developing musculoskeletal discomfort among study participants. Whereas increasing age (aOR=1.07, $P<0.001$), 15-29yrs & ≥ 30 yrs working duration (uOR=2.13&3.62, $P=0.003$ & 0.001), ≤ 3 hrs working at a stretch (aOR=2.20, $P=0.02$), and working at night (aOR=4.20, $P=0.01$) found as risk factors for developing ocular discomfort among study participants.

Conclusion: Most workers burnt unscientific working environment, challenging physical and psychological morbidity without getting any social support as an unorganized working class who also contributes much on rural development.

Keyword: Zari-workers, Musculoskeletal-discomfort, Ocular-discomfort

❖ Title : Development and Validation of the Motivation for Healthy Eating Behavior Scale (MHEBS) in adults of Bangladesh and India

Mode of presentation: Postal; **Theme:** Public Health Nutrition

Presenting author:

- **Dr. Rivu Basu**, Associate Professor

Background: The Motivation for Healthy Eating Behavior Scale (MHEBS) is the first developed and validated scale to measure the motivation for healthy eating in the adult population of Bangladesh and India. The study aimed to develop a validated instrument that can assess the motivation for healthy eating as well as the motivating factors.

Methods: The scale was developed by conducting a literature review for generating the items as the initial step. Content validity of the questionnaire was evaluated by an expert panel and the face validity was performed by conducting a pilot study. The construct validity of the scale was assessed by performing Exploratory Factor Analysis (EFA). A total of 220 participants both from Bangladesh and India participated in the study via Google forms.

Results: The scale demonstrated excellent psychometric properties. The content validity index of the items (i-CVI) and the scale (s-CVI) were at acceptable levels of 0.79 and 0.8 respectively. The scale also showed acceptable reliability with Cronbach's alpha value of 0.820. EFA suggested a three-factor scale



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structure, namely, benefits of healthy eating, external regulation, and affordability. Among the three factors, the maximum number of factors (n=9) loaded into the benefits of healthy eating domain.

Conclusion: Motivation for Healthy Eating Behavior Scale (MHEBS) —15 items 5-points Likert-type scale — is a valid instrument to measure the motivation for healthy eating behavior in the Bangladeshi and the Indian adult population. Keywords: Motivation; Healthy Eating Behavior; Validation

❖ **Title : Diabetes Risk Assessment among Adults attending Outpatient Department of an Urban Primary Health Centre in Uttar Dinajpur District, West Bengal**

Mode of presentation: Postal; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Dwija Poddar, Raiganj Government Medical College

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- **Dr. Nazrul Mallick**, Raiganj Government Medical College

Introduction: Type 2 Diabetes Mellitus (T2DM) is a major health concern in India, with an estimated 64.5 million diabetic patients which is expected to rise to 87 million by 2030. As per International Diabetes Federation estimates almost 66% of Indians are unaware of their diabetic status. Early identification of people at risk of developing diabetes using validated risk assessment tools can help identify individuals at high-risk of developing the disease, allowing for early intervention and improved health outcomes.

Objectives: This study is aimed to assess the risk of developing type 2 Diabetes Mellitus and study the association of diabetes risk with other factors.

Materials and Methods: This cross-sectional study was conducted over a period of two months among non-diabetic consenting adults attending Urban Primary Health Centre in the field practice area of a medical college in Uttar Dinajpur, West Bengal using a predesigned, pre-tested schedule containing domains on socio-demographics, dietary, medical history, and validated risk assessment tool - Madras Diabetes Research Foundation - Indian Diabetes Risk Score (MDRF-IDRS). Estimated sample size was 112 based on formula Z^2pq/L^2 , with $p=0.37$ (ass reported by Patil et al, 2016 in India) and $(q=1-p)$, absolute error (L) of 0.1 and non-response rate of 20%.

Results: 112 participants underwent Diabetes risk assessment using IDRS, of which majority (67.8%) were females and residents (72.3%) of adjacent rural area. IDRS assessment showed that 57.14% had medium and 16.07% participants had high-risk of developing diabetes respectively.

Conclusion: Simple, non-invasive Diabetes Risk assessment tools like IDRS provide cost-effective solutions in identifying individuals at high risk of developing diabetes in primary care settings.

Keywords: Diabetes mellitus, screening, diabetes risk score



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❖ Title : Drug Adherence & Health Seeking Behaviour among Hypertensive Adults in an Urban Slum of Cuttack, Odisha: A cross-sectional study

Mode of presentation: Postal; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Prabin Kumar Lima, Junior Resident, SCB MCH, Cuttack

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Introduction: Hypertension is a major public health concern in India and in other parts of South Asia. The WHO emphasizes that “increasing the effectiveness of adherence interventions may have a far greater impact on the health of the population than any improvement in specific medical treatments”. Poor treatment adherence is a roadblock to better quality of life. Most health promotion interventions seek in some way to change health behaviour by changing health related knowledge, attitudes, barriers and facilitators.

Objective: To study drug adherence and health seeking behaviour among hypertensive adults and to identify their predictors .

Materials & Method: Population-based cross-sectional study was conducted among 121 consenting adults (≥ 18 years). Systematic random sampling was adopted to reach the participants. A pretested predesigned proforma was used for data collection. Drug adherence was elicited by MMSA scale.

Statistical methods Data analysis was done using SPSS version 20.0 (trial version). Quantitative variables were summarised as mean \pm SD, qualitative variable were summarised as proportions. For inferential purpose Chi-square test, Fisher’s exact test were used and a P value of <0.05 was considered for significant difference.

Results: Prevalence of hypertension was found to be 47.9%. The drug adherence was good among 47%, average among 28% and poor adherence was among 25%. Majority of the participants (94%) preferred going to hospital for their ailments. Duration of hypertension and socioeconomic status (SES) was found to be significantly associated with drug adherence.

Conclusions: Prevalence of hypertension was alarming among the slum adults and one in four adult is having poor adherence to the medication. Also duration and SES were the predictors of poor drug adherence among slum adults. Targeted IEC & BCC activates should be mandated in the study area to curb the menace of poor drug adherence.

❖ Title : Drug Adherence & Health Seeking Behaviour among Hypertensive Adults in an Urban Slum of Cuttack, Odisha: A cross-sectional study

Mode of presentation: Postal; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Prabin Kumar Lima



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❖ Title : Effect of mobile-phone reminder intervention on the yield of opportunistic screening for diabetes mellitus at a tertiary care teaching hospital in Jharkhand.

Mode of presentation: Postal; **Theme:** Non-Communicable Diseases

Presenting author:

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Co-author:

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Introduction: India is deemed as the world's capital of diabetes mellitus (DM). The yield of opportunistic screening program carried out across the globe showed poor follow up rate.

Objectives: Among adults who were screened for DM, to determine the screening yield of those who received mobile reminders and those who did not receive mobile reminders and to identify the screening yield attributable to mobile reminders.

Materials and Methods: It was a facility based parallel non-blinded randomised controlled trial done among adults of age ≥ 30 years having RBG ≥ 6.1 mmol/l. Known DM, pregnant and lactating mother, and those screened for diabetes within last year were excluded. Eligible participants were randomly divided into intervention and control arm. Intervention arm received mobile phone reminders to return to follow up test. Screening yield, attributable screening yield, and NNS was calculated. Intention to treat analysis was followed. Data was entered in EpiData Manager and analysed using SPSS 25.0.

Results: Of the 610 participated, 242 had high RBS and were subjected to confirmatory test. Randomly they were allocated into intervention (N=120) and control arm (N=122). In the intervention arm 68 (56.7%) participants returned for definitive test whereas in control arm 40 (32.8%) returned. Participants in the intervention arm had 1.73 times higher chance for returning to definitive test. In intervention arm 40% had diabetes and 29 (23.8%) of the controls had diabetes. Yield was 1.68 times higher in the intervention arm. [RR: 1.68; 95%CI: 1.14 – 2.47]. The attributable screening yield was 16.2% (95%CI: 4.6 – 27.8). The etiological fraction or attributable screening percentage was 40.6% (95% CI: 12.6 – 59.6).

Conclusion: Our study revealed that simple mobile phone reminders were feasible and effective to improve the yield of opportunistic screening for diabetes. This could be implemented across countries including poor performing states.

Keywords: Diabetes, Opportunistic screening, Mobile phone reminder, Intervention, Jharkhand

❖ Title : Effect of Stress on Sleep Hygiene among 15 to 18 years Students of a School in Urban Area of Burdwan, West Bengal: a Cross-Sectional Study

Mode of presentation: Postal; **Theme:** Child & Adolescent Health

Presenting author:

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Introduction: Stress, a natural human response to address difficult situations, is causally linked to morbidity and can lead to cognitive decline. A good sleep, required both for somatic well-being and memory consolidation, is very essential. Hence the current study proposed to study the effect of stress on sleep hygiene among 15 to 18 years students of a school in Burdwan, West Bengal.

Objectives: This study aimed to estimate the burden of perceived stress, determine sleep hygiene by assessment of excessive daytime sleepiness (EDS) and find out the effect of stress on sleep hygiene among the study participants.

Methods: A cross-sectional study was conducted with prior permission from school authority among 99 students aged 15 to 18 years comprising classes 9 to 12. Complete enumeration or census fulfilling the study criteria was done. The study-period was from December, 2022 to February, 2023 and information was collected by using self-administered structured questionnaire. The data collected was analysed using SPSS ver.16 and Microsoft Excel. Stress was assessed using Perceived Stress Scale or PSS and sleep hygiene was assessed using Epworth Sleepiness Scale for Children and Adolescents or ESS-CHAD and association between PSS and ESS was determined.

Results: Out of 99 students, 53.5% were males and 46.4% were females. The mean age was 16.0± 0.8. 42.4% students were of class 9 and 40.4% were of class 11. As per PSS scale, 56.6% of males and 65.2% of females were found to be moderately stressed while 7.5% male and 4.3% female had severe stress. Also 54.5% of 99 students were found to feel academically overloaded while 53.5% felt stress caused negative effect in their study. According to ESS-CHAD score, prevalence of poor sleep hygiene in the form of EDS was found to be around 17.1% in total with 2.0% having high level of EDS. Although association between PSS and ESS-CHAD was not of statistical significance which might be due to the small sample size.

Conclusion: The study showed that prevalence of stress was quite high among the participants and poor sleep hygiene was prevalent. Thus, early identification and management of stress through school-based health programs is required for adolescents for better academic performance and overall wellbeing.

Keywords: Stress, Sleep Hygiene, School, Adolescents, Excessive Daytime Sleepiness or EDS

❖ **Title : Effect of Structured Yoga Program on body lipid profile of Selected Nursing Staff in a Tertiary Care Hospital of Delhi - A Small Scale Phase-II Trial**

Mode of presentation: Postal; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

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Background: Health-care provider, especially nursing staff, suffers from chronic occupational stress leading to deranges lipid profile and metabolic syndrome. Yoga is recognized as a mind-body practice that integrates an individual's physical, mental and spiritual components to alleviate stress, normalizes metabolic profile.

Objective: This study aimed to assess the effect of structured yoga program on the lipid profile and selected anthropometric variables.

Materials & methods: This was a part of a small scale open-label phase-II randomized clinical trial done in a tertiary care hospital. Willing nursing staff of various department were recruited followed by randomization into yoga group and wait-listed control group maintaining allocation concealment. Demographic details, height, weight, BMI, waist circumference, serum triglyceride, total cholesterol, LDL, HDL were measured. The yoga group was offered 12 weeks of structured yoga session 50 minutes/session, twice a week whereas the other group kept as waitlist control. Per-protocol analysis was carried out. Data were summarized using mean, SD and 95% CI and unpaired t-test/Wilcoxon rank-sum test was used. The result was considered significant at 5% level of significance.

Results: Total 110 staff nurses were enrolled with 58 in yoga group and 52 in control group. The baseline characteristics were comparable. After the 12 weeks of follow up there was 19 participants in yoga group and 32 in wait-list control group. There was no statistically significant difference of the mean BMI, waist circumference. Though the lipid profile was found to be relatively better in the intervention group but there was no statistical significance.

Conclusions: We could not find supervised structured yoga to make significant improvement of the lipid profile after twelve weeks of follow up. This may be due to inadequate sample size or the due to profile being within the normal limit. For confirmation further study with larger sample size is needed.

Keywords: yoga; stress; lipid profile; staff nurse.

❖ **Title : Effect of using active learning principles in e-learning environment: A comparative DREEM study.**

Mode of presentation: Postal; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr. Syed Irfan Ali

Co-author:

- Dr Jarina Begum



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Introduction: COVID-19 pandemic has necessitated transition from Face-to-Face to E-Learning, which caught many medical educators unaware. However, E-Learning is going to stay and it's imperative to develop skills as an e-educator through application of active learning principles based on blooms taxonomy. This study highlights the effect of using active learning principles on perception of students towards e-learning environment using DREEM (Dundee Ready Education Environment Measure) questionnaire

Objectives:

- To introduce the active learning principles during online teaching learning sessions.
- To evaluate the change of perception of students towards e-learning environment through DREEM questionnaire

Materials and Methods: An educational Interventional study was carried out among 7th semester medical students (76). Perception towards e-learning environment was collected through DREEM questionnaire before and after the intervention (Application of active learning principles as per blooms taxonomy during online T/L sessions) to compare the scores.

Results: 76 students were involved. The Global DREEM score was 122 which was 62 before the intervention. Similarly, 68% reported positive perception which was only 37% initially. Students' social self-perception scored lowest initially, but scores were improved to 2nd highest after intervention. For few items like teacher centred, non-stimulating teaching, not able to memorize, lack of motivating environment, feedback, feeling lonely, bored, not having good support system, the individual scores were negative i.e <2 which became positive i.e>3.5 after

Conclusion: There was significant change perceived by the students towards e-learning environment with increased DREEM scores after the intervention. Thus, this study concludes use of active learning principles in online platforms is effective in improving student's perception towards the e-learning environment.

❖ **Title: Effectiveness of community based personalized breastfeeding assessment and intervention in improving child growth among 0-6 months infants.**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Introduction: Exclusive breast feeding (BF) is the single most effective intervention for child survival. Effective BF is a function of proper positioning and attachment of baby to the mother's breast. Only 2 % of infants in urban slums are exclusively breastfed due to cultural beliefs, myths and misconceptions, lack of education and multipara.



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Objectives: 1. Assessment of breastfeeding techniques and practices and child growth among lactating mothers of 0-6 months infants in urban slums.

2. Fortnightly growth monitoring of children till two months of intervention among mothers with faulty breastfeeding practice or technique

Materials and Methods: An interventional study was conducted in urban slums in Jabalpur on lactating mothers. The study included all lactating mothers having babies of age less than 6 months, and excluded those who shifted from the study area during follow up, and child with congenital anomalies or medical morbidity affecting the growth. They were asked questionnaires and to demonstrate BF at their home after obtaining their consent, and were intervened the practice of BF as per IMNCI guidelines, Later they were followed up at 14 days interval for 2 months to record the weight of babies and faulty BF, if any, to get corrected. Study is in progress for follow up.

Results. 61 women participated in the study; out of which only 3 had effective BF and rest 58 were intervened. First follow-up was completed by 47 participants, out of which 27 needed interventions. 61% knew procedure of BF in ANC, 38.3% discarded colostrums, 35% knew hungry-clues, 8.3% preferred to open bra for BF and 81.7% practiced hand washing for BF. Sitting posture for BF was preferred by 78.3% mothers; and 30.5% practiced BF along with other milk . Only 5% practiced effective BF at 1stvisit, but it increased to 34% at first follow up, and so also the weight of babies.

Conclusion: Knowledge effective breast feeding is not good among lactating mother of slum. However awareness of repeated education ,repeated followed up by health workers can increase their knowledge,attitude,practices of EBF .

Keywords:EBF,Slum women

❖ **Title: Epidemiological investigation of a community outbreak of Hepatitis A – Kerala, India.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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-

Background: An outbreak of acute Hepatitis was reported from Kozhikode district, Kerala, during October 2019. Trainees of Field Epidemiology Training Program (FETP) were briefed about this outbreak during their visit at District Surveillance Unit, Kozhikode. This study was carried out for learning systematic investigation of community wide outbreak.

Objectives: (1) To describe the epidemiology of the outbreak
(2) To assess the associated risk factors
(3) To suggest evidence-based preventive measures



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Materials and Methods: Outbreak was confirmed by review and analysis of available data. Outbreak was defined in terms of time, place and person. A hypothesis was generated and tested using 1:1 unmatched case control study with randomly selected cases from the line-list and controls from the same community. Siblings, family members and neighbours of the cases were preferred as controls. Data were collected by personal interview through a questionnaire for assessment of risk factors and analysed using Epi curve, spot map and odds ratio (OR) with 95 % confidence interval.

Results: Fifty probable cases of Hepatitis A were analysed with age range of 4 - 47 years and mean age of 23.8 years. Attack rate in female was 1.99% and higher than male. Epidemic curve suggested a common source outbreak possibly from exposure to food or water during community wedding in the area. Average incubation period was 28 days with a range of 18-36 days. The case control study confirmed the hypothesis with a statistically significant association between cases and drinking warm water (drink) during the wedding [OR 3; 95% CI 1.00–8.95]

Conclusion: Water or food contamination during community wedding has emerged as the most likely source of this **Hepatitis A outbreak**. Water treatment by concerned authority before such community event was recommended.

Keywords: Outbreak, Investigation, Hepatitis A

❖ **Title: Epidemiological profile of Tuberculosis, Sambalpur district of Odisha, India 2018 – 2021**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

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Co-authors:

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- **Sharan Murali**
- **Ashok Kumar Das,**
- **Madan Mohan Pradhan**

Introduction: As India strives to eliminate Tuberculosis (TB) by 2025, analysis of National TB Elimination Program (NTEP) data is required to understand the current burden of TB and to give feedback. The present study described the epidemiology of the notified TB cases and estimated the proportion of cure rate among them in Sambalpur, Odisha, 2018 to 2021.

Methods: We conducted a cross-sectional descriptive study among notified tuberculosis patients registered in the NTEP online portal (NIKSHYA) in the Sambalpur district between 2018 and 2021. We used the operational definitions and indicators listed by NTEP for this analysis. We described the time trend in notification using an epidemiological curve, and summarised the sociodemographic characteristics, type of tuberculosis, and cure rates as proportions. All analysis was performed using Microsoft Excel.



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Results: Sambalpur district notified 6594 individuals with TB from 2018 to 2021. The notification rate was highest in 2019 (154 per lakh population) and lowest in 2020 (120 per lakh population). We observed a drop in notification from April 2020 to Feb 2021. Maneswar block notified highest cases consistently in the four study years (176 - 247 per lakh population). More cases were notified among males than females in all age groups other than the paediatric group (<14 years). Eighty-eight percent (n=5804) were new TB cases, and 72% (n=4748) were pulmonary TB. Delay in treatment initiation was highest in the year 2020 (4.5%), followed by 2021 (3%). The TB cure rate was less than 70% in all study years. The death rate was highest in 2020 & 2021, with 11 TB deaths per 1 lakh population.

Conclusion: We noticed a reduction in TB notification, delay in treatment initiation, and poor outcomes during 2020 – 2021. We recommend having continuum of care for TB even during pandemic situations to sustain our efforts for TB elimination.

Keywords: Tuberculosis, Notification rate, Cure rate, Odisha

❖ Title: Epidemiology of Diabetes Mellitus and Hypertension screening in Kozhikode, Kerala, India, 2017-2021

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Rajendran N, *Department of health services, Kerala*

Co-authors:

- Srinath Ramamurthy
- Kalyani Sailesh
- Mohan Kumar Raj

Introduction: The National Programme for prevention and control of Cancer, Diabetes Mellitus, Cardiovascular diseases, and stroke (NPCDCS) was implemented in Kozhikode in 2013. The district wise analysis on screening and detection has not been done since its implementation. The study aims to describe screening and detection of Diabetes Mellitus and Hypertension in Kozhikode.

Methods: We extracted the data from form 5A from the district NCD cell of Kozhikode, Kerala for 2017 to 2021. We described the trend in screening and diagnosis for diabetes and hypertension using time (epidemic curve) and personal characteristics. We estimated the screening yield with 95% Confidence Interval (C.I). We used Microsoft Excel for analysis.

Results: NPCDCS Kozhikode conducted 5571 NCD camps and 62459 NCD clinics during 2017-2021 with a monthly average of 116 and 1301 respectively. 13,99,930 (81%) of the estimated target population were screened. The proportion of women screened (62%) was higher as compared with Men (38%). Among screened, 25,470 (Screening yield 1.8%, 95%CI:1.7-1.8) were newly diagnosed with Diabetes Mellitus and 54,760 (screening yield 3.9%, 95%CI:3.8-3.94) were diagnosed with Hypertension. Of the total institutions, 9(10%) have exclusive NCD clinics and they contribute 44% of the total screened and diagnosed 24,412 (46%) Hypertension and 10,934 (43%) Diabetic Mellitus.

Conclusion: Screening coverage was low among men. The yield for diabetes and hypertension screening activity was low and it implies the need to strengthen opportunistic screening and start population-based screening.



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Only one-tenth of health institutions have exclusive NCD clinics and almost half of screening is done by them and contribute half of the diagnosis. Exclusive NCD clinics should be established in all PHCs and major health institutions. Periodic supervisory visit to ensure reporting and accuracy of data. The regular periodic analysis will help identify the gaps in the system and help rectify them.

Keywords: Diabetes, Hypertension, Non-Communicable Diseases, NCD clinics, Screening,

❖ **Title: Epidemiology of Individuals with End Stage Renal Disease (ESRD) registered in the dialysis program in Dhenkanal, Odisha, 2018 – 2022**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

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Background: Considering the rising burden of chronic kidney disease and its financial burden, the Government of Odisha initiated “free-of-cost” dialysis through National Dialysis Program in Odisha in 2018. Data on End Stage Renal Disease (ESRD) patients are not routinely analyzed.

Objective: The study described the epidemiology of these individuals in Dhenkanal, Odisha, 2018 to 2022, by time, place, and person.

Materials and methods: We conducted this secondary data analysis on the line list of individuals with ESRD extracted from the dialysis unit of the district hospital, Dhenkanal, from 2018 to 2022. We summarised age, gender, clinical profiles, and outcomes as frequencies and calculated the prevalence of ESRD per million population. We compared age and gender across dead and alive individuals using Chi-square test. We used Epi Info version 7 for analysis; a p-value <0.05 was considered significant.

Results: The total number of individuals with ESRD registered for dialysis during the study period was 371. Half (206/371, 56%) of the individuals were in the 40-59 groups, and the majority (310/371, 84%) were males. Registrations increased during January to March and also between July to September. The prevalence of ESRD in the Dhenkanal district was 239 per million population. Kamakhyanagar (505) and Sadar (411) blocks showed a higher prevalence per million population than other blocks. Among 371, 78% (n=290) were still receiving care, 17% (n=64) were dead, and 5% (n=17) were dropouts. We observed a significant gender difference among the reported deaths (male 19% [59/310] vs. female 8% [5/61]; p-value: 0.041). Details of comorbidity and laboratory values were missing in the register.



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Conclusions: There was no standardized format for data collection in the dialysis unit, Dhenkanal. We recommend establishing a standard reporting format in the dialysis unit. We must initiate opportunistic screening for Chronic Kidney Disease in blocks with higher ESRD prevalence.

Keywords: ESRD, National dialysis program, Dhenkanal, Odisha

❖ **Title: Epidemiology of Malaria cases reported from Government Health Facilities in District Dantewada, Chhattisgarh, 2018-2022**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance
Presenting author:

Dr. Seema Tigga, Indian Council of Medical Research, National Institute of Epidemiology, Chennai

Co-authors:

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1- Indian Council of Medical Research, National Institute of Epidemiology, Chennai

1- State Nodal Officer, Intergrated Disease Surveillance Programme, Chhattisgarh

2- District Nodal Officer, Dantewada, Chhattisgarh

Introduction: India accounted for about 82% of all malaria deaths in this region in 2020. Chhattisgarh accounts for 2% of the total population of the country, contributed >16% of the total malaria cases, 23% of Plasmodium falciparum, and 7% of deaths due to malaria in the country.

Objectives: To describe the epidemiology of reported malaria cases under National Vector Borne Disease Control Programme (NVBDCP) and Intergrated Health Information Platform (IHIP) in district Dantewada, Chhattisgarh, India by time, place, and person between January 2018 and December 2022.

Materials and Methods: We conducted surveillance data analysis of laboratory-confirmed aggregate malaria cases reported under malaria component of NVBDCP and IHIP from Jan 2018 to Dec 2022 in district Dantewada. We also extracted IHIP line-listed reported malaria cases between January 2021 and December 2022. We used Microsoft Excel to collate and analyse the data. We estimated the Annual Parasite Incidence (API) per 1000 population by year and block and Annual Blood Examination Rate (ABER) per 100 population by year. We calculated the Test Falciparum Rate (TFR) per 100 samples by year.

Results: A total of 5,883 lab-confirmed malaria cases were reported under NVBDCP and IHIP between 2018 and 2022 in the Dantewada district. Annual Parasite Incidence (API) decreased from 43.4 (13,180/3,03,738) in 2018 to 8.4 (2565/3,03,738) in 2021 and increased to 11.9 (3,643/3,03,738) in 2022. Annual Falciparum Incidence (AFI) decreased from 36.5 (11,084/3,03,738) in 2018 to 10.8 (3286/3,03,738) in 2022. In 2022, the Katekalyan block reported a high API of 28.1 per 1000 population among the four blocks. ABER decreased from 43.4% in 2018 to 6.7% in 2022. During 2021-2022, TFR remained more than 15%.

Conclusion: The incidence of malaria increased in the recent years. We recommended to investigate the reasons for increased API and strengthening vector control initiatives in the district.

Keywords: Malaria, Chhattisgarh, epidemiology, surveillance,



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❖ Title: Epidemiology of Malaria, district Korba, Chhattisgarh, India, 2018-22: Surveillance data analysis

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance
Presenting author:

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Introduction: India contributes 3% of the global malaria burden in India in 2019. Chhattisgarh state accounts for 18% of national burden and contributes 40% of deaths in the country.

Objectives:

To describe lab-confirmed malaria positive cases reported under National Vector Borne Disease Control Programme (NVBDCP) in district Korba, Chhattisgarh, India by time, place, person from 2018 to 2022.

Materials and Methods: We conducted secondary data analysis of lab confirmed malaria aggregate number of cases reported under NVBDCP from 2018 to 2022 in Korba district. We estimated Annual Parasite Incidence (API) per 1000 population of malaria and Annual Falciparum Incidence (AFI) per 1000 population by year and block. We calculated test falciparum rate (TFR per 100) and annual blood examination rate (ABER per 100 population). We extracted district level aggregate data of NVBDCP malaria component and analysed in Microsoft Excel.

Results: A total of 4,333 lab confirmed malaria cases were reported under NVBDCP between 2018 and 2022 in Korba district. API decreased from 1.6 in 2018 to 0.6 in 2022. Similarly, AFI decreased from 0.7 in 2018 to 0.1 in 2022. Increase in incidence was observed during July to October in the reported years. Plasmodium falciparum (Pf) infection among cases reported increased from 43% (959/2229) in 2018 to 81% (88/109) in 2022. ABER was more than 10% in all reported years. In 2022, among five blocks, Podiuproda block reported high AFI 0.22 per 1000 population (48/219,649) and TFR 0.5 per 100 tested. Of 4,333 cases, females contributed 57% and majority cases were more than 15 years of age (65%).

Conclusion: Incidence of malaria peaked between July and October months in Korba district. Increase in proportion of falciparum malaria in recent years. We recommended to investigate the reasons for increase in falciparum cases and intensify vector control measures from May month.

Keywords: Malaria, Chhattisgarh, Incidence, falciparum, surveillance



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❖ **Title: Evaluating the impact of Bovine Colostrum supplementation on linear growth among children: A community based interventional study**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Deshna Oswal

❖ **Title: Evaluation of District Mental Health Programme in Hooghly District, West Bengal**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

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Introduction: In India an estimated 10.7% of population is affected by mental health disorder with a treatment gap of more than 80% for different mental disorders. District Mental Health Programme (DMHP) was added in 1996 to National mental Health Programme (NMHP) envisaging the provision of community mental health services by facilitating integration of mental health care by decentralizing the treatment from specialized mental hospitals thereby promoting mental health care for all.

Objectives:

1. To assess the implementation of DMHP in the Hooghly district.
2. To measure the programme effectiveness through the different stages of implementation of DMHP

Materials and Methods: This observational epidemiological study was conducted between September to October 2022 based on evaluation of Secondary Data collected using Pre designed checklist based on (modified WHO-AIMS) in Hooghly district. Information regarding implementation of programme, staffing pattern, position of funds, training programme were collected.

Results: DMHP was started in Hooghly from 2018. Hooghly district has a robust model for service delivery with an average 12-13 outreach clinics per month, 80% of manpower availability in DMHP team, good fund utilization of 98%, training of 73% of ASHA and 56% of medical officers with scope for scale-up of the program. Lack of dedicated IPD (in patient department) facility and increased coordination with private sectors is required along with increased health promotional activity.

Conclusion: DMHP is playing a vital role in Hooghly district with good number of OPD and outreach clinics and imparting training. Increased funding and initiating IPD facilities will strengthen the district and periodic evaluations to monitor its implementation will help in taking any mid-course corrections.

Keywords: District Mental Health Programme, National Mental Health Programme, , Mental health



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❖ **Title: Evaluation of Hypertension Component of National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke in Public Health Facilities of District Sangrur, Punjab, India, 2022**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

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Introduction: The National Program for the Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS) was initiated with the focus to enable opportunistic screening for common non communicable diseases, at District and CHC levels, through NCD clinics and population based screening.

Objectives: The objective of the study was to evaluate the extent of implementation of opportunistic screening arm of hypertension component in public health facilities as per the guidelines under NPCDCS program.

Materials and Methods: We conducted a cross-sectional study from May to July 2022 in 10 public health facilities selected by simple random sampling (1 district hospital, 1 sub district hospital, 2 community health centres and 6 primary health centres). We evaluated the facilities using an observation checklist and a semi structured questionnaire and interviewed the medical officers and staff nurses in the NCD clinic. We used log frame matrix to define the indicators and expressed them using percentages. Data from survey sheets transferred to excel sheets using EpiInfo v7.2.4 and analysed.

Results: All ten facilities had functional BP apparatus. Among the facilities, 8 of them had screening register and 7 displayed IEC materials related to hypertension screening. Only 3 out of 10 facilities displayed an NCD banner. The coverage of opportunistic screening based on previous day records was 52% (135/260) and yield was 27% (611/2263). Although all the nurses interviewed were trained in hypertension screening, only 2 of them were aware of cut off for diagnosing hypertension.

Conclusion: The coverage of opportunistic screening may be improved by having a designated area for NCD clinic, screening register and IEC materials at the clinic. Since the yield is high, opportunistic screening needs to scaled up in all health facilities. Nurses need to undergo periodic refresher training to strengthen the opportunistic screening.

Keywords: Program evaluation, Hypertension, Opportunistic screening

❖ **Title: Evaluation of treatment and follow-up component of Hypertension program in Public Health Facilities, Rajnandgaon, Chhattisgarh, India, 2022**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics



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Background: The National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular diseases and Stroke (NPCDCS) in India has a component to prevent and control hypertension.

Objectives: To evaluate the treatment and follow-up arm of the hypertension component of NPCDCS in Rajnandgaon district, Chhattisgarh.

Material and Methods: We conducted a cross-sectional study among public health facilities in April-June 2022. We selected ten health facilities (1 district hospital, 3 community health centers, 6 primary health centers) by simple random sampling. We used an observation checklist to evaluate facilities. We interviewed all the medical officers involved in hypertension management and at least five individuals on hypertension treatment (beneficiaries) in each facility using a semi-structured questionnaire through exit interview. We defined controlled blood pressure (BP) as systolic BP ≤ 140 mmHg and diastolic BP ≤ 90 mmHg. We used the log frame matrix to define the indicators and expressed them using percentages. We analyzed the data using Epi Info v7.2.4.0.

Results: Of the 10 public health facilities, nine had at least one medical officer trained in hypertension management. Nine of the 10 facilities had reported drug stock-out at least once in the past three months. Eight of the 10 interviewed medical officers knew the cut-off value for controlled BP. Of the 50 beneficiaries interviewed, 30 (60%) had BP under control, and 45 (90%) received counselling on salt restriction, but 49 (98%) were eating high salt foods. Of the 20 individuals with uncontrolled BP, treatment was not escalated for 14 (70%).

Conclusion: More than one-third of beneficiaries had poor BP control, possibly due to drug stock out in the facilities, non-escalation of treatment by medical officers and intake of high salt foods. Refresher training of the medical officers on hypertension management and nurses on counseling techniques related to lifestyle modification can improve BP control among beneficiaries.

Keywords: Blood pressure, Hypertension, Program Evaluation

❖ **Title: Examining effect of outdoor air pollution exposure on lung function of adolescents in slums of Mumbai, India**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

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Introduction: Several epidemiological studies have identified exposure to air pollution as a major risk factor for compromised respiratory health in adolescents, with vehicular traffic being a major contributor to air pollution in urban communities. However, evidence for the effect of air pollution exposure on the lung function of adolescent children from the socioeconomically deprived groups is scarce, especially in low- and middle-income countries such as India.

Objective: This study aims to investigate the association of lung function and air pollution (using proxies of outdoor exposure to air pollution) in adolescent children living in slums of Mumbai. **Materials and Methods:** The current study is a part of the APEAL (Longitudinal Effects of Air Pollution Exposure on Adolescents Lungs) study, a cohort study being conducted in four cities of India – Delhi, Mumbai, Bangalore and Mysore. Lung function of ~450 randomly selected children in Mumbai, aged 11-13 years, was measured using portable spirometers (EasyOne). Exposure proxies such as distance from the nearest major and minor roads, length and street density of roads, were derived using geographic information system (GIS). Other covariates and confounders were collected using structured online questionnaires.

Results: Mean percent predicted FEV₁, FVC, FEF₂₅₋₇₅ and PEF for males (n=244) were 77.8 ± 10.2, 80 ± 10.8, 84.1 ± 20.4 and 77 ± 12.6, respectively. Corresponding values for females (n=204) were 75.4 ± 11.1, 78.2 ± 12.2, 90 ± 24.5 and 76.4 ± 13.6, respectively. The preliminary analysis shows that lung function increases as distance from minor roads increases in the male children (mean % predicted FVC at < 40 m from minor road is 77.4±9.5, at 40-100 m is 80±12.6 and at 100-175m is 84.1±9.7, p>0.05). Corresponding values for females were 79.4±12, 78.1±11.3 and 79±12.7 at respective distance cut-offs, however, no such increase was observed in case of females. **Conclusion:** Proximity to minor roads which in slums can be a proxy of exposure to urban vehicular air pollution is associated with lower lung function in urban slum adolescents. Further analysis of the effects of these exposure proxies adjusted for the other confounders is currently underway.

Keywords: Lung function, traffic proxy, spirometry, adolescents, urban, slum

❖ **Title: Exploring the Reasons for Drop outs of Antara Injection from Beneficiaries' and Service Providers' Perspective in Burdwan Municipality area of Purba Bardhaman District, West Bengal, India: A Qualitative Study**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Introduction: The inclusion of the Antara Programme into family planning services signals a shift in the nation's perspective and helps recipients achieve their goals for reproductive health. Antara injection is considered as a highly effective, long-acting reversible contraceptive, it has limited acceptability. Understanding the reasons behind DMPA's limited acceptability from both beneficiaries' and service providers' perspectives is crucial in order to implement appropriate measures at various levels.

Objectives: To explore the reasons for drop outs of the subsequent doses of injectable contraceptive (DMPA) by the beneficiaries after taking the prior doses in Antara clinics of Burdwan Municipality of Purba Bardhaman district, West Bengal, and to explore the constraints in service delivery faced by service providers.

Materials and Methods: A descriptive type of qualitative study was conducted from October'22 to February'23 through In-depth Interviews (IDIs) of 18 beneficiaries and Focus Group Discussion (FGD) among 8 Auxiliary Nurse Midwives (ANMs). Data was collected by audio recording the IDI, FGD and taking notes. Inductive thematic analysis was done.

Results: The reasons for drop outs of Antara injections among beneficiaries were found to be side effects (Irregular bleeding, abdominal pain), familial resistance, and various misconceptions. Additionally, the significant challenge of recalling and visiting the clinic again for repeated injections was also recognized as a hindrance to sustained usage. Service providers cited stockouts, inadequate counseling, and lack of training as reasons for discontinuation. Both beneficiaries and service providers cited sociocultural factors (stigma), lack of awareness, and economic burden, as a barrier to consistent use of Antara injections.

Conclusions: The current study has shed some insight on the factors for the drop outs of Antara as a method of family planning. The study's findings are anticipated to be applied in formulating regulations that will increase compliance of Antara and make the program more acceptable and consumer-friendly.

Keywords: Antara, Auxiliary Nurse Midwives, DMPA, Focused Group Discussion, Injectable contraceptives, West Bengal

❖ Title : Extent, Pattern and Associates of Fast Food Consumption among Rural Adolescents of Prayag Raj

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

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Co – author :

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Introduction: Over the past decades, the consumption of fast foods has increased worldwide. Increasing menace of fast food consumption is gradually being realized in rural areas.

Objectives: To find out associates of knowledge, opinion and consumption of fast food by rural adolescents.

Materials and Methods: This community based cross sectional study was conducted on 213 adolescents selected by multistage sampling procedure from rural Prayagraj. Each subject was interviewed about knowledge, opinion, and consumption of fast foods with the help of predesigned and pretested proforma. Analysis of data was done through SPSS and for finding out associates chi square test was used.

Results: Majority (99.5%) of the subjects had knowledge about fast foods and 84.0% subjects consumed fast food. In all 40.4% subjects agreed to the statement “Fast food fulfils hunger” whereas 62.4% subjects felt energetic after eating fast food. Effect of fast food consumption on mental health was stated by 84.5% subjects. There existed significant association of opinion of subjects regarding fast food fulfil hunger with type of family, social class of subjects.

Keywords: Adolescents, Fast Food, Mental health

❖ Title : Facilitators and barriers of medication adherence among type II diabetes mellitus patients attending the diabetes clinic of a tertiary care hospital, Kolkata: A mixed-methods study.

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

- **Dr. Abhipsa Dey**, Junior resident, Calcutta National Medical College.

Introduction: Type II diabetes mellitus is a disease of epidemic proportions in India and medication adherence is a primary determinant of treatment effectiveness.

Objectives: 1. To assess the medication adherence and factors associated with it among type II diabetes mellitus patients attending the diabetes clinic of a tertiary care hospital, Kolkata. 2. To identify the facilitators and barriers of medication adherence among them

Materials and methods: This cross-sectional, mixed methods (explanatory sequential), study was conducted among type II diabetes mellitus patients attending the diabetes clinic of Calcutta National Medical College. Quantitative assessment of medication adherence and its associated factors was done among 308 participants, selected by systematic random sampling and interviewed using a pre-designed, pre-tested schedule. Facilitators and barriers of medication adherence were explored by conducting in-depth-interviews with 12 participants, selected purposively until data saturation.

Results: Medication adherence was found to be poor among 35% of the study participants. On multinomial logistic regression, medication adherence was found significantly associated with age, glycemic control, Body Mass Index and type of medication. On thematic analysis of the transcripts obtained from the recorded interviews, several themes regarding facilitators of adherence emerged such as: self-awareness and fear of disease, family support, good communication from service provider, etc. Several themes regarding barriers of adherence also emerged such as: inability to afford treatment,



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overburdened by multiple medications, preference of alternate system of medication, overcrowding and delayed services at hospitals etc.

Conclusion: Non-adherence to diabetes medication is a considerable problem. Focus should be directed on the perceived barriers to help promote adherence.

Keywords: Diabetes mellitus, medication adherence

❖ **Title: Factors associated with Common Mental Disorders among adolescent living with HIV who attended paediatric HIV service of a tertiary care facility in New Delhi**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Semanti Das, (Presenter), Junior Resident, Centre for Community Medicine, AIIMS, New Delhi

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Introduction: Good mental health is essential for successful transitions of the adolescents living with HIV (ALHIV) into adulthood and face the long-term challenges of remaining in medical care, sustaining medication adherence, and achieving viral suppression. The objective of the study was to assess the factors affecting Common Mental Disorders (CMD) among ALHIV who attended a paediatric HIV service of a tertiary care facility in New Delhi.

Materials and Methods: This was a Case-Control study design. We recruited 50 cases and 50 controls. ALHIV scoring ≥ 5 on the PHQ 9 or ≥ 5 on the GAD 7 were classified as cases and those who scored < 5 on both PHQ 9 and GAD 7 were taken as controls.

Results: Death of a parent (OR= 3.63(95% CI= 1.27-10.38)) and disclosure of HIV status to the participant by their caregiver (OR= 4.36 (95% CI= 1.24-15.26)) were significantly associated with higher odds of having depression and anxiety among ALHIV. Having a CD4+ count less than 500/mm³ (OR= 3.63(1.02-12.98)) and < 350 /mm³ (OR= 11.44(2.07-63.39)) were associated with significantly higher odds of a Common Mental Disorder as compared to patients who had a CD4+count of at least 500/mm³. Age and sex of the participant, travel time to the clinic, socio-economic status of the participant, type of family and perceived social and family support were not associated with increased odds of common mental disorders in the participants.

Conclusion: There must be proper linkage with mental health services for all adolescents who are started on anti-retroviral therapy, especially those that have factors associated with higher odds for CMD.

Keywords: Common mental disorders, Adolescent living with HIV, Depression, Anxiety.



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❖ Title: Factors associated with Out-of-Pocket health Expenditure: A Cross-sectional Study in Rural West Bengal

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

- **Dr. Sukanya Ghosh**, Dept of Community Medicine, College of Medicine & Sagore Dutta Hospital.

Co-authors:

- **Dr. Santanu Ghosh**, Dept of Community Medicine, College of Medicine & Sagore Dutta Hospital.

Introduction:

In India, health expenditure accounts for 2.1% (FY23) of the Gross domestic product. Household's Out of Pocket Expenditure on health (OPPE) is 48.21% of Total Health Expenditure and 1.52% of GDP (Rs 2,155 per capita).

Objectives:

1. To estimate the Out-of-pocket expenditure in the gram panchayets under Barrackpore 2 Community Development block.
2. To Find out the Factors associated with Out-of-pocket expenditure.

Materials and Methods: It is a community based; observational, cross-sectional study conducted in a duration of 3 months, in the gram panchayets under Barrackpore 2 CD block.

A sample size of 215 calculated, taking estimation of households incurring OOPE to be 78%.

215 households were selected by simple random sampling technique from all 6-gram panchayet under Barrackpore 2 CD block.

Predesigned pretested structured questionnaire used to assess out of pocket expenditure in past 6 months and the factors associated with it after taking appropriate consent.

Median (\pm IQR) and percentages used to present summary measures of both dependent and independent variables. Mann Whitney U/Kruskal-Wallis H test was done to compare differences between two/more than two groups of an independent variable.

Results: The median Out of Pocket expenditure is Rs: 2245/-. IQR (500-3225).

Median Direct cost of care 2000 INR (IQR 500-3500), Indirect cost of care 200 INR (IQR 100-500).

Education level and socioeconomic status showed significant association ($p < .05$) with Out-of-Pocket expenditure.

Conclusion: There is considerable portion of direct cost of care among the Out-of-pocket expenditure. Although Govt. insurance is widely available but round the availability of drugs and diagnostic facility at all govt facilities is of utmost importance.

Keywords: Out of Pocket Expenditure, health expenditure, Direct & Indirect cost of care.



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❖ **Title: Family and Facility care variables attributing to Postnatal depression among women in two tribal-dominated districts of Odisha: Log model analysis to suggest intervention.**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Introduction: Postpartum women are affected by poor mental health predominantly depression, scored by validated tool Edinburgh postnatal depression scale. Odisha has made laudable progress in delivering MCH care in tribal-dominated districts through robust comprehensive care, restricting home delivery to 4-5% and reduction of maternal deaths by 60-70% as per NFHS-5.

Objectives: To measure mean postnatal depression in women. To compare family vs facility-care as greater attributing factors for higher EPDS scores. Materials and methods: 2 villages each from Koraput and Boudh were selected. Women having 1-6 months old baby were selected, who consented. Questionnaire was used that elicited information on familial socio-demographic details and facilitybased ANC and post-delivery services availed by them. General Health Questionnaire-12 scores were used as independent variable and a proxy measure of cumulative familial stress. Descriptive and log regression used to measure odds of family vs Facility-based services.

Results: Total 98 women, 50 from Boudh, 46 from Koraput participated. Koraput's mean EPDS scores were 6 points higher than Boudh indicating poorer mental health. Log models showed no difference in facility-based care. Both reported 96-97.3% institutional delivery, OOP expenditure

❖ **Title: Field Response to the Detection of Sabin-like Type-3 Isolate from Polio Virus Sewage Surveillance, Shahdara, Delhi, India 2022**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

• **Dr. Vijaya Dhage**, Applied Epidemiology Programme, World Health Organization, New Delhi, India

Co-authors:

• Mohammad Ahmad

• Ismeet Kaur Kevisetuo

• Anthony Dzeyie



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Introduction: India conducts polio virus (wild or vaccine derived) surveillance through acute flaccid paralysis (AFP) cases and sentinel sites for environmental sewage sampling. On 5 May 2022, Delhi detected a Sabin-like-3 (SL-3) isolate with 8 nucleotide changes from Shahdara sewage sampling site.

Objectives: To mitigate the risks of SL-3 progression to infectious virus (≥ 10 nucleotide changes), we responded with objectives to identify AFP cases and assess polio vaccine coverage in the identified areas.

Methods: We conducted house-to-house survey in six identified areas under 13 planning units situated approximately 2 Kilometer upstream and downstream of Shahdara sewage sampling site to identify AFP cases among <15 years in the community. We searched AFP cases in health facilities and reviewed the AFP surveillance data for the last six months. Stools samples were sent for polio virus detection from identified AFP cases. We assessed the polio vaccine {oral polio vaccine (OPV) and fractional inactivated polio vaccine (fIPV)} status of children <2 years through routine immunization (RI) in the identified areas. We also reviewed supplementary immunization activity (SIA) data post national immunization day (NID) held in February 2022. Results: We surveyed 12,420 houses and identified no AFP cases from community or from the health facilities catering to the area. During the last six months, routine AFP surveillance detected 18 AFP cases. Stool samples of the identified AFP cases showed no polio virus. The surveillance data showed non-polio AFP rate of 9 and stool adequacy of 92% for Shahdara in 2022. We identified 1879 children <2 years; OPV third dose coverage was 93%, fIPV1 96% and fIPV2 90%. Five of the 13 planning units had both OPV3 and fIPV2 coverage <90%. The SIA monitoring data showed 13% (24/191) unimmunized children in one area of Shahdara. The follow up sewage samples (once a week) for next 12 weeks from Shahdara detected no Sabin strain or polio virus though non-polio entero-virus was detected.

Conclusion: We responded to the environmental detection of SL-3. No AFP was detected or linked to the strain. The RI polio vaccine coverage was adequate in all but six dispensary areas and one area had high proportion unimmunized children during SIA. We recommended planning of special immunization session in identified area with poor coverage, we recommended for regular sensitization of field level health workers for suspected AFP case reportin

❖ **Title: First Aid Practice and Clinico-social parameters of patients Attending Anti Rabies Clinic of a Tertiary Care Hospital, Odisha**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Introduction: Rabies is a neglected zoonotic tropical disease which is highly fatal. First aid practice like washing wound with soap and water is mandated in the initial management of the wound. But, this is the



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most neglected part and there is paucity of literature exploring the first aid practices among cases of animal bite.

Objective: To study the first aid practices adopted by the animal bite patients and their clinico-social profile.

Materials and Methods: A hospital based cross sectional study was conducted in anti-rabies vaccination (ARV) clinic of SCB MCH for two months. Every alternate animal bite cases coming to ARV clinic consenting for the study was included. Those who had washed their wound with soap and water for at least 15 min were considered as proper first aid practice. A pre-designed pre-tested semi-structured questionnaire was used for collection of data.

Statistical methods Data analysis was done using SPSS version 20.0 (trial version). Quantitative variables were summarised as Mean \pm SD, Qualitative variables were summarised as proportions. For inferential purpose Chi-square test, Fisher's exact test were used and a P value of <0.05 was considered for significant difference.

Result: Majority (86%) cases were category-III exposure. In all 22% patients did not adopted first aid practices at all. As a part of local treatment 37% patients applied non pharmacological substances and among those 80% applied bitter gourd leaves as local treatment. First aid practice adoption was significantly associated with gender.

Conclusion: About one in five patients did not use first aid properly and 29% applied bitter gourd leaves as a local treatment. The first aid practices by the patients are far from satisfactory and acceptable. Extensive IEC and proper counselling to the patients is mandated for improvement in initial management of animal bite cases.

Key Words: Rabies, First Aid Practices

❖ **Title: Gaps in Utilization of Public Health Services among Women of Reproductive age Group (15-45 years) in Rural area of East Singhbhum District: A Qualitative Study**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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- **Dr. Syed Irfan Ali**, Professor,
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- **Dr. Swati Shikha**, Assistant Professor,

(Department of Community Medicine, Manipal TATA Medical College, Jamshedpur, Manipal Academy of Higher Education, Manipal, India)

Background: Public and private health care service providers are both a part of India's mixed health care system. The government's primary method of providing healthcare is known as the public health care system. Unfortunately, the system has trouble delivering certain services, particularly in remote or



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difficult-to-reach areas. **Objectives:** To assess the perception towards public health services among women of reproductive age group in rural areas of east singhbhum district & to explore the challenges faced by them to access the available services. **Materials and Methods:** It was a qualitative study done among the women of reproductive age group (15-49 years) as study participants which were selected using convenient sampling in the rural area of east Singhbhum district. Total duration of the study was about 10 months. In-Depth Interviews were conducted with the study participants to know the gaps in utilization of public health services. Total number of IDIs conducted were 24. All the IDIs were recorded and transcribed for content and thematic analysis. Software used for analysis was ATLAS-Ti (Demo version). **Results:** After analysis of all the 24 transcripts, various codes were generated for thematic analysis under different themes. It was observed that the public health services utilization has increased among the women of reproductive age group. Some codes came out during analysis like long waiting time, availability of services, behaviors of staffs, quality of services, accessibility to health care utilization, awareness about the available services, for which different participants had different views which was shown by network analysis and word cloud. **Conclusion:** It was concluded from the study that the study participants were aware about the public health services available more and also utilization has been increased in last few years which may be due to availability of services and reduced waiting time.

Keywords: Public health services, Maternal health, Adolescents, Rural area

❖ **Title: Hand washing practices by mother in urban slums of Guwahati. A community based cross-sectional study.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

- **Dr. Smita Lamsal, PGT, Department of Community Medicine, GMCH**

Co-authors:

- **Dr Jutika Ojah, Professor and Head, Department of Community Medicine, GMCH**

Introduction: Morbidity from infectious diseases is high in the slum areas due to poor sanitation and low literacy rate. Since handwashing is the baseline preventive method to improve sanitation and thus prevent infectious diseases. However, there are limited data that have assessed the hand hygiene behaviour of mothers in slums so this study was conducted.

Objective: To estimate the knowledge and practices of hand washing among the mothers in the urban slum areas of Guwahati city.

Materials and Methods: A community-based cross-sectional study was conducted in the registered urban slums of Guwahati in Assam from November 2022 to January 2023. Taking the prevalence of 19% from a previous study and relative error as 15% the sample size was found to be 165 and was rounded off to 170. Out of the total 99 notified slums 10 slums were selected randomly then from each selected slum 17



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households were selected randomly and one mother from each of those household was included in the study.

Results: In this study 70% mothers regularly practised hand washing with soap after defaecation and 42% after cleaning the child feces. 34% practised hand washing with soap during serving and child feeding. 80% knows the importance of hand washing for prevention of diseases, 68% believe hand washing with water is sufficient. Significant association was found between mothers education and hand washing practices.

Conclusion: Hand washing with soap (HWWS) is still not properly practised in slum areas. Majority mothers believed that hand washing with water alone is sufficient, which emphasizes that there is no awareness about the hand hygiene practices thus, requires promotion of awareness activities for mothers residing in the slum areas.

Keywords: Hand washing; diarrhoea; pneumonia; under-five children

❖ Title: Health Burden due to Cigarette, Bidi and Smokeless Tobacco Consumption in Rajasthan

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Nitin Kumar Joshi, School of Public Health, All India Institute of Medical Sciences, Jodhpur

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Background: A staggering 270 million people consume tobacco in India. Rajasthan has low age of initiation (7.6-13.4 years) and high prevalence (24.7% in adults and 4.1% in the youth) of tobacco use. With a quarter of state's population being tobacco users, it is necessary to estimate the exact mortality and morbidity due to tobacco. Current literature only provides estimations of odds and risk of disease development due to tobacco consumption.

Objective: This study was done to estimate the deaths, DALYs and premature life years lost attributable to consumption of cigarettes, bidis and smokeless tobacco in Rajasthan.

Methodology: Pooling and meta-analysis was done using case-control studies on the three types of tobacco products. Health burden was estimated by population attributable fraction 3 due to specific product and applied to the total state disease burden.



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Results: From the 33 included studies, PAF was calculated for oral and lung cancer and IHD due to cigarettes, oral and lung cancer, IHD and COPD due bidi, and oral and stomach cancer, IHD due to SLTs. Cigarettes result in 357,724 DALYs loss, 351,752 YLLs and 13,147 deaths, bidis in 685,094 DALYs, 627,097 YLLs and 28,633 deaths, and SLTs for 189,890 DALYs, 186,752 YLLs and 6,779 deaths annually in Rajasthan.

Conclusion: A novel methodology has been utilised for generating evidence of measurable health burden in this study. The evidence could be utilized for policy recommendations and similar estimations for other regional contexts.

Keywords: Tobacco, Disability-Adjusted Life Years, Morbidity, Mouth Neoplasms, Lung Diseases, Policy

❖ **Title: Health facility preparedness as per government policy initiatives regarding Respectful Maternity Care**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

- **Dr. Bindiya C Gowda**, Junior Resident

Co – author :

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- **Dr. Srikanth S.** Additional Professor, Department of Community Medicine and Family Medicine, AIIMS Jodhpur

Introduction: Respectful maternity care: Care organized for and provided to all women in a manner that maintains their dignity, privacy, and confidentiality, ensures freedom from harm and mistreatment, and enables informed choice and continuous support during labour and childbirth.

Objective: To assess health facility preparedness as per government policy initiatives regarding Respectful Maternity Care.

Methodology: A qualitative study comprising of direct observation using a standard checklist and key informant interviews of stakeholders was conducted. Primary and secondary level public health facilities such as PHCs, CHCs and Urban health centres which provide routine obstetric care in Jodhpur were considered as this study setting. In rural 1 block was randomly selected, from which all the primary and secondary health facilities were approached, and deliveries were observed on random first visits. Since no urban PHCs were conducting deliveries, observation was not conducted. Key informant interviews were conducted to stakeholders such as programme managers at district level, RCHO, CMHO to know the policy initiatives regarding Respectful Maternity Care. These interviews were transcribed and thematically analysed.

Results: Direct observations conducted using the Standard Based Management and Recognition (SBMR) approach checklist consisted of 7 standards under 2 areas focusing on physical harm, informed consent, privacy, dignity, equitable care, negligence, and detainment of facilities. Care during labour & childbirth and Care during ANC & PNC were 2 areas for which 4 and 7 health facilities were observed respectively. None of the facilities protected women from physical harm during labour. None of the facilities taking proper informed consent from women before delivery. But standards were quite followed during



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antenatal care. Themes that emerged from KII were government initiatives, RMC in routine training, support for health care providers, facilitators, and barriers of services.

Conclusion: There is a performance gap at the facilities which need to be analysed for cause and that should be addressed through proper interventions. There is a need to correct the flaws in the ongoing initiatives currently rather than building a new policy as such to provide respectful maternity care.

Keywords: Respectful, maternity care, preparedness, health care facility

❖ **Title: Health Insurance Awareness Enrollment and its Utilization among the families residing at urban field practice area of a medical college in Visakhapatnam**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. V.Sujitha, PGT

Co-authors:

- **Dr. K.Sai Sushma**, Assistant professor.

Introduction : Health insurance is an important tool to provide health care facilities, boost health system and also important factor in improving the socio economic development of the country.

Objectives : 1. To assess the prevalence of awareness, enrollment and utilization of health insurance in the study population.

2. To find the association between awareness and enrollment of health insurance with socio demographic variables.

Materials and Methods : A community based cross sectional study was conducted for a period of 2 months in the urban field practice area of a medical college after obtaining approval from the institutional ethical committee. Total 100 households were included by systematic random sampling method. Data was collected from one individual above 18 years from each house using pre designed semi structured questionnaire and analysed using SPSS version 26. Fishers exact or chi square test were used to find the statistical significance. $p < 0.05$ is considered as statistically significant.

Results : In the present study, 100% of the study participants had awareness about health insurance, 86% were enrolled and 41% have utilized health insurance. Remaining results will be shared at the time of presentation.

Conclusions : Present study concluded that utilization of health insurance is less among the enrolled population. It is necessary to raise awareness and ensure proper utilization of health insurance.

Key words : Health insurance, urban, enrolment, utilization.



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❖ Title: Health literacy among general adult population of Bishnupur, Manipur: A Cross-sectional study

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

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Background: Low level of health literacy is a public health problem. Meeting the health literacy needs of societies will accelerate progress in reducing health inequities. By improving people's access to health information and their capacity to use it effectively, health literacy is critical to empowerment.

Objectives: To assess the health literacy of general adult population in Bishnupur district of Manipur and to determine its association with socio-demographic factors.

Methods: This study was conducted among general adult population of Bishnupur district from December 2022 to January 2023. Data were collected using Health Literacy Survey-European Union Questionnaire (HLS-EU-Q16) using google form from 576 participants selected by stratified multistage cluster sampling. Descriptive statistics, chi-square test and multivariate logistic regression were applied using SPSS vn.26 and $p < 0.05$ was considered statistically significant.

Results: Median age of the participants was 43(32-53) years and half of them were females. Among the participants, majority, 514(89.2%) had inadequate health literacy. Being employed [aOR:0.470 (0.227-0.973)], having no formal education [aOR:0.097(0.011-0.845)], educated upto primary school [aOR:0.111(0.013-0.933)] or secondary school [aOR:0.258(0.082-0.806)] were significant predictors of having less adequate health literacy. Fair self-perception of health [aOR:10.098(1.176-86.736)] had higher odds of adequate health literacy.

Conclusions: High prevalence of inadequate health literacy highlights the need for targeted measures to improve health literacy as it is an important determinant of health.

Keywords: Health literacy, General population, HLS-EU-Q16, Manipur



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❖ **Title: Healthcare, veterinary, poultry, and fishery professionals' perspective on the one-health aspect of antibiotic resistance: a qualitative study in Odisha, India**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

- **Ms. Sonam Karna**, ICMR-RMRC

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- Sanghamitra Pati (MBBS, MD & MPH, Scientist-G & Director, ICMR-RMRC)

Introduction: Antibiotic resistance (ABR) is one of the major public health concerns around the world, and it is now recognized as a vital One Health issue. Antimicrobial use and abuse in the human, animal, and environmental sectors are all results of ABR. Hence, it is critical to comprehend the diverse stakeholders' perspectives on ABR.

Objectives: To investigate the views of healthcare professionals, veterinarians, poultry farmers, and fishery professionals on one health aspect of ABR in rural Odisha's primary and secondary healthcare settings.

Materials and Methods: We conducted a qualitative study among healthcare providers (6 registered allopathic doctors, 2 AYUSH providers, 6 pharmacists, 4 staff nurses, 12 community-health workers), 2 veterinary practitioners, 4 poultry farmers, and 1 fishery professional in rural Odisha, India. We conducted two focus group discussions (FGDs) among community health workers and 25 in-depth interviews (IDIs) among other professionals. We used an interview guide – open-ended questions with probes for data collection. All the FGDs and IDIs were digitally recorded, transcribed, translated, and analyzed using thematic analysis methods. We used MAXQDA software for open-coding and selective coding of data.

Results: Three themes emerged: 1) Understanding of prescription practices, challenges, and ways to combat ABR, 2) Interpretation of infection and re-infection in the context of ABR, and 3) Views on one-health dimensions of ABR. The medical personnel recognized that antibiotics were being provided unnecessarily for many illnesses and they were unaware of the antibiotics prescribing guideline. According to community health workers, the ABR was adversely affected by the growing habits of self-prescription through the internet. Furthermore, the community's easy access to antibiotics through non-pharmaceutical drug dealers contributed to ABR. Other than the allopathic doctors, all other participants were ignorant of the one-health dimensions of ABR. However, following a briefing, they realized the public health significance of one-health and ABR.

Conclusion: Although all participants acknowledged that antibiotics are often used in human, veterinary, poultry, and fisheries, the "one-health" aspects of ABR remain unclear to many stakeholders, indicating the need for education, intervention, and research regarding one

Keywords: antimicrobial resistance, antibiotic stewardship, one health, rural community



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❖ **Title: Health-seeking behaviour among new adult Tuberculosis patients registered in government health facilities of Sonitpur district, Assam: A community based cross-sectional study.**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

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Co-authors:

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- **Dr.Ankur Phukan**, Assistant Professor, Department of Community Medicine, Tezpur Medical College, Tezpur.

Introduction: As India seeks to eliminate TB by 2025, Health-seeking behaviour is an important factor for early detection of people with TB. It is therefore imperative to describe health-seeking behaviour of people with TB.

Objectives: To describe pattern of health-seeking behaviour among new adult TB-patients registered in government health facilities of Sonitpur district, Assam.

Materials and Methods: A community-based cross-sectional study conducted from August 2021 to July 2022 among new adult TB-patients registered in government health-facilities of Sonitpur district, Assam. New TB-patients above 18 years, in intensive phase of their treatment including both pulmonary and extra-pulmonary TB-patients were included in the study with a sample size of 150. By Multi-stage sampling technique, in first stage 150 TB-patients were selected from 4 Tuberculosis-Units(TU) under Sonitpur district and in next stage under each TU TB-patients were selected from Testing-and-Diagnostic-Centres(TDC) based on the average proportion of case load contributed by the TUs and TDCs. The data was collected using a pre-designed and pre-tested schedule, entered in excel and analysed in epi-info-7.

Results: 98(65.3%) were male and 52(34.7%) were female; 81(54%) reported health-seeking delay >3 weeks and it was 29(55.8%) among females and 52(53.1%) among males; Of them 45(55.5%) visited pharmacy and 11(13.6%) chose traditional-medicine practitioners as first place for health-seeking. 50(62%) reported perceiving symptoms as due to mild illness and shall resolve by taking pharmacy drugs as reason for health-seeking delay.

Conclusion: Health-seeking delay is mainly due to misperception of TB symptoms and not prioritising health facilities for seeking health-care. Improvement of knowledge and awareness on TB symptoms in community can improve patient-initiated pathway for TB-diagnosis.

Keywords: Tuberculosis, Health seeking behaviour, NTEP.



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❖ Title: A Cross-Sectional Study on Morbidity Profile of Printing Press Workers in Madhyamgram Municipality Area of North 24 Parganas

Mode of presentation: Poster; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

Dr Aditi Rathod, Junior Resident-1, GMC Akola

Co – author :

- **Dr Amrit Mishra**, Junior Resident-2, GMC Akola
- **Dr Sanjeev Chaudhary**, Associate Professor and HOD, GMC Akola

Introduction: Printing press workers get exposed to wide range of risk factors ranging from potentially toxic chemicals to complex machineries, causing various morbidities among them.

Objectives: This study envisaged to estimate the prevalence of morbidities among Printing press workers and to elicit factors associated with those morbidities.

Materials and Methods: After obtaining institutional ethics committee approval, this cross-sectional study was conducted in three Printing press factories at Madhyamgram municipality from November, 2020 to October, 2022, among 190 study participants, selected through simple random sampling. Prior permission from the factory authorities and written informed consent from the participants were also obtained. A pre-designed pre-tested schedule was used, relevant general and clinical examinations were done and anthropometric measurements were also taken. Data was analysed using SPSS software version 16.

Results: The median age of the participants was 51 years (IQR=44-56). Among all study participants, 72.6% had any type of chronic joint pain, 53.2%, 29.5%, 37.4%, 36.3%, 18.4%, 16.8% and 11.1% study participants had chronic eye, ear, GI, respiratory, cardiac, neuro-muscular and urinary problems respectively and 60.5% study participants experienced any type of traumatic injury while at work in any time after their employment. Among all morbidities chronic neck pain and eye problems were more prevalent among officials. Although no statistically significant association [OR=5.74; CI=(0.69-47.6)] was found between chemical exposure and dermatological morbidities but a considerable proportion (43.7%) of participants had skin diseases. Exposure to loud noise [OR=3.85; CI= (1.11-13.3)] had significant association with development of hearing loss.

Conclusion: Findings of this study emphasized the need of using PPEs, maintaining appropriate posture while working, proper workplace illumination & ventilation. Pre-placement examination, periodic health check-up of the workers should be a norm & further research is needed to find out barriers in adapting appropriate workplace protective practices by the workers.

Keywords: Printing press, Occupational exposures, Health status, Printing Workers

❖ Title: Identifying the Knowledge Gaps in the Prevention of Dog-bites & Rabies among Adolescents in an Urban Area of Lucknow

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr Shruti Singh, Senior Resident, Community Medicine, Dr Ram Manohar Lohia Institute of Medical Sciences, Lucknow



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Background: Rabies is 100% fatal, but it is also 100% preventable if timely, appropriate and adequate preventive measures are taken. According to WHO, India contributes 36 per cent of the global rabies mortality, accounting for around 18000 to 20000 deaths annually. About 30–60% of reported rabies cases in India occur in children under 15 years of age, as bites in children are often unrecognized. Rabies is considered a model disease for the "one health" concept and hence identifying the knowledge gap in dog bite and rabies prevention among adolescents is the first step in implementing this concept.

Objectives:

1. To identify the knowledge gaps in the prevention of dog bites & rabies among adolescents in an urban area of Lucknow.
2. To estimate various sociodemographic factors associated with low knowledge about the prevention of dog bites and rabies among adolescents in an urban area of Lucknow.

Materials and Methods:

A cross-sectional study was conducted over a duration of six months and included 200 adolescents, residing in the urban field practice area of Dr RMLIMS, Lucknow.

The participants were subjected to in-person interviews using a predesigned, pretested, open-ended questionnaire in a door-to-door manner.

Results: Data analysis is in progress and the result is awaited.

After a preliminary analysis of one-quarter of the data, it was found that in the areas of rabies transmission from bites from animals other than dogs, rabies fatality, proper wound care, vaccination sites & the number of visits, and dog bite preventive methods the knowledge gap was biggest.

Conclusion: The overall knowledge about the prevention of dog bites & rabies is substantially low among the adolescents living in urban areas of Lucknow. Methods to identify a rabid dog and prevent dog bites are required to be taught through formal and informal educational methods. Also, the myths regarding dog bite wound care and vaccination, like smearing salt overwound, and that fourteen vaccines are injected in the abdomen should be demolished through targeted IEC materials.

❖ **Title: Impact of Co-morbidities on Outcome of COVID-19 Patients: An Observational Study among Patients Admitted to Intensive Care Unit**

Mode of presentation: Poster; **Theme:** Public Health Nutrition

Presenting author:

Dr Sumeet Dixit,

Co-authors:

- **Nikhil Gupta**
- **Preeti Gupta**
- **Manoj Kumar Pandey**
- **Shobhit Shakya**
- **Amiya Kumar Pandey**



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Introduction: COVID-19 has been a major cause of morbidity and mortality in 2020. Associated co-morbid conditions increase severity of COVID-19 which leads to six times more chances of hospitalisation than patients without comorbid condition. Multiple co-morbidities in patients with COVID-19 increases immunosuppression which leads to increased viral replication hence causes severe pneumonia which leads to a higher mortality rate in these patients as compared to patients with no or lesser number of co-morbidities.

Objectives: To determine association of co-morbidities with mortality in COVID-19 patients.

Materials and Methods: This observational study was conducted at a tertiary teaching institute of Lucknow, Uttar Pradesh, India which was a designated L-3 facility for treatment of COVID-19 patients. Ethical approval was taken and all the patients with moderate to severe COVID-19 pneumonia who were admitted to ICU facility during the study time period were included in the study after obtaining informed consent from patients/ family members.

Results: Severe COVID-19 patients had higher mortality (59.2% of severe category expired during hospital course, 1.7% patients expired in moderate category group). Most common comorbidities were hypertension (n=51, 46.8%) and diabetes (n=48, 44%). Multivariate analysis showed that co-morbidities in the form of chronic liver disease (OR -0.127 (0.024-0.681, p-value 0.016)) and post tubercular sequel (OR 0.036 (0.003-0.442, p-value 0.009)) were less likely to occur in patients who survived. More number of co-morbidities in a patient were associated with higher chance of mortality and this trend was significant statistically (p-value <0.001).

Conclusion: Associated co-morbidities play a significant role in severity and mortality of COVID-19 patients. Chronic Liver Disease and Post Tubercular sequel were significant in expired group as compared to survived group. Cardiac disease, chronic pulmonary diseases, chronic liver diseases and renal diseases were found as significant co-morbidities, which were associated with mortality.

Keywords: Chronic liver disease, COVID-19, Mortality, Pneumonia, SARS

❖ **Title: Impact of COVID 19 lockdown on routine immunisation services in a rural community of North India**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr Kartik Chadhar, Center for Community Medicine, AIIMS New Delhi.

Co-authors:

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Introduction: COVID-19 lockdown has led to disruption of routine immunization services across India. This study aimed to estimate the impact of COVID-19 lockdown on routine immunization services in a rural community of North India by estimating its coverage.

Objectives: To estimate the coverage of routine immunisation among children during COVID-19 lockdown in rural Ballabgarh, Haryana

Materials and Methods: Cross-sectional data was collected from the birth registers routinely maintained at 12 sub-centers under rural field practice area of Centre for Community Medicine, AIIMS New Delhi for children eligible for primary immunization during the lockdown period (April 2020 to September 2020). Children who received the vaccine within 4 weeks of the scheduled date as per the immunization program were considered to be covered, reported as a proportion. This was compared to the baseline coverage from similar time periods of previous three years (2017-2019).

Results: A total of 8018 children were selected for estimation of coverage for various vaccines. As compared to the baseline, third dose of oral polio vaccine and pentavalent had a decline of 13.4% and 14.1% respectively. Second dose of oral polio vaccine and pentavalent had a decline of 11% and 11.5% respectively. There was a 4.9% and 5.4% decline in the coverage of first dose of oral polio vaccine and pentavalent. BCG coverage was reduced by 1.6% and Measles and Rubella- 1 coverage declined by 4.6%.

Conclusion: Coverage across all vaccines declined, with the highest decline seen for third dose of pentavalent during the lockdown period. In times of future humanitarian emergencies administrators should prioritize their efforts in ensuring continuity of services at all times wherever possible.

Keywords: COVID-19, Immunization, Lockdown

❖ **Title: Impact of COVID-19 pandemic on mental health of undergraduate medical students: A cross sectional study from Maharashtra state of India**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr Ujwala U. Ukey, Associate Professor, GMCH Nsgpur

Name of co-authors with designation: Paras Waghmare, Sumaiya Alibaba Meman, MBBS student, GMC Nagpur

Introduction: The ongoing pandemic due to novel corona virus has caused global social and economic disruption, including the largest global recession since the great depression. Due to pandemic many students were unable to attend clinics that create anxiousness among them which led to anxiety and stress.

Objectives: To estimate depression, anxiety and stress in medical students

Materials and Methods: The survey was conducted among the undergraduate medical students across the state of Maharashtra. The online semi-structured questionnaire was developed with the aid of Google form, among various undergraduate medical students by using DASS-21 scale.

Results: In the present study, total 435 students responded and returned completely filled in questionnaire. Out of these 435 study participants, 213 (48.97%) were male students and remaining 222 (51.03%) were female



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students. Based on responses to the DASS-21 scale, study participants can be categorized as normal or with mild, moderate, severe and extremely severe depression, anxiety or stress.

Conclusion: The present study concludes that psychological health of the undergraduate medical students who participated for the survey is involved to a sizeable extent. Depression and anxiety and some or other degree of stress was detected in the participants as a common finding.

Keywords: Mental health, Pandemic, Psychological impact, COVID-19, Medical undergraduates

❖ **Title: Impact of Implementation of " National Quality Assurance Standards " Initiative on Services provided under National Health Programme in PHC-HWCs of Kandhamal district of Odisha**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Abhimanyu Behera, Dr. Debasish Sethy

Co – author :

- **Dr. Durga Madhab Satapathy**, PG Resident , Asst. Professor , Professor & HOD

Background: National Quality Assurance Standards program launched by the Ministry of Health and Family Welfare with the aim of recognizing the good performing facilities as well as improving the credibility of public hospitals in the community .

Objective: To assess if 'NQAS' for improvement through predefined standards and to bring up their quality of services under various National Health Programmes at PHC-HWC.

Methods: A retrospective study was designed to gather data for 10 PHC-HWCs under NQAS between November 2022 and February 2023. Certification criteria and their external assessment checklist under NQAS program for PHC-HWCs were extracted. External assessment score of all PHC-HWCs under study were entered and analyzed using Excel sheet for the Social Sciences version 22 and MS Excel 2016.

Results: NQAS implementation has significance on the quality certification of public health facilities to services provided under NHPs.

Conclusion: Overall impact of implementation of NQAS on public health facilities like PHC-HWCs to health services was significant. This could be due to more weightage given to the checkpoints under each area of concern in NQAS.

Keywords: NQAS, National Health Programme, Primary Health centres

❖ **Title: Implementation of feedback mechanism at intervention health facilities in select districts of Madhya Pradesh for improving service delivery as part of quality initiative.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Ranu Kumari Parma



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❖ **Title: Implementing quality improvement initiatives in HWCs across three districts in Madhya Pradesh.**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Shruti Gangrediwar

❖ **Title: India's preparedness regarding Decade of Healthy Ageing'**

Mode of presentation: Poster; **Theme:**

Presenting author:

Dr Aaheli Roy

Co-authors:

- **Dr Girish N Rao**, Professor, Department of Epidemiology, NIMHANS

Background: Estimates indicate 138 million elderly persons in India in 2021 and is further expected to increase by 40% in 2031. To ensure all older people live long and have healthy lives, 2021–2030 has been declared UN Decade of Healthy Ageing and a global plan of action has been drafted. Healthy ageing is considered relevant to everybody and a key component is related to strengthening data sources for developing an action plan.

Objectives: We review data availability which reflects status and preparedness of India towards achieving the decadal strategy and drafting the action plan.

Materials and Methods: Publicly available data sources regarding health of the elderly were listed: NSS 75th round, NFHS 5, LASI, NPHCE and NPCDCS statistics. Data pertaining to elderly (≥ 60 years) was extracted. The results were analysed for components listed in the WHO baseline report.

Results: WHO identifies assessment of functional ability, intrinsic capacity and environments for healthy ageing and eleven items have been identified. Three items (ability to get dressed, ability to take medication and ability to manage money) in LASI measures functional ability of older people. In addition, to measure Intrinsic Capacity, two items - delayed word recall for cognitive capacity and hand grip strength for vitality have been assessed. Apart from LASI, NSS and NFHS – 5 reports disability among elderly. However, data to measure how people interacted with the environment (availability of amenities) and how accessible local amenities were for elderly (e.g. using geocoded maps, etc.) which are important to define / refine services, are lacking.

Conclusion: Routine program statistics are not amenable for planning or monitoring status of progress for decade of healthy ageing. The golden opportunity to generate evidence both proximal and distal and developing the Decadal Action Plan for Healthy Ageing in India needs to be harnessed.

❖ **Title: Indian Diabetes Risk Score Assessment Among Residents Of Bhandardara, A Tribal Area In Western Maharashtra**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health



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Presenting author:

Dr. Monica Saha, (PG Community Medicine)

Co-authors: **Dr.Mandar Baviskar** (Associate Professor) , **Dr.Jayant Deshpande**(Professor) **Dr.BVP RMC**,Loni

Introduction: Studies have shown that tribal population has higher burden of non-communicable disease. We conducted a household survey in a tribal area of western Maharashtra with the aim of diabetes risk assessment amongst tribal population in Bhandardara.

Objectives: To assess risk of diabetes among tribal population in a rural area of western Maharashtra.

Materials and Methods: Cross sectional study was conducted in house to house visits in village of Bhandardara. 110 non diabetic adults were assessed using Indian Diabetes Risk Score. Analysis done by Microsoft excel. Percentage values were compared.

Results: We found 26.4 % were at low risk , 56.4% had moderate risk & 17.2% were at a higher risk of diabetes.

Conclusion: Those with Diabetes risk can be enrolled in a diabetes prevention programme and targeted life style interventions can be given to them as a part of Comprehensive Primary Care Services.

Keywords: Indian Diabetes Risk Score, Tribal health ,bhandardara, risk assessment, Non communicable disease screening

❖ **Title: Influence of Quality of Life. Anxiety on Depression using Quantile regression analysis among the Survivors of the Road Traffic Accidents**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Palaniappan Marimuthu, Professor

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Senthil Kumar Priya, Professor, Madras Medical College. Chennai.

Background: A life loss in the productive age will have adverse effect on the country's economy as well as in the family. In addition to the economic loss, Family members of RTA victims and RTA victims who experienced non-fatal events, will undergo disturbed mental health.

Objective:This study is an attempt to throw some lights on the aspect of Quality of Life, Anxiety and Depression level of the non-fatal RTA victims.

Material and methods: A total of Nonfatal 407 RTA Non-fatal victims were randomly selected and approached for data collection; using socio-demographic and accident information form, Hospital Anxiety and Depression Scale (HADS) and WHO Quality of Life tools. Quantile Regression method is used for understanding the contribution of Quality of Life's four Domains, Education and age on the Depression score as dependent variable.

Results: Non-Fatal victims were classified into two groups as 'Impaired/ handicap/ disable' and 'No serious Injury'. Age, Education and expenditure on RTA treatment were compared except Age other two



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variables were statistically significant. The Quality of life's four Domains were also significantly differ between these two groups. Anxiety is most important variable which contributes almost in all the quantiles of depression followed by Psychological health, Social relationship, Environmental Health and Age of the RTA victims.

Conclusions. Low QoL score and higher depression is noted among RTA victims with the consequence of 'Impaired/Handicap/Disable'. Depression is associated with Anxiety, age and social relationship. After the medical care of the RTA victims have to undergo psycho-social counselling to reduce the Anxiety and to improve their Quality of Life.

Keywords: road traffic accident, quality of life, injury severity, Non-fatal, health status, compensation, Quantile Regression.

❖ Title: Investigation of a local outbreak of leptospirosis in an urban slum in Mumbai.

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr Chayanika Biswas, Junior resident Community Medicine Seth GS Medical College

Co – author :

- **Dr Shrikala Acharya**, Professor, Community Medicine, Seth GS Medical College
- **Dr Lokesh Krishna** Junior resident, Community Medicine, Seth GS Medical College

Background: Leptospirosis is the commonest zoonosis globally. In India, leptospirosis is endemic in the south and west, especially in urban areas. Outbreaks commonly occur after flooding in monsoon and wading through floodwaters is the best known method of transmission. However, in our field practice area, a rise in leptospirosis cases was seen lately, in spite of it being the dry season. Hence, the study was conducted to investigate the local outbreak.

Objectives: To investigate the local outbreak of leptospirosis in the urban slum and to find the associated risk factors among confirmed cases

Materials and Methods: During the period October 2022 to December 2022, 439 patients with history of fever were advised leptospirosis and other tests and 78 (17.8%) patients were found positive for leptospirosis IgM antibodies. The descriptive study assesses the trend, demographic factors and risk factors among these. Patients diagnosed as leptospirosis at our UHTC by IgM-ELISA are recruited as cases. For each case, a family member selected randomly is recruited as the control. A case record form is used to assess the risk factors and exposure in the immediate preceding period to investigate the possible source of infection and the mode of transmission. Results and

Conclusion: A line graph will be drawn for presenting the trend of cases. A spot map of the confirmed cases as per the residential/work area will be presented. The association of risk factors among the cases will be analyzed and presented.

❖ Title: Investigation of an Acute Diarrhoeal Disease Outbreak at Mahada Village, Subarnapur, Odisha, November 2022

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

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- **Dr Madan Mohan Padhan**, District Public Health Officer, Boudh, Odisha

Introduction: On 8th November 2022, an Acute Diarrhoeal Disease Outbreak was reported from Mahada village, Subarnapur district, Odisha, following the consumption of food from a religious festival (Asta Prahari) on 7th November 2022

Objective: We investigated the outbreak to describe the epidemiology and to suggest evidence-based recommendations for control & preventive measures

Materials and methods: We defined a case as a person who experienced at least three or more loose, watery stools (With or Without Vomiting/ dehydration) between Nov 8-10, 2022, in Mahada Village. We did a cross-sectional descriptive study at the village during Nov – Dec 2022 to search for cases by House-to-House survey by volunteers by using a structured questionnaire in Epi-Collect 5. We collected key information for demographic profile, exposure status, symptom profile, and outcome. We also collected water samples for environmental assessment. Data analysis done using Microsoft Excel.

Results: Out of 1570 study subjects, 354 cases (23%) were identified, with 57%(n= 202) female (attack rate 27%), and no deaths occurred. 353 persons (99%) experienced diarrhoeal symptoms. We plotted the epi-curve, which showed a continuous propagated source outbreak. The median Incubation period was 16 hrs (IQR= 14hrs-17hrs). Residents in Uparpada (n= 220, 62%) and those in the 45 to 64 age group 35% (n=124) were more affected. More than 95% of the cases had food from the festival. None of the cases had food from outside. 59% (n= 209) attended the PHC for outpatient consultation. Only 1 % (n=4) were hospitalized. Water samples showed faecal contamination.

Conclusions: Food from the festival is expected to be the prime source of disease. Further, an analytical study can be planned to know the exact etiology. While organizing such events, an advisory committee should be made functional at the village level with the help of a Health Officer.

Keywords: Acute Diarrhoeal Disease, Outbreak, Epi-Collect 5

❖ **Title: Iron Deficiency Anaemia among Women of Reproductive Age: Situational Analysis of Anaemia-Mukt Bharat Programme in a Rural area of West Bengal**

Mode of presentation: Poster; **Theme:** Public Health Nutrition

Presenting author:

Dr. Soumit Roy, Assistant Professor, Dept of Community Medicine, IQ City Medical College.

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- Mr. Sudip Ghosh, Statistician and Assistant Professor, Dept of CM, IQCMC

Introduction: Despite of various initiatives by Govt. of India in recent years under Anaemia Mukht Bharat (AMB), NFHS 5 (2019-20) revealed huge burden of anaemia especially among Women of Reproductive Age (WRA) of West Bengal.

Objectives: To determine prevalence and predictors of iron deficiency anaemia (IDA) among rural WRA and to conduct situation analysis for six key interventions under AMB.

Material and Methods: A community-based cross-sectional study was conducted on 111 WRA selected using probability proportionate to population sampling in the rural service area of IQ City medical college, Durgapur. Study subjects were interviewed using a predesigned pretested questionnaire followed by clinical and anthropometric examination and testing of venous blood. Complete hemogram with RBC indices was tested by cell counting and iron profile was tested by Chemiluminescence Assay (CLIA) in a NABL accredited laboratory.

Result: Prevalence of anaemia was 61.3%. Prevalence of only Iron deficiency State (IDS), iron deficiency anaemia (IDA), and Anaemia of other cause (AOC) were 20.7%, 39.6% and 21.6% respectively. Lack of dietary diversity and very poor hygienic condition including handwashing, avoidance of barefoot walking, cleaning of nail was noticed among most of them. Education up to middle school, pallor and haematological parameters like PCV, MCV, MCH, MCHC, serum iron, transferrin saturation % and ferritin was associated with IDA. Negligible awareness about AMB, iron fortification, management of AOC among them. Acceptability and perceived impact of IFA supplementation and behavioural change communication (BCC) activities was good but availability and accessibility was poor. In a contrast, opposite result was seen for deworming. For POC screening of anaemia and Iron fortification all four parameters were poor. For management of AOC all parameters were good except accessibility.

Conclusion: More efforts should be given on year-round BCC for awareness and demand generation, POC screening and management of AOC as well as ensuring continuous supply of IFA tablets.

Keywords: Anaemia, Rural, Women of Reproductive Age, Iron deficiency, Anaemia Mukht Bharat, Iron Folic Acid

❖ **Title: Japanese Encephalitis Vaccination Coverage Of Children Aged 24-36 Months In Ganjam District Of Odisha**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Amrita Maharana, PGT

Co-authors:

- **Dr . Divya,**
- **Dr.Priyasa,**
- **Dr. Durga Madhab Satapathy**



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Introduction: Japanese Encephalitis is a mosquito-borne viral encephalitis caused by Flavivirus mainly affecting swine, squids and humans. Following severe outbreaks of Japanese Encephalitis, a mass vaccination campaign was introduced in 17 districts of Odisha in 2017 and later in 2018, JE vaccine was introduced in routine immunization program. So a study was conducted to assess the adequacy of vaccination coverage in the district of Ganjam.

Objective: To assess the JE vaccination coverage of children aged 24-36 months in Ganjam district of Odisha.

Materials and Methods: A community-based cross-sectional study was conducted from August- September 2022. Cluster sampling technique and PPS method was used to select 45 clusters. From each cluster, 20 children within 24-36 months were selected resulting to a sample size of 900. House to house visits were done and information about vaccination status was collected by interviews and verified from MCP cards. The collected data was compiled and analysed using MS EXCEL and SPSS v17.

Results: Majority (93.4%) had their immunisation complete up to date, 6.1 % were incompletely immunised and 0.5 % were not immunised at all. The total Coverage of JE 1st dose was found to be 99.5%. The total Coverage of JE 2nd dose was found to be 93.97%.

Conclusion: As major reason for partial/ non immunization was lack of awareness among community on JE, health campaigns can be conducted by PHCs in their area. Vaccinators should be sensitised on providing four key messages during vaccination to reduce partial immunization.

Keywords: Vaccination, Immunization ,Japanese Encephalitis

❖ Title: Kashmiri communities' perspective of child Sexual abuse: a qualitative study

Mode of presentation: Oral; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Misbah Ferooz Kawoosa, Senior Resident, SPM.

Co-authors:

Dr.S.Muhammad Salim Khan-HOD SPM

Background: Childhood sexual abuse (CSA) is defined as an act intended to give sexual pleasure, arousal, or enjoyment to an adult who utilises a youngster for this purpose while abusing their position of dominance. CSA may have grave repercussions for the child. CSA can take place through physical interaction (such as touching, vaginal, oral, or anal sex, both performed and recommended), as well as through the consumption of pornography, adult entertainment, or demands for sexual favours.

Objectives: The purpose of this study was to examine and comprehend community perceptions on child sexual abuse with the additional goal of examining those perceptions that might contribute to preventing the disclosure of abuse.

Materials and Methods: Focus group discussions with male and female community members, including religious leaders, professionals, and other community members, were conducted utilising a qualitative design. The conversations focused on the causes of child sexual abuse, abuse survivors, help-seeking and reporting, and collecting suggestions for ways to make improvements. There were two focus group



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discussions. The focus group discussions were taped, verbatim translated, then subjected to manifest qualitative content analysis.

Results: The respondents noted that child sexual abuse was a common and covert occurrence. CDA was blamed on a variety of things, including the breakdown of societal standards, westernisation, the susceptibility of children, substance misuse, the availability of internet, and poor parental supervision. Participants identified the need for community education to increase people's understanding of sexual assault, its effects, and their roles as preventive agents.

Conclusion. Social conventions encourage sexual abuse against children while preventing them from accessing support services. While changes in social and cultural norms are required for the prevention of sexual assault, addressing the mentioned challenges may encourage help-seeking behaviour and enhance treatment for survivors of sexual violence.

❖ Title: Knowledge Attitude And Practice of (LLIN) Long Lasting Insecticidal Net in an Urban Slum Of Berhampur City: A Cross Sectional Study

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Baidyanath Panda, Postgraduate resident

Co – author :

▪ **Dr. Durga Madhab Satpathy**, Professor & HOD

Introduction: Malaria is a life-threatening disease transmitted through bites of infected female Anopheles mosquitoes. Sleeping under a LLIN is the best way to prevent malaria, as they form a physical and chemical barrier against mosquitoes.

Objective: To assess KAP of residents about LLIN in an urban slum of Berhampur city.

Materials and Methods:

The Survey took place in an urban slum Ankuli of Berhampur, Ganjam district of Odisha. Sampling units was randomly selected by simple random sampling method with an assumption that 50% of people are implementing some mosquito control at their houses. Sample size of 109 was obtained with 10% non-response rate. The data is being collected using a pre-validated semi-structured questionnaire via Google Form, and will be analysed in MS Excel & IBM SPSS V.17.

Result: As per the study till date, most of the respondents were middle-aged females. 72% of them had closed drainage system, 52% of them thought unsafe water is mode of transmission of malaria other than mosquito itself. 60% of people used coils, 36% of them thought bed net should be used always irrespective of any conditions, 24% of them used bed net for other purposes out of which 57% use it for occupational purpose. This study is still going on.

Conclusion: Most of respondents were using other personal protection against mosquito instead LLIN or bed nets. Hence it was recommended to aware people regarding different mosquito control measures and beneficial effects of LLINs and need to ensure its supply.

Keywords: LLIN, KAP, MALARIA



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❖ **Title: Knowledge And Attitude In Elderly Care Among Students Of Nursing Colleges In Western Maharashtra - A Cross Sectional Study**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Ajith Mohan,

Introduction: The present study was undertaken to understand the knowledge and attitude in elderly care among nursing students in colleges in Western Maharashtra

It is estimated by the year 2050, 80% of the global elderly population will be from low-and-middle income countries. In India the elderly statistics indicate a increase by 10.1% in 2021. There is a proportionate increase in health problems along with increase in elderly population in India.

Elderly care requires health workers who are skilled in understanding psychological, social, biological and cultural theories related to ageing. Nurses with better knowledge and positive attitude towards elderly care is necessary. **Objectives:** This study was conducted to understand knowledge and attitude of nursing care of elderly amongst nursing students who have not yet been exposed to geriatric care in their curriculum/clinics and help us understand how much consideration should be given to inclusion of gerontology science into the curriculum for better geriatric care and emphasize the positive aspects of aging. **Material and Methods.:** A cross-sectional study was conducted using facts on aging quiz 2 and Kogan's attitudes toward old people scale to assess the level of knowledge and attitude towards elderly care among the students respectively. All students were involved for the study which includes first, second and third year students who have not started geriatrics in their curriculum. Chi-square test was conducted to compare the proportions of knowledge and attitude with different demographic variables of participants **Results:** A total of 227 responses of nursing students from both nursing colleges were considered for this study. Only 26% of the participants had good level of knowledge and about 78% had positive attitude towards elderly care. Having Lived in rural areas and lived with extended families were found to be associated with good level of knowledge and positive attitude towards elderly care. **Conclusion.:** This study has shown that majority of nursing students have positive attitude but poor knowledge on elderly care. The study has indicated that past experience in living with elderly, living in extended families and currently living with elderly person help in influencing good knowledge and shaping of positive attitude towards elderly care. Low level of knowledge amongst nursing students has indicated the need for inclusion of more structured gerontology courses in the basic nursing curriculum. Encouraging discussions regarding elderly care and their problems will help contribute to future nursing care of geriatric patients.

❖ **Title: "Knowledge and Attitude Towards Exclusive Breastfeeding Practices Among Fathers: A Community-based Cross-sectional Study in Urban Slums of Bhubaneswar, Odisha".**

Mode of presentation: Poster; **Theme:** Public Health Nutrition

Presenting author:

Dr. Payel Roy, Academic Junior Resident, Department of Community & Family Medicine, AIIMS Bhubaneswar



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Co – author:

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- **Dr. G. Susmita Dora**, Senior Resident, Dept. of Com. & Family Medicine, AIIMS, Bhubaneswar

Background: It has been shown that fathers play an important role in making decisions in feeding a child in this patriarchal society. But the knowledge and attitude of the fathers regarding breastfeeding have been rarely explored.

Objectives: To assess the knowledge and attitude of the fathers of infants aged 6 months to 1 year regarding breastfeeding and find the factors associated with duration with continuing exclusive breastfeeding.

Materials and Methods: The community-based cross-sectional study was conducted from November 2022 to January 2023 in urban field practice area of AIIMS, Bhubaneswar, Odisha. A sample of 170 parents of the infants were selected by simple random sampling from 18 slums. Knowledge and attitude of fathers were assessed with a semi-structured questionnaire and IIFAS (Iowa Infant Feeding Attitude Scale). The scale consists of total 17 questions with total score of 85. Chi-square test was done to find out correlation and multi-nominal logistic regression and one way ANOVA was done for statistical significance.

Results: About 30.8% fathers knew that only breastfeeding is sufficient for the babies in the first six months. “Only baby is benefited by breast-feeding” was told by 52.4% fathers and 32.5% knew that breastfeeding can protect the mother and child from various diseases. There was significant association between duration of exclusive breastfeeding and total number of children ($p=0.020$, $\chi^2=14$), problem in breast-feeding (like feeding difficulty, lactational failure, breast diseases) ($p<0.001$, $\chi^2=103.34$), frequency of breast-feeding ($p=0.03$), time of starting breast-feeding ($p=0.006$), mode of delivery ($p=0.02$) & time of delivery ($p<0.001$). The median attitude score of the fathers on IIFAS Scale was 58.89. Statistically significant association was found with the fathers’ attitude score and duration of exclusive breast-feeding ($p=0.013$) with one way ANOVA.

Conclusion: Fathers’ attitude not only supports the mother in breastfeeding but also it influences the duration of exclusive breastfeeding.

Keywords: Knowledge, Attitude, Fathers, Breastfeeding, Exclusive breastfeeding

❖ Title: Knowledge And Awareness Regarding Adenovirus Epidemiology, Prevention And Vaccine Among Interns Of An Eastern India Medical College – A Pilot Study

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Shuvro Bhattacharya, Intern of Medical College Kolkata



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Introduction: Adenovirus is a common group of viruses that causes cold or flu-like infections. At present, in West Bengal, there is an outbreak of adenovirus cases. The government has sent 500 samples to NICED and has received information that 32% of the samples were adenovirus cases.

Objectives: To find out the knowledge and awareness regarding adenovirus epidemiology, prevention and vaccine among interns of an eastern India medical college.

Materials and Methods: A cross sectional study was done using census sampling method amongst the interns of an medical college Kolkata for 2 weeks and a questionnaire containing 10 questions with true and false two options, used as a study tool. Our valid response is 177. Data is analysed in MS Excel.

Results: Among 177 responses 72 are female and 105 are male responders. After statistical calculation we found around 11 % of our study population have an appropriate knowledge regarding viral structure. 25% of our study population has a knowledge regarding epidemiology and 17.5 % interns have knowledge about clinical features. Approximate 40% of our study population have knowledge about prevention where only 16% have vaccine knowledge.

Conclusion:- Consider adenoviruses as possible causes of upper respiratory illness, and lower respiratory illness such as pneumonia. This questioner to be run in other set up also, we should arrange more health talk and education. The guidelines should more prominent, straight forward, and accessible.

Keywords: Adenovirus, Communicable Disease, Epidemiology, Vaccine, Knowledge

❖ Title: Knowledge regarding Iron Deficiency Anaemia and its Predictors: A Cross-sectional Evaluation among School Going Adolescent of Deoghar, Jharkhand

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

- **Dr. Anuradha Gautam**, Department of Community & Family Medicine, AIIMS Deoghar

Co-authors:

- Dr. Bijit Biswas, Assistant Professor;
- Prof. (Dr.) G. Jahnvi, Professor & Head;
- Dr. Richa, Associate Professor; Department of Community & Family Medicine, AIIMS Deoghar

Introduction: Anaemia is a common nutritional problem and a major public health concern amongst adolescents. Iron deficiency anaemia (IDA) is the most common type of anaemia observed in this age group. Adequate knowledge regarding the disease is likely govern the practices related to it.

Objectives: To assess the knowledge towards IDA and its predictors among school going adolescent of Deoghar district.

Materials and Methods: A Cross Sectional Study was conducted in Devipur block of Deoghar district. The selection of study schools and study subjects were done using simple random sampling (SRS). The study questionnaire included socio-demographic, 34 item predesigned, pretested, structured knowledge questionnaire ($\alpha=.894$). The data were entered and analysed using statistical package for social sciences (SPSS) (version 16.0).



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Results: The mean IDA related knowledge score of the study participants were 13.4 with standard deviation (SD) of 7.4. The source of knowledge regarding IDA among the study subjects were reported to be teachers (74.4%) followed by other family members (44.0%) and parents (39.2%). The significant attributes of IDA related knowledge were observed to be reading standard ($p=.015$) [post hoc (Tukey's) 8th (11.9 ± 7.1) vs 9th (14.4 ± 7.5), $p=.014$]; caste ($p<.001$) [post hoc (Tukey's) other backward class (OBC) (14.6 ± 6.3) vs general (11.3 ± 8.5), $p<.001$]; type of diet [veg (10.0 ± 8.8) vs non-veg (13.7 ± 7.2), $p=.002$]; fathers educational level [literate (14.1 ± 7.5) vs. illiterate (11.7 ± 6.9); $p=.002$]; mothers educational level [literate (14.5 ± 7.5) vs. illiterate (11.4 ± 6.9), $p<.001$] and attitude towards anaemia [positive (15.3 ± 7.2) vs. negative (10.3 ± 6.7), $p<.001$]. IDA related knowledge was moderately positively correlated with the number of self-reported IDA related symptoms (spearman rho correlation co-efficient: 0.305, $p<.01$).

Conclusion: Demographic disparity relating to IDA related knowledge exists among school students. They must be periodically made aware regarding IDA and factors attributing to it to in curb the rising burden of the disease in the country.

Keywords: Iron deficiency anaemia; School going adolescents; Knowledge; Attitude; Deoghar

❖ Title: Knowledge, Attitude and Practices Regarding Electronic Waste (e-waste) Management Among Consumers of Electronic Equipments living in Lucknow City

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Peeyush Kariwala, Associate Professor

Co-authors:

- **S D Kandpal**, Department of Community Medicine, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow
- **Sumeet Dixit**, Department of Community Medicine, Dr. Ram Manohar Lohia Institute of Medical Sciences, Lucknow
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- **Shikhar Singh**, Uttar Pradesh Technical Support Unit

Introduction: Time-worn Electrical and Electronic Equipments (EEEs) are frequently known as Electronic Waste (e-waste). The past two decades show that the e-waste is growing exponentially. It is estimated that about 53.6 million tonnes of e-waste was produced in 2019 and about 74 million tonnes of e-waste would be generated by 2030. Disposal of these e-wastes without appropriate measures can cause health and environmental hazards to humans, live stocks and the ecosystem. At present, e-waste management is a major global problem.

Objectives: Assess the knowledge, attitude, and practices (KAP) of consumers utilising electronic equipment in Lucknow, India, and its associated factors.



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Materials and Methods: The study was a Cross-sectional descriptive study, conducted amongst consumers of electronic equipment living in Lucknow City of Uttar Pradesh.

Results: Only 16% of participants correctly recognized the symbol of e-waste. Only 62.1%, 56.1%, 39.0%, 31.4%, 29.7%, and 7.4% consumers were aware that car light bulbs, computers, fridges, T.V., batteries, and mobile, respectively produce e-waste. On adverse health effect of e-waste, 37.1% of total participants had correct knowledge that e-waste causes heavy metal poisoning. Only 29.1% of respondents believed that it is their own responsibility to dispose of their personal e-waste. 18.9% of participants correctly responded to the presence of heavy metals

Conclusion: Most of them were not aware about the adverse effects of e-waste on health and environment that is caused by improper disposal. participants had least knowledge of government guidelines on e-waste disposal. So, education regarding ill effects of e-waste is essential for people and awareness on proper disposal of e-waste is the need of the hour.

Keywords: e-waste, electronic equipment, Awareness, KAP

❖ **Title: Knowledge, Attitude and Practices regarding Non-Communicable diseases with special reference to Hypertension and Diabetes Mellitus among non-medical undergraduate students.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Pushkar Surendra Masram

Co-author:

- Abhay Chavan, Govt. Medical College Nagpur
- Uday Narlawar, Govt. Medical College Nagpur

Background: Non communicable diseases (NCDs) are one of the foremost morbidities that plague our world. The major chunk of people that suffer from NCDs belong in the age group of 40 years and above. Longer exposure to contributory etiologies during the early years may lead to early emergence of the symptoms and diagnosis of the said NCDs. While there are several studies done on the KAP of NCDs in Adults around the world and in India, the data of age group 18-24 years is deficient.

Objectives: To assess the Knowledge, Attitude and Practices towards the NCDs with special reference to Hypertension and Diabetes Mellitus among non-medical undergraduate students.

Materials and Methods: This is a cross sectional study done on students of non-medical undergraduate courses in central India. A google form was circulated among the students and their consent was taken which was a part of the google form. The google form consisted of different sections of Knowledge, attitude and practices regarding non-communicable diseases and special sections with questions about hypertension and diabetes mellitus respectively. Univariate regression analysis was used to find association between various factors.

Results: A total of 350 responses were recorded. Of the total, 57 % were females and 43% were males. Majority of the subjects (81% and 52%) had good knowledge and attitude towards NCDs but only 8.7% had good practice towards NCDs. In univariate regression analysis, family occupation, parental education, and family history of diabetes and hypertension were significantly associated with good knowledge level.



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Conclusion: Study subjects had poor practice regarding NCDs despite having good knowledge and attitude. There is need to spread awareness about complications of hypertension and diabetes.

❖ **Title: Knowledge, attitude and willingness to donate organ among medical students of a tertiary college hospital: cross-sectional study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Ekta Krishna

Introduction: With advent of newer technologies, it has become easier to transplant organs and cure people suffering from various illnesses. The correct knowledge and positive attitude towards organ donation among medical students can help in improving the country's organ donation rate as they are future healthcare professionals of our country.

Methods : A cross-sectional study was conducted among 362 medical students from first year to internship of AIIMS Patna over the period of 7 days. The pre-designed, pre-validated questionnaire was used and was circulated as Google form online through various social media groups in order to assess their knowledge, attitude and willingness regarding organ donation. Data cleaned in excel sheet and analyzed using Statistical Package for Social Sciences (SPSS) software version 20.

Results: Mean (\pm SD = standard deviation) age of participants was 20.6 ± 1.64 years. 74.4 % of the study subjects were male. Overall, 32.0 % of participants had score more than 12 (good knowledge), 62.4% of participants had scored between 8-12 (average knowledge) and very low proportion of participants had low knowledge score. Similarly, 52.7% of participants had scored more than 3 (good attitude). More than 4/5 of study participants in this study shown their willingness to organ donation as well as organ acceptance

Conclusion: Overall, medical students in this study had average knowledge regarding live organ donation. So, the government and the policy maker should work in this direction to create awareness among medical students who are going to be future health care professionals.

❖ **Title: Knowledge, Attitude, and Practices of Japanese Encephalitis and its prevention in a rural area of Bihaguri of Sonitpur District of Assam – A Community Based cross sectional study.**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Alok Kumar Das

Co-authors:

- **Dr. Shashanka Shekhar Chakraborty**
- **Dr. Suddipta Kumar Bora**



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Introduction: Japanese Encephalitis (JE) virus is a mosquito borne viral infection of human. Mostly endemic in temperate & tropical regions of Asia. Majority of cases occur in children but all age groups may be affected during an outbreak. JE is one of the major community-based problem in Assam. As per NHM, Assam more than 50 people died of JE in the year 2022. Therefore, we conducted the study to evaluate the KAP of JE infection in rural areas of Sonitpur District of Assam.

Objective: To assess the KAP of JE and its prevention in rural areas of Sonitpur District.

Materials and Methods: A Community Based cross sectional Study was done amongst rural persons of Bihaguri in Sonitpur District for a period of 3 months. Participants were interviewed by predesigned and pretested structured proforma. Around 140 participants were included in the study using multistage sampling technique. Results were analysed using Microsoft Excel and In Stat GraphPad.

Results: Majority i.e., 90% of the rural population of Bihaguri area of Sonitpur district exhibits good knowledge and 96.5% of population shows positive attitude towards preventive measures against JE. Meanwhile the practise habit against prevention of JE was only 9.2% which is found to be inadequate.

Conclusion: The study will help in capacity building regarding prevention of JE among rural population of Bihaguri area of Sonitpur district. The study will also help in vector control measures like fogging during outbreaks, use of mosquito nets, antilarval measures and in management of domestic animals.

Keywords: Knowledge, Prevention, Japanese Encephalitis

❖ **Title: knowledge, attitudes, and practices related to breast SELF EXAMINATION among female nursing staff: a cross-sectional study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

First author:

Dr. Subhashree Singh, PG 1st year

Co – author :

- **Dr. Krishna Kar**, Professor and HOD
- **Dr. Pragyna Paramita Dash**, Senior Resident Department Of Community Medicine, SCB MCH Cuttack
- **Dr. Smarnika Dash**, Senior Resident Department Of Community Medicine, SCB MCH Cuttack

Introduction: With some 1,78,000 new cases being diagnosed every year, the incidence of breast cancer has overtaken cervical cancer to become the most common cancer in Indian women. Though there is an availability of advanced treatment for breast cancer, the prognosis is still not good for advanced stages. So screening helps in the early detection of cancer and timely treatment of breast cancer which leads to a better prognosis. Simple and inexpensive, non-invasive, universally accessible means like breast self-examination (BSE) can promptly identify the early stages and thus, can save many lives from this disease. Women in the healthcare profession like our nursing staff can have a positive impact on the attitude, beliefs, and practices of the common public. Therefore, the healthcare workers themselves must have adequate knowledge and positive attitudes.



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Objectives: To assess the knowledge, attitude, and practices related to breast self-examination among female nursing staff.

Materials and methods: A cross-sectional study was conducted on the Female nursing staff of SCB Medical College and Hospital from January 2023 to March 2023. Data was collected using a predesigned, pretested, semi-structured questionnaire. The questionnaire included specific sections to test the participant's knowledge, attitude, and practices related to breast cancer and breast self-examination.

Results: As the study is still ongoing, the data will be analyzed after the completion of data collection.

Conclusion: The conclusion will be drawn subsequently after the analysis of the data.

Keywords: Breast cancer, Screening, Breast self-examination

❖ **Title: Knowledge, Perceptions and Practices regarding animal bite injury among Anganwadi beneficiaries in a rural area of Dakshina Kannada: A cross sectional study**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Sara J Ommen, JRI Dept of Community Medicine Kasturba Medical College, Mangalore

Co-authors:

- **Dr Neneh Feren PV**, JR III Dept of Community Medicine Kasturba Medical College, Mangalore
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- **Dr Prasanna Mithra P., MD, DNB**, Additional Professor, Department of Community Medicine
- Manipal Academy of Higher Education, Manipal

Background: Animal bites remain one of the deadliest injuries of all times. Rhabdovirus, which is responsible for Rabies, often infects people through the bite of a rabid animal. Almost 59,000 human deaths occur annually due to rabies worldwide. The main cause of death due to rabies is due to lack of knowledge regarding initial wound management and Post exposure prophylaxis.

Objective: To assess the knowledge, perceptions and practices regarding animal bite injuries and their initial management among Anganwadi beneficiaries.

Material and methods: In this cross-sectional study, after obtaining clearance from the institutional ethics committee, 79 beneficiaries affiliated to Anganwadi Centre in Moodabidri Taluk were assessed about their knowledge, perceptions and practices regarding animal bite injuries and their management. A written informed consent was obtained from all the eligible participants after explaining the objectives of the study and providing them with a participant information sheet. A content validated pre-tested questionnaire consisting of 4 sections was used for data collection. Results were expressed in proportions.

Result The mean age of the participants were $38.47 \pm$ years. Overall 97.5% (n=77) of the study population had inadequate knowledge regarding rabies. History of animal bite injury was seen in 24.1% (n=19) and among them, 44.3% (n=35) followed proper precautionary measures. About 7.6% (n=6) of the population agreed to the application of substances like chilli powder, turmeric etc to the wound. Among



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the study population, 77.2%(n=61) agreed that it was necessary to take Tetanus toxoid(TT) injection after an animal bite

Conclusion_Even though rabies is a major health threat to our community, majority of the participants had inadequate knowledge regarding the disease and were unaware regarding the correct practices following an animal bite injury. Appropriate health educational sessions must be conducted among these areas to reduce the disease burden

Keywords: Rabies, Rhabdovirus, Animal bite Injury.

❖ **Title: Measles Outbreak Investigation and Public Health Response-Urban area, Firozabad, Uttar Pradesh, 2022**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Priya Bhat

Background: Gain towards measles elimination received a set-back due to COVID-19 leading to 6-fold increase in measles outbreaks in 2022. On 17 September 2022, clustering of sporadic cases was observed and investigated from urban area of Firozabad, Uttar Pradesh. We flagged the outbreak and described epidemiology to provide evidence-based recommendations towards measles elimination.

Methods: We defined a case as fever and maculo-papular rash in a person of urban Firozabad between 3 July–30 September 2022. Case search was conducted through house-to-house survey using semi-structured questionnaire for information on fever rash cases with sensitization of clinicians and teachers. We reviewed in-patient and out-patient records of health facilities and collected virology and serology samples as per standard guidelines. We also reviewed surveillance data and conducted immunization gap assessment for 2021–22.

Results: We identified 21 cases (57% male); attack rate was 0.03% (21/55,099). Median age of cases was 3 years (range: 0-33 years) and predominantly from religious minority. Of the 21, medical college reported 62% cases while frontline workers reported 14%. We identified 14/21 (66%) of the cases had not received post-rash prophylactic Vitamin A of which six (43%) developed complications including diarrhoea, ear infection and one death. Of the 21 serum samples, six tested positive for measles IgM and had not received measles vaccine while all 19 virology samples were negative. The MCV 2 coverage was 42% (2,352/5,602). The non-measles non-rubella rate was 2.3 (15/650,000*100,000). We identified 27 areas where immunization services were not being provided and <75% planned sessions being conducted.

Conclusions: We report a confirmed measles outbreak in an urban setting with low MCV 2 coverage. We recommended revision of immunization micro-plan, training of frontline workers on case reporting and post-rash Vitamin A supplementation. We covered missed areas by addition of 47 sessions in micro-plan.

Keywords: Immunization, measles, Outbreaks, surveillance



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❖ **Title: Measles Outbreak Investigation in a Residential School at Khargone District of Madhya Pradesh**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

Dr. Devendra Singh Tomar, World Health Organization, New Delhi, India

Co-authors:

- **Ashutosh Agrawal**, World Health Organization, New Delhi, India

Background: Measles caused >140,000 under-fives deaths in 2018 globally. Despite India's target to eliminate measles and rubella by 2023, 10 laboratory-confirmed measles outbreaks were reported during January-February 2022. On 17 March 2022, a measles outbreak was flagged from a residential school, housing children from hard-to-reach districts, at Aurangpura area of Khargone district. We investigated to describe the epidemiology and recommend control measures.

Material and Methods: We defined a suspect measles case as fever and maculopapular rash among students of the residential school at Khargone district during 17 December 2021-7 April 2022 and confirmed case as laboratory positive for measles. We identified cases in the school and interviewed using a semi-structured questionnaire for demographics, clinical presentation, vaccination, and post-rash vitamin-A status. We excluded laboratory tested negative from analysis.

Results: We identified 23 suspected cases (19, 83% male); 20 classified as measles (2 laboratory confirmed and 18 epidemiologically linked) and no death occurred. The median age was 8 years (range: 6-12 years); 95% (19/20) were within 6-10 years age group. The attack rate was 9% (20/225 total population); the school housed 181 children >5 years, 10 special need children and 34 staff. All the 20 cases had fever with maculopapular rash and 48% (11/23) were administered post-rash two vitamin-A doses after 22 days of first confirmed case. Record was not available to assess measles containing vaccine coverage. The first case was reported on 17 March, peaked on 22 March and the last case reported on 26 March 2022.

Conclusion: We report a laboratory confirmed measles outbreak among children in a closed setting. Vitamin-A dose administration was delayed. The exact source of infection and vaccination status could not be ascertained. We recommended the school to record vaccination status of children at the time of admission and district to include the school for special vaccination campaigns.

Keywords: Measles, Elimination, Disease outbreaks, Vaccination, India

❖ **Title: Measles-Rubella Vaccination Campaign coverage in the urban field practice area of a Tertiary Medical College, Kolkata: A Cross-Sectional evaluation**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Subham Dey, 1st year Junior Resident, CNMCH, Kolkata



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Introduction: India launched the Measles Rubella vaccination campaign in Jan-Feb 2017 to increase coverage, but West Bengal's campaign was delayed to 9th Jan-11th Feb 2023 due to COVID-19. The campaign aims to control measles and rubella outbreaks and protect against Congenital Rubella Syndrome.

Objectives:

1. To evaluate the coverage of MRVC in an urban field practice area of CNMCH, Kolkata.
2. To identify the factors contributing to the hesitancy of vaccination.

Materials and methods: A Community based Cross-Sectional study was conducted in the urban field practice area of CNMCH, Kolkata for a duration of 17 days during February 2023 among 152 children aged 9 months to 15 completed years using a pretested, predesigned, semi structured questionnaire after obtaining informed consent from the study subjects. Sample size was calculated based on previous studies and Cluster Sampling was done.

Results: Vaccination coverage was found to be 94.71%, among which <2% had minor side effects (>94% complaining fever). 62.47% immunized children had a mark on left thumb and 98% could show their vaccination certificates. Among remaining 5.29% of non-immunized children, 42.25% were unaware of the campaign and 33% children were ill. Majority of the children were in the age group of 6-10 years (68.46%) with no gender bias.

Conclusion: In our study, the campaign performance was far above the target coverage of 90% set by the Government of India, which is also similar to the coverage found in the other states in an earlier phase.

Keywords: Measles Rubella Vaccination, Campaign, Evaluation, Urban, Left thumb mark.

❖ **Title: Men's perception and participation in maternal and child health care in the field practice area of a teaching hospital: a cross-sectional study from rural Bengal**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

Dr. Mamunur Rashid PG Trainee, Department of Community Medicine, IPGME&R, Kolkata

Co-authors:

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- **Prof. (Dr.) Mausumi Basu**, Professor and Head, Department of Community Medicine, Institute of Post Graduate Medical Education and Research, Kolkata

Introduction: Participation of men in Maternal and Child Health (MCH) is crucial for the reduction of infant and maternal mortality. MCH care services have been focused on providing information and services to women, but males behavior and decision affects the health of child and mother.

Objectives: The objectives of the study were to assess the perception and participation of males regarding MCH care, to find out the factors associated with the perception and participation and to identify the correlation between perception and participation among study participants in the rural field practice area of a teaching hospital of West Bengal.

Materials and Methods: A descriptive observational study with cross-sectional design, was conducted among 125 male residents of Muchisha subcentre in Budge Budge-II block of South 24 Parganas from



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October-December 2022. Data were collected by face-to-face interview using a pre-designed, pre-tested, semi-structured schedule. Multivariable binary logistic regression was done to identify the association between dependent and independent variables ($P < 0.05$). Correlation between perception and participation were assessed by Spearman's rho.

Results: Nearly half of the study participants (44.8%) had good perception and inadequate participation regarding various aspects of MCH care. Those participants involved in skilled occupation and between 21-30 years age, belonging to middle SES and involved in clerical occupation had higher odds of adequate participation. Participants involved in professional and semi-professional occupation had higher odds of good perception. A statistically significant positive correlation was found between perception and participation ($\rho=0.3$)

Conclusion: Male perception and participation in MCH care services were found to be low. Public health interventions and Social and Behaviour Change Communication (SBCC) are strongly recommended to improve male involvement in MCH care.

Keywords: Perception, Participation, Maternal and child health care

❖ **Title: Menstrual hygiene management and its correlates among women of reproductive age in a rural area of West Bengal: a cross-sectional study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Rituparna Mitra, post-graduate trainee

Background: Despite being a physiological process, menstruation is stigmatised in Indian society as an unclean phenomenon. Urogenital infections are often caused by inadequate personal hygiene practises during menstruation. Moreover, menstrual equity has received little attention in the socioeconomic and healthcare sectors. Despite a dearth of evidence, there appears to be a link between menstrual inequity and menstrual health outcomes among rural women.

Objectives: 1. To assess knowledge of menstrual hygiene management (MHM) among women of reproductive age of the Rural Field Practice Area of Calcutta National Medical College.

2. To determine factors, if any, affecting the accessibility of menstrual hygiene materials in the study subjects.

Materials and Methods: A Community-based, observational study of Cross-sectional design was conducted over a period of two months (January-February 2023), using systematic random sampling, until the inclusion criteria were satisfied and a total sample size of 104 was achieved. After obtaining informed consent, data was collected by interviewing the study subjects using a predesigned, pretested schedule based on MPNS-6 scale. Data was analysed using MS Excel and IBM SPSS and using statistical tests like Chi-Square and Binary Logistic Regression.

Results: Most of the study subjects (77.2%) had primary education, had access to water (63%), had adequate knowledge regarding menstruation (42.3%), used sanitary napkins (45.6%). Majority (78.9%) belonged to lower socioeconomic class and found sanitary napkins beyond their means. There was statistically significant



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association between age($p=0.003$), education($p=0.001$) and socioeconomic status($p=0.013$) with menstrual hygiene.

Conclusion: Menstrual hygiene practice was inadequate. Many women reported practising various restrictions. Making menstrual products affordable, and regularly promoting menstrual education in schools and health centres can help.

Keywords: Menstrual health and hygiene, period poverty, reproductive age

❖ Title: Mental Health Status and its Correlates among People Living with HIV/AIDS in a Tertiary Care center of West Bengal

Mode of presentation: Poster; **Theme:** Menatal & Geriatric Health

Presenting author:

Dr. Shahinoor Islam, Junior Resident, Department of Community Medicine, Burdwan Medical College and Hospital, Purba Burdwan, West Bengal

Co-authors:

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- Dr. Dinobandhu Naga, Assistant Professor, Department of General Medicine, Burdwan Medical College and Hospital, Purba Burdwan, West Bengal
- Prof. (Dr.) Pranita Taraphdar, Professor and Head, Department of Community Medicine, Burdwan Medical College and Hospital, Purba Burdwan, West Bengal

Introduction: People with mental disorders experience disproportionately higher rates of disability and mortality. Bidirectional link between mental illness and HIV/AIDS accelerates the disease progression, reduces willingness to access health care, promotes high risk behavior, leads to low medication adherence, and ultimately results in poor disease outcome.

Objectives: To estimate the prevalence of common mental disorders (CMD) among People Living with HIV/AIDS (PLWHA) attending Anti-Retroviral Therapy (ART) clinic at Burdwan Medical College and Hospital and to find out the association if any, between sociodemographic characteristics and CMD among the study population.

Materials and Methods: A cross sectional descriptive study was conducted among 410 adult PLWHA, selected through systematic random sampling, registered at ART clinic of Burdwan Medical College and Hospital, West Bengal during October 2022 to February 2023. Interview of each study subject, with a pre-designed, pre-tested, semi-structured schedule was done to obtain socio-demographic characteristics and CMD was assessed using WHO's Self-Reporting Questionnaire (SRQ)-20. Univariate and multivariable logistic regression was performed to predict the factors associated with CMD. Data were analysed using SPSS v23.

Results: Prevalence of CMD was 30.2% among PLWHA attending ART clinic. In univariate logistic regression, female gender, persons not living with partner (un-married, widow/widower, divorced/separated), current smoker, pre-ART cases and persons with WHO stage 3 disease were found to be significantly associated with presence of CMD. But in multivariable logistic regression, persons not living with partner [AOR 2.114 (95%



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CI: 1.228-3.641)] and pre-ART cases [AOR 8.909 (95% CI: 4.770-16.640)] were remained statistically significant.

Conclusion: Screening and treating the PLWHA suffering from CMD, should be considered to be an integral part of HIV care, support and treatment at the primary level.

Keywords: Common mental disorders (CMD), HIV/AIDS, Self-Reporting Questionnaire (SRQ-20)

❖ **Title: Model Immunization Room: A novel approach of providing immunization services in urban areas**

Mode of presentation: Poster

Presenting author:

Dr. Kishu Waghela

❖ **Title: Morbidity profile and Drug distribution pattern at Urban field practice area of a tertiary care hospital**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Munesh Sharma, Professor-Presenting Author

Co-authors:

- **Dr. N.K. Goel** (Professor & Head),
- **Dr. Meenu Kalia** (Assistant Professor)
- **Dr. Dinesh Kumar** (Professor)

Introduction-For planning any control and management strategy, the first step is laying down the premises by relevant situational analysis. Hence present study.

AIMS & Objectives-1.To find out the number and type of morbidities and drugs.2.To find out whether there was any gender and/or seasonal difference and 3. To interpret the results

Material & Methods-A study was conducted by using registers maintained at RHTC-Palsora having data from March, 2021 to Feb,2022, dividing the patient according to gender (Male & Female) and seasons (March to June – Summer, July to October – Rainy, November to February – Winter).

Results- The total of 23382 morbidities were reported of which 6982 (3471 from males and 3421 from females) were of 5 diseases having the downward order of Hypertension, fever, diabetes, ARI and Diarrhea, reported to Urban Health Training Centre (UHTC) within one year (2021-22). There was no statistical difference between males and females. The sequence of morbidity, however, was different in monsoon and rainy seasons. A total of 101175 tablets/creams/capsules were utilized for treatment of patients during the above said period. The order of drugs used in downwards direction was B-complex (16.1%), Calcium Carbonate(13.2%), Omeprazole(13.2%), Metformin(10.8%) Paracetamol (10.4%), Anti-hypertensive (10%), NSAID (7.9%), Iron and Folic Acid tablets (6.7%), and others.



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Conclusion- only few drugs are required to deal with the majority of cases at Primary Health Care level.

❖ **Title: Morbidity Profile And Physical Functional Status In The Geriatric Population Of Sonitpur District In Assam.**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Souvik Banik, PGT-II year, Dept of Community Medicine, TMCH

Co-authors:

- **Shashanka Shekhar Chakraborty**, Associate Professor, Dept of Community Medicine, TMCH.

Introduction- At what age one is considered 'elderly' has varied between countries and over time but is most commonly classified into young elderly (60–69 years), middle elderly (70–79 years) and extreme elderly (80+ years).

Objectives: To determine the correlation between morbidity profile, physical functional status & relation of physical functional status with increasing age in the geriatric population of Sonitpur District in Assam.

Methods- A population based cross sectional study of Villages under Sonitpur District in Assam over a period of 8 weeks. A total of 135 elderly samples were collected. A predesigned Questionnaire with katz index was used and analysed in MS EXCEL 2010.

Results: Majority of the population were Young Elderly (56%), followed by Middle Elderly (33%), and Extreme elderly (11%), Male(53.34%) Females(46.66%).Diabetes- Young elderly, (46.05%) , Middle elderly (22.72%) and Extreme elderly (26.66%) .Hypertensive- Young elderly (39.47%), middle elderly (54.55%) and extreme elderly (53.33%) .Vision impairment- Young elderly (46.05%), middle elderly (47.73%), and extreme elderly (60%). Hearing impairment- Young elderly (30.27%), Middle elderly (36.26%), and extreme elderly (46.67%) suffer from hearing impairment. Alzheimer's disease - Young elderly (7.89%), Middle elderly (11.36%) and extremely elderly (20%).

Conclusion- Most common morbidity in the elderly to be diabetes followed by hypertension as the age increases severity of co-morbidities also increases. Hence, there is an urgent need of dealing with the geriatric health problems in our community with good compliance and compression. There is a need to generate awareness among the community, general public, policy makers, regarding multiple issues related to the ageing separate Hospital for the geriatrics. Early detection of morbidities among elderly and timely referral to secondary or tertiary care facilities.

Keywords- Geriatric, Morbidity, Sonitpur.

❖ **Title: Motivation Among Community Health Officers in South 24 Parganas in West Bengal: A Cross-Sectional Study**

Mode of presentation: Poster; **Theme:** Climate Change, Environment & Occupational Health

Presenting author:

Dr. Abhijit Dhara, Post graduate trainee MD CM (2nd Year), Dept. of PSM, AIH&PH

Co-authors:



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- **Dr. Monalisha Sahu**, Associate Professor and HOD, Dept. of Occupational Health, AIH&PH
- **Dr. Muktisadhan Maiti**, CMOH, South 24 Parganas
- **Dr. Lina Bandyopadhyay**, Advisor Public Health (Professor) Eq., Dept. Of PSM , AIH&PH
- **Dr. Bobby Paul**, Professor and HOD, Dept. of PSM, AIH&PH

Introduction: CHOs have been assigned to run NCD clinics in rural areas under the CPHC program. Multiskilled CHOs are the key role player to deliver expended services, continuum of care etc. This study aims to describe levels of motivation in Community Health Officers and its various associates to rule out the obstacles in terms of service delivery.

Objectives:

1. To determine the level of motivation among the study participants
2. To identify the factors associated with the motivation among the study participants

Materials and Methods: A cross-sectional setting-based observational, descriptive study was performed among 106 randomly selected Community Health Officers through simple random sampling from December '22 to February '23 in selected Sub-Centres under the CMOH, South 24 Parganas. Face-to-face interview was conducted and data was analysed using SPSS 16.

Result: Mean age of the respondent was 30 years and 90% of the participants were female who have working experience as staff nurse. 76% of the participants are the permanent resident of the same district and most of them travel daily from home to the workplace. 68.6% participants have average motivation due to lack of inspiration and recognition whereas 31.4% have high motivation to their job. 50% participants reported average burnout for executing their job. 59% are averagely satisfied with their job whereas 24% reported dissatisfaction due to poor support and supervision.

Conclusion: Inspiration and recognition from higher authority is essential to improve motivation. Regular need-based training, support and supervision require more attention.

Keywords: Motivation, Community Health Officers, Health professionals, Occupational Health

❖ **Title: Musi river and its effect on public health, steps taken by GHMC, Hyderabad, Telangana state.**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Rambabu Ayyadevara, Chief Entomologist, GHMC

Introduction: Musi river origin from Antagiri hills, where the river Musi flows 19.7kms across the city. Musi river is covered (4) zones with GHMC limits i.e., Charminar zone, Khairatabad zone, Secunderabad zone, LB Nagar zone, mosquito control activities are executed with (4) Asst entomologist, 5 entomology field assistants, 57 fieldworkers are working for mosquito larvae control in Musi river from Bapughat to Nagole bridge. Mosquito control activities are of 2 types Anti-larval operations, Adult mosquito measures.

Objectives: To find out the larval density and mosquito density and to control the mosquito menace.

Materials and Methods: Total 4 zones covering Musi river, with 6 circles, each zone we selected to zones, spraying done by drone antilarval method, and manual antilarval adult mosquito measures, on

pilot method from each zone 2 areas selected ,total 6 places selected, before spraying (ALO)after spraying we find larval density by doing dip method, total 5 dips taken, total larva and total dips divided we find larva density ,using MLO oil as chemical.Comparing before after spraying manual method.

Results and Conclusion:

Sl. No.	Zone	Name of the Circle	Name of the Lake / Tank	Name of the Chemical used	Type of Spraying (Manual / Drone)	Before Spraying					After Spraying					Reduced %	No. of Mosquitoes found Before Spraying				Time Spent (Hrs)	No. of Mosquitoes found After Spraying				Time Spent (Hrs)	MHD (Total No. of Mosquitoes / Total Time spent)	MHD (Total No. of Mosquitoes / Total Time spent)	Reduced %		
						Larva Found in DIPS					Larva Found in DIPS						Aedes	Culex	Anopheles	Armi geres		Aedes	Culex	Anopheles	Armi geres						
						1st	2nd	3rd	4th	5th	1st	2nd	3rd	4th	5th															Larval Density (Total Larva found / Total No. of)	Larval Density (Total Larva found / Total No. of)
1	LB Nagar	5-Saroor nagar	Nagole bridge	MLO	Manual	0	1	1	0	0	1.0	0	0	0	0	0	100.0	0	0	0	0	1	0	0	0	0	0	1	0	0	0.0
2	Charminar	11-Rajendra nagar	Attapur Bridge (MUSI)	MLO	Manual	20	16	12	8	6	12.4	9	8	6	4	4	6.20	50.0	0	10	0	3	2	7	0	2	0	1	1	3	53.8
3		6- Malakpet	Chadharghat Bridge	MLO	Manual	10	6	6	8	5	7.0	8	5	3	3	0	4.75	32.1	0	8	0	0	1	8	0	2	0	0	1	2	75.0
4	Khairatabad	13 Karwan	Bapughat Bridge	MLO Oil	Manual	8	7	4	6	5	6.0	3	4	2	3	2	2.8	53.3	3.0	4.0	2.0	0.0	2.0	5	3	2	1	0	1	4	20.0
5		14-Goshmahal	Puranapool Bridge	MLO	Drone	5	3	1	4	0	3.5	3	2	1	2	0	2.0	42.9	0	7	2	0	1	9	0	3	1	0	1	4	55.6
6	SEC BAD	16- Amberpet	Golnaka Bridge	MLO	Manual	5	3	8	4	3	4.6	3	2	0	1	0	2.0	56.5	0	6	0	2	2	4	0	3	2	0	2	2.5	37.5

Figure 1 Statement showing the Circle wise Larval & Mosquito Density in Musi

From above Figure 1 , LB Nagar 0 density Charminar Attapur bridge 12.4 to 6.20, 50%reduced most of the places 50%reduced ,we will do our activities day by day up to 0 density. Mosquito density before after spraying Lb Nagar 0 mosquito density reduced, in Malkapet area reduced 75%,followed I other places ,density in Charminar zoner reduced 53.8,in another area 53.3 and We will do our drone and manual activities until the larval density, mosquito density come to 0 that means 100%.

Keywords: Musi River, Lakes ,Hyderabad, Mosquito Density.

❖ **Title: National prevalence of Gestational Diabetes Mellitus in pregnant women across different states of India: A Systematic Review and Meta-analysis**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

Dr. Neha Mantri, Ph.D. Student (CMFM), AIIMS, Jodhpur.

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Introduction: Manifestation of Gestational diabetes mellitus (GDM) in pregnancy has adverse maternal and neonatal outcomes. Indian pregnant women are at increased risk of having GDM, but less is known about the regional prevalence estimates of GDM in India.

Objectives: This systematic review and meta-analysis aimed to investigate the prevalence of Gestational Diabetes Mellitus (GDM) among pregnant women and how they might differ between the different regions of India.

Materials and Methods: The study protocol was registered in PROSPERO (Ref. CRD42022335011). Data sources like PubMed, Scopus, Google Scholar, and ShodhGanga searches were run to identify quantitative research papers (database inception to 15th June 2022). Prevalence studies were included in the study. A total of 2393 articles were identified for screening which was completed by three independent reviewers. Only 117 studies met the inclusion criteria. Meta-analysis was done using the Inverse variance heterogeneity method which represents the variation in the prevalence of GDM among pregnant women residing across the different zones of India.

Results: We found a pooled estimate (with an Inverse square heterogeneity model) of the prevalence of overall GDM in pregnant women was 0.13% [95% CI, 0.09-0.16]. The prevalence of GDM ranges from 7.0% (West) to 16.1% (North) zone of India. In India, DIPSI was the most common diagnostic criteria used, followed by IADPSG and WHO 1999. It was observed that the rural population has slightly less prevalence of GDM at 10.0% [6.0-13.0%, $I_2=96%$] compared to the urban population at 12.0% [9.0-16.0%, $I_2=99%$].

Conclusion: GDM is a rising public health controversy due to its lack of universal consensus in its screening and diagnostic approach. For prompt diagnosis and better management of GDM in India, we must incorporate a feasible, cost-effective, and reliable diagnostic tool that can easily be collated with the public healthcare system.

Keywords: Gestational Diabetes Mellitus, Pregnancy, Screening, India.

❖ Title: Nature and Level of Mental Health Stigma Among Primary Health Care workers in India: Findings from Kolar district-wide survey

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Senthil Amudhan, Additional Professor, Department of Epidemiology, National Institute of Mental Health And Neuro Sciences (NIMHANS), Bengaluru

Co-authors:

- **Ramesh babu**, Taluka Health Officer-Madhugiri, Tumkur district, Health & Family Welfare Department, Government of Karnataka
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- **Girish N Rao**, Professor, Department of Epidemiology, National Institute of Mental Health And Neuro Sciences (NIMHANS), Bengaluru-560029



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Introduction: It is quite disturbing to find that many people with mental health problems reported stigma experiences within the health care services perpetuated by health care providers. Thus, it becomes essential to understand and diminish the stigmatization by health care providers especially the Health Assistants (who form the first line workers from the health system) to advance the mental health services.

Objectives: The present study aimed to assess the nature, degree, and the socio-demographic correlates of mental health stigma among the Health Assistants of a district in India.

Methods: A district-wide cross-sectional survey was undertaken among 291 health assistants in Kolar District to assess the stigma related knowledge, attitudes and behaviour using MAKS (Mental Health Knowledge Schedule), MICA-4 (Mental Illness Clinicians' Attitudes Scale) and RIBS (Reported and Intended Behaviour) respectively. All the study instruments were validated for feasibility and reliability before administration. Data were entered in Epiinfo, and analysed using descriptive and inferential (unpaired t-test) statistics.

Results: The total scores of MAKS, MICA-4 and RIBS were (22.81 ± 2.79) , (52.63 ± 7.45) and (13.12 ± 3.58) respectively. The MICA-4 scores had negative correlations with RIBS ($r = -0.34$, $P < 0.001$) and MAKS ($r = -0.18$, $P = 0.002$). The present study did not show significant differences among the participants classified by gender, education, religion, family type, place of residence and marital status. Even though the differences have reached statistical significance for age, income, cadre and work experience, the small differences does not allow drawing any conclusion for practical implications.

Conclusion: The study reported a higher knowledge but less favourable behaviour and attitude. This finding highlights the need to improve the attitude and behaviour of health care providers towards people with mental illness through anti-stigma campaigns with focus on universal approach, social contact, and mental health care. This will also help to close the treatment gap.

Keywords: Mental Health Stigma, Primary Health Care workers, Health Assistants, district survey, stigma, treatment gap

❖ Title: One Health Collaboration For A Resilient And Vibrant Health System In India: Learnings From Global Perspectives

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Siladitya Balial, Research Assistant of PREVAIL Project at Kolkata site under JOHNS HOPKINS UNIVERSITY.

Introduction:- The One Health (OH) approach to research addresses questions at the intersections of human, animal, and environmental health by utilizing the expert knowledge of researchers, including public health practitioners and clinicians from multiple disciplines and at local, national, and global levels. In 2004, Wildlife conservation society gave the concept of "One World, One Health".

Objectives:-

1. Policy relevant scientific assessment on the emergence of health crises arising from the human-animal-ecosystem interface.
2. To identify opportunities for health improvement and optimize risk mitigation simultaneously across all three domains.
3. To identify line of action for extension/public health organizations in One Health Approach.



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Materials and Methods:- A systematic review of the literature was carried out to identify potential challenges and possible solutions for designing and implementing one health initiatives.

Results:- Indian One health concept related strategies-There are a few instances of collaboration in India for the control of outbreaks. The initiatives that have been commenced so far in India are either solution-based collaborations or level-based (research) collaborations.

There is a need to increase research on zoonoses, food safety, and agriculture and to improve the understanding of the one health concept. Acceptance of one health is seen where there was impact of infectious diseases in India.

Conclusion: Finally, we discuss opportunities for applying an OH approach to identify solutions to current global health issues, and the need for cross-disciplinary funding sources to foster an OH approach to research and administrative barriers, improved science-based risk management policies, improved manpower and research infrastructure capacity in India.

❖ Title: Non-communicable disease profile and its occupational determinants among factory workers of Northern India.

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Shipra Saini, ESIC Medical College

Co-authors:

- **Dr. Mitasha Singh**, ESIC Medical College and Hospital, Faridabad
- **Dr. Pooja Goyal** ESIC Medical College & Hospital, Faridabad

Introduction: The garment and textile industry of India is the second largest contributor of employment and economic growth. The employees are engaged in plethora of activities from sewing, ironing, packing to delivering and lifting heavy loads. The long working shifts without adequate ergonomic facilities at the workplace risks the workers for various non-communicable diseases (NCD).

Objective: To estimate the prevalence of NCD and its associated risk factors among garment workers of Faridabad, Haryana.

Materials and Methods: A cross-sectional study was carried out among 89 male garment factory workers. Detailed history of socio-demographic and work profile was taken by personal interview. Screening for presence of diabetes (DM) and Hypertension (HTN) along with its risk factors was done using pretested predesigned World Health Organization STEP wise approach to surveillance (WHO STEPS) questionnaire. Body mass index ≥ 23.0 kg/m² is labelled as overweight and obese, Random blood sugar >200 mg/dl is labelled as diabetes and Blood pressure $\geq 140/90$ mm of Hg is labelled as hypertension.

Results: Among the study participants, the mean age was 32.4 ± 7.9 years. Out of the total 89 workers, 87 (97.7%) had either one or more NCD's that is central obesity, DM or HTN. 24.7% were overweight or obese. The prevalence of central obesity based on waist-hip ratio (male ≥ 0.90) was 58.4%. The prevalence of DM was 2.2% and that of HTN was 23.6%. Study population having any one of the NCDs was equally distributed among those taking (and not taking) salty food, lack of (and presence of) physical activity. This distribution was statistically non-significant. The odds of having NCD's among tobacco/ alcohol abusers was



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1.87 (95%CI- 0.11, 31.4) times more as compared to non-alcoholics and non-smokers. All the night shift workers had either of one NCD's.

Conclusion: The prevalence of DM, HTN and obesity was quite high in the factory workers. Apart from screening the physical risk factors, emotional and stress related risk factors for various NCD's should also be attempted in these unprivileged, under paid, and laboured factory workers.

Keywords: Lifestyle diseases, Garment workers, WHO STEPS

❖ **Title: Nutritional assessment of persons living with TB and use of field charts at primary care in Dakshina Kannada**

Mode of presentation: Poster; **Theme:** Public Health Nutrition

Presenting author:

Dr. Madhavi Bhargava

❖ **Title: Nutritional Status And Dietary Fads In School Going Adolescent Girls In Urban West Bengal**

Mode of presentation: Poster; **Theme:** Public Health Nutrition

Presenting author:

Dr. Mousumi Datta AIIH&PH and Medical Officer, Kolkata Municipal Corporation

Co-authors:

- **Dr Debashis Dutt**, Director Professor and Dean, AIIH & PH, Kolkata

Introduction: The period of adolescents is defined by The World Health Organization (WHO) as 10–19 years of age. Rapid growth and maturation during this period require better nutrition. Changing dietary habit with increase consumption of energy dense but nutrient poor foods may lead to poor nutritional status.

Objective: To assess the nutritional status and to elicit dietary habits of adolescent girls in an English medium school of North 24 Paragana, West Bengal.

Methods: This cross sectional study was done in August 2019 in an English medium school of North 24 Paragana, West Bengal, selected by convenience sampling. A ten item simplified dietary gap assessment tool was used to elicit daily consumption of various food groups and dietary fads. Anthropometric data collected by measuring height and weight and calculating BMI. Nutritional status compared based on the WHO BMI chart for girls from 5 to 19 years.

Results: Total 162 students aged 12 to 16 year participated. Of them BMI is less than 2SD in 5.4%, more than 2SD in 3% and more than 1SD (overweight) in 24.8%. Almost one-fourth of them did not take three main meals(cereals). Two third of them not taking milk and milk products in recommended amount. Nearly 1/3rd used to skip meals. Majority responded 'yes' to eating junkfoods(84.2%) and streetfoods(71.5%).

Conclusion: Better eating habits and less dietary gaps associated with better nutritional status, which influences academic performance also. Further study with large sample size will be helpful to identify the associated factors.



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Keywords: adolescent, nutrition, food habit, school health

❖ **Title: Obesity and Visceral Fat: Indicators for Anemia among Females visiting a Health Camp of World Obesity Day**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr. Ravishekar N Hiremath,

Background: Obesity and anemia are among most common non-communicable diseases not only in India but around the world. Obesity being a risk factor for various lifestyle disease, is hypothesized to affect iron absorption and hence level of hemoglobin.

Methods: A cross sectional study was done among married females visiting a health camp on World Obesity Day. They were asked to undergo clinical and anthropometric examination. Body fat analysis and blood indices were also done. Sociodemographic profiling of participants was done using a self-administered questionnaire.

Results: The mean age of study participants was found to be 30.27 ± 5.3 years. 487 (70.78%) of the study participants were found obese with $BMI > 23 \text{Kg/m}^2$ and 61 (8.86%) participants were found to be anemic. 157 (36.9%) had abnormal visceral fat. Visceral fat content was found to be significantly associated with anemia among participants.

Conclusion: Obesity and anemia are among most prevalent non-communicable conditions among adult females around the world. Though various indicators are known to these states, relationship of fat distribution with anemia needs to be explored further.

Keywords: Anemia, Obesity, Married females, Iron deficiency

❖ **Title: Occupational Hazards and Health Problems of Agricultural Workers in a Rural Area of Nadia District of West Bengal**

Mode of presentation: Poster; **Theme:**

Presenting author:

Dr. Manisha Das, Senior Resident, R.G.Kar Medical College and Hospital, Kolkata, West Bengal

Co-authors:

- **Dr. Amrita Samanta,** Associate Professor, Raiganj Government Medical College, Uttar Dinajpur, West Bengal
- **Dr. Rivu Basu,** Associate Professor, Bankura Sammilani Medical College, Bankura, West Bengal

Background: Agricultural works are associated with a variety of occupational hazards in the form of physical, chemical, biological and mechanical hazards and it is also a very high physically demanding occupation. It is



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also associated with economic uncertainty, vulnerability to weather events leading to stress, anxiety or other mental health crisis.

Objectives: To find out the occupational hazards and to assess the health problems of agricultural workers of Chakdaha Community Development Block of Nadia district, West Bengal.

Materials and Methods: A descriptive study was conducted with cross sectional design among 214 agricultural workers who were engaged in agricultural work for at least one year at Chakdaha Community Development Block. Villages were selected by simple random sampling and study participants were selected by applying probability proportional technique. A predesigned, pretested, semi structured schedule was used for interviewing the study subjects.

Results: Most of the study participants were found to be working for more than 5 days in a week and more than 8 hours per day in bent posture or in static and twisting posture. Maximum study population (88.8%) had the history of pain in lower back followed by pain in the knee (69.2%). 17.3% of the total study population had the incident of unconsciousness under the sun and 14.5% had accidental pesticide poisoning during their work in the fields. 64% of study population had anxiety, 70.1% had depression and 62.6% had high stress level which was significantly associated with age, level of education, type of family, number of earning member in the family, socio economic status and history of loan or debt.

Conclusion: The prevalence of work related injuries, musculoskeletal disorders, mental health problems as well as other health problems were high in the farming community with low rate of healthcare utilization.

❖ Title: Occupational Noise Exposure and Non -Communicable Diseases- an Investigation among Industrial Workers of Northern India

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

Dr Suman Kumar Raushan, PG Resident

Co – author :

▪ **Dr Pooja Goyal**

Background: The India State-Level Disease Burden Initiative in 2017 by Indian Council of Medical Research (ICMR), reported a rising trend in deaths due to Non-Communicable Diseases (NCDs) in India. NCDs are multifactorial in etiology with stress being an important contributor. Industrial workers having prolonged exposure to SPL over 85 dBA are prone to get their organs and systems effected and develop various NCDs.

Objectives:

1. To estimate the prevalence of NCDs (Hypertension, Impaired Glucose Tolerance, Obesity, Hearing loss and COPD) among industrial workers with occupational noise exposure.
2. To determine the association between duration of occupation and NCDs.

Methodology: An industry based, cross-sectional study was conducted among workers employed in manufacturing industries of district Faridabad, Haryana for 3 months. Taking two-sided significance level (1-alpha) of 95, power (1-beta) of 80, prevalence of diabetes among workers exposed to noise as 4.6%,



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absolute error of 0.5 and non-response of 10%; total sample size was calculated was 74. Occupational noise exposure was defined as exposure to noise of 85 dBA or more at work-places, 6 hours a day (Threshold Limit Values criteria provided by the American Conference of Governmental Industrial Hygienists). Information related to socio-demographic factors, occupational history, General Physical Examination, Anthropometry and Biochemical tests including blood pressure, blood test for haemoglobin, audiometry and lung function by spirometry were recorded. Data Analysis is under process and will be done using SPSSv21.

Results: Data analysis is under process and results will be shared later.

❖ **Title: One Health Collaboration For A Resilient And Vibrant Health System In India: Learnings From Global Perspectives**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Siladitya Balial

❖ **Title: Online course: A journey from designing to launching**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Mrs. Shalu Gupta, Programme Officer

Co-authors:

- **Dr Debduitta Bhattacharya**, Scientist-D; **Dr Sanghamitra Pati**, Scientist-G

Introduction: One Health recognizes that the health of people is connected to the health of animals as well as the environment. This course will give you a brief history and evolution of One Health concept, its application, relevance and success. Knowledge on zoonotic diseases, current scenario of emerging and re-emerging infectious diseases, measures to control and ways to reach out to community is part of the course with alignment to public health policies. The course is designed for the students, early career researchers, clinicians and policy makers to get an insight into “One health” and its importance in view of emerging and re-emerging infectious diseases of public health importance.

Objectives: To Introduce learners to the concept of ‘One Health’ and to develop a trained human resource for effective management of emerging re-emerging infectious diseases of public health importance.

Materials and Methods: The course fund was approved from Department of Health Research. Staff recruited and office equipment purchased post which platform of NPTEL was selected to host the course. With 5-6 rounds of peer reviews and corrections, course module was approved by NPTEL and NIE Chennai. Faculties selected for each topic and recording of lectures took place in a span of 3 months. Editing and proof reading was completed in next 6 weeks and course launched in January 2023.



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Results: 2060 students have enrolled in the course with over 200+ registrations for the examination to be held in April 2023. Each week, feedback is taken and doubts and queries are attended to through the use of a google group.

Conclusion: This course is the first ever course on “ONE HEALTH” in India to be launched online and it is a breakthrough in the history of public health. The course will help and give a light to new directions for research work and studies in the area of One Health which is a growing phenomenon in the current world.

Keywords: One health, Zoonosis, Applied Epidemiology, One Health Policy

❖ **Title: Oral Hygiene Practices, Dietary Habits and its relation to Dental Caries among children in the slums of Guwahati City, Assam: A Cross- Sectional Study.**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Arunima Sarmah, Department of Community Medicine, GMCH

Co-authors:

- **Dr Jutika Ojah, Professor and Head**, Department of Community Medicine, GMCH
- **Dr Mehzabin Haider Hazarika**, Assistant Professor, Department of Community Medicine, GMCH

Introduction: Dental Caries affects all age groups, although children are affected to a great extent. It is caused by bacterial degradation of sugar and carbohydrates present in food, resulting in destruction of tooth enamel. The risk factors for caries include biological, socio-behavioral and environmental factors.

Objectives:

1. To estimate the prevalence of dental caries among children of 5 to 12 years in Urban slums of Guwahati, Kamrup metro District.
2. To assess different risk factors associated with dental caries.

Materials and Methods:

Taking the prevalence of dental caries from one previous study as 43.6%, relative error as 10%, the sample size was calculated to be 98, rounded off to 100.

Out of 100 registered slums in Kamrup metro, 10 slums were selected randomly. List of households having 5-12 years old children in each slum were prepared. Then 10 children were selected from each slum randomly from the prepared list. Subjects were interviewed and examined by pre-designed semi-structured questionnaire.

Results: Out of 100 children, prevalence of dental caries was found to be 63.3%. Around 73.3% children used toothbrush and toothpaste to clean their teeth and 26.7% used their fingers and abrasives like toothpaste, ash and charcoal. Around 80% children brushed once daily and 20% brushed twice a day. A total of 83.3 (%) children ate chocolates daily, 53.3% children seek dental care in past 6 months.

Conclusion: In the study, most of the children among slums of Guwahati city are found to have dental caries which might be due to excessive consumption of chocolates and poor oral hygiene practices.

Keywords: Oral hygiene practices, dental caries, slums



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❖ Title: Out-of pocket expenditure among antenatal patients attending outdoor patient's department in a tertiary care hospital in Delhi

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Sunanda Gupta, Senior Resident, Department of Community Medicine, VMMC and Safdarjung Hospital, New Delhi.

Co-authors:

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Government of India has promoted several initiatives for providing financial and medical support to all women during their pregnancy and delivery. Despite this, various studies report out-of-pocket expenditure among antenatal women across the country.

Objectives: To assess out-of pocket expenditure among antenatal patients attending outdoor patient's department in a tertiary care hospital in Delhi.

Materials and Methods: A cross-sectional study was conducted among 405 antenatal women attending the outdoor patients department of Gynaecology and Obstetrics, VMMC and Safdarjung Hospital, New Delhi. Data was collected through systematic random sampling over three days in September 2022, during OPD hours, using a self-developed pre-tested interview schedule.

Results: The median age of study participants was 25 (IQR:22-28) years. Ninety-five percent of the participants were literate. Ninety-four percent of study subjects belonged to urban area. Eighty percent participants were Hindu by religion. Median monthly family income was 15000(12000-25000) INR. Almost sixty percent of the participants were multigravida. Five percent of the participants had conceived by artificial means. Fifty-six percent of the participants had visited private facility for antenatal care at least once. Male sex preference for baby was reported by twenty-eight percent participants.

Median out-of-pocket expenditure (OOPE) during antenatal period was found to be 4000 (IQR:1900-7400) INR. Highest median cost for OOPE was reported for laboratory investigations, followed by purchase of medicine(s), consultation charges (at private facilities visited before reporting to Safdarjung) and lodging for attendants.

Fifty percent of the participants met out-of-pocket expenditure via salary/ wage/ pension. Ten percent of participants utilized savings for meeting the expenses, while eight percent of participants used both sources of money.

Conclusion: The present study found that hundred percent of participants incurred out-of-pocket expenditure for antenatal care and most common source of this money was reported to be salary/wage/pension.

Keywords: Antenatal care, Out-of-pocket expenditure, Antenatal care cost



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❖ **Title: Pattern of multimorbidity among the physically disabled people- Findings from a rural cohort.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Mamata Nayak, Research assistant

Co-authors:

- **Chinmaya Kumar Acharya**, Research Assistant

Backgrounds: Physical disability is associated with greater likelihood of depression and hence, to morbidity and mortality. This study identifies prevalent multimorbidity patterns and evaluates their association with disability among rural residents.

Objectives: To assess the pattern of multimorbidity among physically disabled people in Tigriria region. Additionally, we tend to assess the associated factors for the same.

Materials and Methods: A cross-sectional study, using 610 physical disabled participants, was carried out in rural Tigriria. We have only considered to those who have visual, hearing, speech, and mobility impairment. All the impaired conditions were verified with their certificate. A pretested and validated questionnaire was used for data collection. Multimorbidity was the interest of outcome; defined as the co-occurrence of at least two of the following chronic diseases: A descriptive statistic along with logistic regression was used to assess the association of socio demographic factors with multimorbidity among physical disabled participants.

Results: Out of 610 participants, 8.52% had multimorbidity. Additionally, among mobility disabled participants, the multimorbidity was found to high (10.26%) followed by visual disabled participants (8.18%). More than two third (62.18%) of participants were male. Half of participants were not working. Upon analyzing the association, we do not found any significant association with the multimorbidity among physical disabled patients.

Conclusion: We observed a higher prevalence of multimorbidity among mobility disabled participants followed by participants with visual impairment. Further research is required for understanding how this physical disability relates to disease progression. There is a need to health system strengthening to implement patient-centered care involving special care with mobility and visual assessment in these cases.

Keywords: Physical Disability, Multimorbidity

❖ **Title: Pattern of usage and perception regarding effectiveness of fitness applications among fitness application users of a medical institute: A cross-sectional study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Suman Chatterjee, PG student

Co-authors:

- **Dr.DS Faujdar**, Professor, Dept of Community Medicine, AFMC



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Background: Lack of exercise puts individuals at an increased risk of numerous chronic health conditions. Mobile and wireless technologies have the potential to reach millions of people and can help to promote physical activity and reduce sedentary behaviours. However, there is still a lot of gaps in knowledge regarding how fitness applications may impact behavioural change and health outcomes.

Objectives: To understand the pattern of usage of fitness applications among users and to explore the perception regarding effectiveness of fitness applications.

Methods: A descriptive cross-sectional study was conducted among medical undergraduates in AFMC, Pune. The study was conducted from mid-Aug to mid-September. A pre-validated, self-administered questionnaire was used to collect data with the help of Google Form. The data was analysed using SPSS v23 software.

Results: A total of 236 undergraduates participated in the study among which 58 (24.6%) were fitness application users. Among users, 46 (79.4%) were males while 12 (20.6%) were females, all between the age group of 17-24 years. Among users, 27 (46.5%) had been using fitness applications for more than 01 year while 14 (24.1%) were using fitness applications for less than 01 month. 16 (27%) of fitness application users used fitness applications every day without fail while 36 (62%) users used fitness applications on most days. Calories burnt was the most important variable of interest among users 24 (41.38%) followed by number of steps covered 13(22.4%).

Conclusion: More than 45% of fitness application users continue to use fitness applications for more than a year showing good adherence among users. However, when looking at daily use among users, only 27% used fitness applications every day without fail, showing that most users are not dependant on fitness applications to achieve their fitness goals on a daily basis.

Keywords: Fitness applications

❖ **Title: Perceived Prioritization, Barriers to Screening, and Effectiveness of Health Education on Health Literacy of Cervical Cancer among Eligible Women in Rural Puducherry: An Exploratory Mixed Method Study**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Introduction: Despite continuous efforts to promote cervical cancer screening, uptake is low in rural India. Low awareness and non-utilization of services can be improved by increasing health literacy to process and understand health information to make decisions.



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Objectives: To determine perceived prioritization and barriers to screening, develop a health education booklet and determine its effectiveness in increasing health literacy about cervical cancer.

Materials and Methods: An exploratory mixed-method study was conducted in selected areas of rural Puducherry. We conducted focus group discussions (FGDs) to understand perceived prioritization, knowledge, and barriers to cervical cancer screening. In-depth interviews (IDIs) with stakeholders helped in developing a health education booklet and validating it using PEMAT-P assessment tool. Single-arm pre-post-test with health education sessions were conducted. Modified HLQ-2014 was used to assess knowledge, perception and health literacy about cervical cancer. Reasons for not getting screened were elicited during post-test on Day 8.

Results: Low prioritization and awareness regarding cervical cancer, fear of diagnosis, and logistics were main barriers to screening. Community-level awareness programs and using a one-step screen-and-treat approach were proposed. Health education booklet thus developed scored 56.0% for understandability and 50.0% for actionability on PEMAT-P. Of 120 participants, 108 (90%) completed post-test. Among them, 26 (24%) underwent screening. Not having symptoms (23%) and logistic issues (15%) were most common reasons for not getting screened. Knowledge of screening criteria improved from 20.4% to 71.3% ($p < 0.001$). Five out of nine domains of Modified HLQ-2014 showed significant improvement ($p < 0.001$).

Conclusion: Health education is effective in increasing health literacy about cervical cancer screening. Prioritizing women's health and aiding utilization of available facilities are key to making sustainable changes at community level.

Keywords: Perceived prioritization, PEMAT-P, health literacy, HLQ-2014

❖ Title: Perceived Risk of COVID-19 Infection in Patients with Rheumatoid Arthritis

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr Ritu Sahu, PGT

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Introduction: COVID-19 pandemic caused panic among all. The uncertainty in the diagnosis, treatment and future consequences led to anxiety, fears and worries amongst all worldwide. Patients with rheumatoid arthritis (RA) faced challenges with regards to their disease and its treatment. **Objectives:** The study was done to evaluate the self-reported perceived fear during the first wave of the COVID-19 pandemic in patients with rheumatoid arthritis.



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Materials and Methods: A cross-sectional study was carried out by telephonic interviews, amongst a sample of consenting 71 participants of the registered 76 patients, visiting the rheumatologist of a specific unit of the hospital. Sociodemographic and clinical data was extracted from past reports and their fear of COVID-19, assessed using “Fear of Coronavirus-19 Scale”; during June to September 2020.

Results: The mean age of the study participants was 49.27 ± 10.40 years; 85% females. 43.9% of them had suffered from COVID-19. 64% had an inherent fear of getting disease, 8% couldn't sleep at night. Fears about COVID-19 were higher among younger age group, females, those who had been tested for SARS-CoV-2 and more during first wave. 16.6% were afraid of losing their lives due to COVID-19.

Conclusion: This study assessed the levels of fear and investigated their possible predictors during the outbreak of COVID-19 in a vulnerable group of immunocompromised patients. The present study used the Fear of COVID-19 Scale (FCV- 19S) to complement the clinical efforts in preventing the spread and treating of COVID-19 cases amongst the registered patients of a tertiary care hospital.

Keywords: risk, fear, COVID-19 infection, Rheumatoid arthritis

❖ **Title: Perception Among MBBS Students About Online Teaching in a Medical College of Kolkata**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Soumik Das

❖ **Title: Perception and attitude of Undergraduate Medical students towards rural health services – a cross sectional study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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Introduction: Medical students are under immense pressure and competition to advance in their career. 65% of Indian population resides in rural area and their health care needs are to taken care of. Understanding perception and attitude of undergraduate medical students towards rural health service will help in better provision of rural healthcare services.

Objectives: 1) To assess the perception and attitude of medical students towards rural health services
2) To understand the factors influencing willingness and unwillingness of medical students towards serving in rural areas

Material and methods: A cross-sectional study was conducted among 600 students of first, second and final MBBS studying in a private medical college in Andhra Pradesh. A predesigned semi-structured, self-administered questionnaire was used for data collection and the data was analyzed in Epi Info 7



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Results: A total of 467 completed questionnaires were returned with participation rate of 78% out of which 67.9% were females and 32.1% were males. 44.3% of the respondents had a family member working in rural area. 81.4% of respondents believed that rural services should be made compulsory for doctors. 79.9% of respondents expressed willingness to work in rural areas. The commonest reason for willingness to work in rural areas was to gain experience (62.2%) while the commonest reason for unwillingness to work in rural areas was limited infrastructure (57.5%).

Conclusions: Rural health services can be improved by employing young medical graduates

Keywords: Medical students, perception, attitude, rural health servi

❖ **Title: Perception Towards Biomedical Research Among Undergraduate Medical Students in a Tertiary Care Institute of Kolkata: A Cross-Sectional Study**

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author:

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Background: Biomedical research at undergraduate level is a novel concept. It is believed to encourage research-oriented thinking among students. Participation in research is important for developing an insight into evidence-based medicine.

Objectives: This study focussed on assessing perception towards biomedical research among undergraduate medical students in a Tertiary Care Institute of Kolkata, to find out association of perception with their background information and to determine factors influencing their perception towards research.

Materials and Methods: A cross-sectional study was conducted from December 2022-February 2023, among 298 students belonging to Phase III of MBBS (Part I and Part II) of a Tertiary Care Institute of Kolkata, by complete enumeration method. Perception towards research was assessed using 8 items answered on a 5-point Likert Scale. Score more than 75th percentile of the overall perception score was taken as 'highly favourable'. Data were tabulated and analysed in SPSS v25.0. Association of the participants' background information with their perception was assessed using Pearson's Chi-square Test, followed by Multinomial Logistic Regression.

Results: Among the participants, 61% belonged to Part I, 69.1% had English as medium of instruction in schools and 27.2% had 'highly favourable' perception towards research. Personal interest was the



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main factor favouring research (80%), while lack of dedicated research time was the major hindering factor (87.5%). Statistically significant associations of perception were found with Phase III of MBBS, medium of instruction in schools and their parents' education. Also, statistically significant higher odds of 'highly favourable' perception were found among English-medium students as compared to those who had other languages as medium of instruction in schools.

Conclusion: Almost one-third of the study participants had highly favourable perception towards research. Adequate research time, workshops on research methodology, certificates of appreciation, etc. may foster more enthusiasm among students to avail further research opportunities in future.

Keywords: Biomedical research, perception, undergraduate, medical student

❖ **Title: Perceptions of medical students about Community Medicine subject in a teaching hospital of Visakhapatnam – A cross-sectional study.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. K.Keerthana, , Postgraduate

Co-authors:

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- **Dr. V. B. Srividya**, Associate professor, Department. of Community Medicine

Introduction: India requires a multidisciplinary workforce for managing programs. Community Medicine as a subject has a crucial role in training medical students about the strategies and interventions of national health programs. The study was conducted to know about the perceptions towards learning community medicine and to know the preference for Community medicine as a postgraduate option among medical students.

Objectives:

- 1.To find out the perceptions towards learning of Community Medicine among medical students.
- 2.To find out the preference of Community Medicine as a Post-graduate option among medical students.

Materials and Methods: A cross-sectional study was conducted among students pursuing MBBS in the teaching hospital of Visakhapatnam. The study period was 3 months (Dec 2022 – Feb 2023). MBBS students and interns were selected by using a purposive sampling method and a self-administered questionnaire was used to collect the data through a google form.

Results: A total of **174** students were part of the present study. The mean age of participants was **21.78 (±1.8)**. Among the total participants, **28.7%** reported an interest in learning the principles of Community Medicine **whereas 74.1%** expressed that learning the subject is mandatory in the undergraduate medicine curriculum. Around **16.1%** wanted to choose Community medicine as a specialty and the reason for their option was less hectic life or no night duties (**64.3%**) followed by interest in research and fieldwork (**61.9%**). Interested in clinical subjects (**81.8%**) ranked topmost for not choosing the specialty, followed by no name/fame equivalent to other subjects (**37.8%**).



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Conclusion: The students felt that more field visits and more interactive and example-based teaching can make the Community Medicine subject more interesting. Interest in research and the chance of having a less hectic life were said to be the reasons for opting the specialty in the post-graduation.

Keywords: Community medicine, Perceptions, Teaching hospital

❖ **Title: Physical activity and dietary intake pattern in adolescent children living in slums of Mumbai, India**

Mode of presentation: Poster; **Theme:** Public Health Nutrition

Presenting author:

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Introduction: Globally, an increase in physical inactivity and intake of unhealthy food, particularly in adolescents, are commonly observed. The slums in urban areas are characterized by crowded homes, few open spaces along with prevalence of street food. Hence, it is essential to evaluate physical activity and dietary intake patterns of adolescent children particularly in urban-slums.

Objective: To analyze physical activity and dietary patterns along with changes in anthropometric parameters in urban adolescents in India.

Materials & Methods: This study is a part of the APEAL (Longitudinal Effects of Air Pollution Exposure on Adolescents Lungs) study, a longitudinal multi-centric cohort study examining the effect of air pollution exposure on lung function in four cities in India. Physical activity and dietary patterns were assessed in about ~220 subjects in urban Mumbai using digitized questionnaires (IPAQ, FFQ). Body height, weight, and fat mass percentages were also taken as a part of anthropometric measurements..

Results and Discussion: Almost 90% of the children (out of N= 221) are found to have low physical activity. Overall, no significant difference was found in physical activity in males and females ($p > 0.05$). The consumption frequency of junk-fried food was significantly higher in males than in females ($p < 0.05$). The mean body mass index (BMI) for males (N=134) and females (N=87) was 17.4 ± 3.8 , and 17.3 ± 3.0 kg/m², respectively. Corresponding mean fat mass index (FMI) was 4.1 ± 1.7 and 1.7 ± 1.3 kg/m², respectively. There is no significant difference in BMI and FMI between the genders ($p > 0.05$).



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Conclusions: Since the data is from the urban slums of Mumbai, a considerable percentage of children are stunted and wasted. Hence lack of physical activity can be an outcome of low nutritional status. This work can help in identifying the typical nutrition and physical activity pattern that could help prepare targeted, tailored intervention programs that improve healthy habits in adolescents. Additional analysis examining the relationship among physical activity, anthropometry and dietary intake is underway.

Keywords: Physical Activity, Dietary patterns, anthropometry, Body Mass Index, and Fat Mass Index.

❖ **Title: Poly-morbidities and frailty among the elderly residing in the rural Bihar**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Rajath Rao, Senior resident, Department of Community and Family Medicine, AIIMS Patna

Introduction: Aging is unavoidable. Aging and longevity of life has resulted in Polymorbidity (PM) and frailty. India will face demographic transition in next three decades. So, this study was planned with objective to find the prevalence of PM, its association with frailty and factors associated with among elderly population of field practise area of AIIMS Patna

Methods: This community-based cross-sectional study was conducted among 395 elderlies residing in the rural field practice area of AIIMS Patna for a duration of six months using a semi-structured, standard tool “Edmonston Frail Scale” for frailty and “WHO-QOL BREF” for health-related quality of life (Hr-QOL). A frailty score of ≥ 5 was taken as presence of frailty. PM was defined as presence of two or more comorbidities. Descriptive analysis was conducted to find the Proportion of PM with 95% CI. A multivariable linear regression analysis was performed to find out the association of PM with frailty and adjusted Beta coefficient with 95% CI was reported.

Results: A total of 53[**13.4%**, 95% CI: 10.4-17.3] elders had Polymorbidity and nearly three-fourth, 295 [**75%**, 95% CI: 70.1-78.2] had frailty. Physical domain of Hr-QOL being affected the most out of all with mean (SD) score of 51.2 (8.2). Drug adherence (adjusted B: -0.15, 95% CI: -0.24 to -0.05), Physical domain of Hr-QOL (adjusted B: -0.018, 95% CI: -0.04 to -0.001) and social domain of Hr-QOL (adjusted B: -0.01, 95% CI: -0.023 to -0.001) were independently associated with frailty among the rural elderly.

Conclusion: One out of six and three out of four elderlies had Polymorbidity and frailty respectively. Physical domain of quality of life was most affected among the all. Adherence to medicines, better physical and social quality of life were the correlated of frailty among the elderly in our study.

Keywords: Polymorbidity, Polypharmacy, drug adherence, Frailty, quality of life, elderly

❖ **Title: Postmenopausal Experiences and Constraints in Seeking Health Care in a Community Development Block of Purba Bardhaman District, West Bengal: A Qualitative Study**

Mode of presentation: Poster; **Theme:**

Presenting author:

Dr. Anisha Sarkar Department of Community Medicine, Burdwan Medical College



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Co-authors:

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- **Pranita Taraphdar** Department of Community Medicine, Burdwan Medical College

Introduction: During menopause, women experienced various psychological or physical changes which need adequate attention. Moreover, women don't seek help for these problems due to their hesitancy, lack of awareness, socio-cultural or financial-constraints or as they feel this is a natural phenomenon.

Objectives: To explore the postmenopausal experiences faced by women during menopause and to elicit the constraints faced by them in seeking health care services.

Materials and methods: This was a qualitative study with phenomenological approach conducted among post-menopausal women (≥ 45 years) from November 2022-February 2023 with the help of In Depth Interview guide in four villages of Bhatar Block, Purba Bardhaman District. Considering the availability of the study participants, they were selected purposively from the list prepared by ASHA of each village and recruitment done till the point of data saturation. Inductive thematic-analysis was used to identify codes and themes.

Results: During menopause, women experienced physical and psychological changes in the body, changes in social life and for these changes they had to adjust to cope up. They felt various needs like empathy from husbands, children, peers and experts. On the other hand, they did not seek help from health-care services due to their lack of knowledge, dissatisfaction from previous visit, cost issue and unavailability of resources in health care delivery system.

Conclusion: Majority of the post-menopausal women faced various problems associated with menopause, but very few had sought help. So, health care providers have an important role to generate awareness among post-menopausal women regarding physical and mental changes during this phase.

Keywords: postmenopausal women, experiences, health-care seeking behavior, qualitative-study

❖ Title: Practice of Menstrual Hygiene among Adolescent Girls in India: A Review

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Swati Shikha

Introduction: Menstruation is the vaginal bleeding that takes place as part of a woman's monthly cycle. The term "Menstrual hygiene" refers to proper maintenance of hygiene related to the menstrual cycle. The primary factor which affects the level of menstrual hygiene is the type of absorbent material used and the frequency of its change. **Objectives:** To estimate and compare the prevalence of sanitary pads use among adolescent girls. **Materials and Methods:** A thorough search was conducted across a number of databases, including PubMed, PubMed Central etc using the following keywords 'adolescent OR adolescence OR puberty OR peer OR school' AND 'Menstruation OR menstrual OR menses' AND 'hygiene OR hygienically OR sanitation OR sanitary' AND 'India'. Observational studies with information on menstruation and menstrual hygiene among adolescent (10–19 years) girls in India were searched. Articles published within the last 20 years were included in this review. Templates were generated in MS Excel Sheet and results were presented as odds ratio with 95% confidence intervals. **Results:** The prevalence of sanitary pad used



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varied from as low as 13.2% to as high as 89.2% whereas the odds of sanitary pads use varied from 0.12 [0.07 – 0.20] to 5.60 [4.42 – 7.10]. **Conclusion:** The prevalence of sanitary pad used is highly variable despite efforts being made to ensure easy availability.

Keywords: Practice, Menstrual, Hygiene, Adolescent

❖ **Title: Predictors of Women Empowerment among residents of selected slum settlements in South Kolkata, West Bengal**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Background: Women empowerment refers to creating an environment for women where they can make decisions of their own for their personal and society's personal benefits. The Goal-5 of the Sustainable Development Goals focuses on "Achieve gender equality and empower all women and girls."

Objectives: This study was conducted to assess the level of empowerment among married women residing in the urban field practice area of IPGME&R, Kolkata; to estimate the proportion of employed women among the study population and to describe the pattern of decision-making among them.

Materials and Methods: An observational study, cross-sectional in design was conducted from October-December 2022, among 175 women residing in selected slum settlements of South Kolkata. Data were collected by face-to-face interview using a predesigned, pretested and structured schedule comprising of questions adapted from NFHS-5 Women's questionnaire. Women empowerment was assessed on five domains. Data were analysed using SPSS v.25.0. Multinomial logistic regression was employed to find predictors of high and low women empowerment.

Results: Around 46% of women had low empowerment scores. Only 17% of the participants were employed. According to the respondents 46.3% and 45.7% of decisions regarding major household purchases and healthcare respectively, were taken jointly by both husband and wife. Women of upper and middle socio-economic status had statistically significantly higher odds of high women empowerment and husbands of respondents having business as the occupation had medium women empowerment compared to the reference group.



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Conclusion: Almost half of the participants had low women empowerment scores. Increasing employment opportunities for women by means of better education, skill training, and the provision of microfinance to start small businesses is recommended.

Keywords: Empowerment, Decision-making, NFHS-5, Women

❖ **Title: Preparedness and perspectives on the Competency Based Medical Education among the faculties of a Government Medical College in Assam**

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author:

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Co-author:

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Introduction: Covid 19 pandemic has taken every nation by storm crossing all barriers of international and national boundaries. The poor and vulnerable sections of the society, like the daily wage earners are displaying tale tell evidences of the horrific effect of the pandemic and lockdown.

Objectives:

1. To assess the impact on socioeconomic status and lifestyle of the daily wage earners because of the pandemic.
2. To assess the impact on health and health seeking behaviour of daily wage earners during the Covid 19 pandemic.

Materials and methods: It is a Community based cross sectional study. Assuming a decline in the socioeconomic status of the daily wage earners due to the current pandemic situation, and this decline affecting 50% of them, with an absolute error of 8%, sample size was calculated as 150. Taking 10% non response rate, the sample size was rounded off to 170.

The state of Assam in India has five regional divisions, each comprising of a number of districts. Randomly 2 divisions were selected. 7 districts were randomly selected from these divisions. From these districts, one block each was taken randomly. From the selected blocks, respondents were selected randomly.

Results: A total of 170 respondents were taken, 74.70% male and 25.30% females. 56.47% faced difficulty in finding work after covid-19, 8.82% were not paid enough and 7.64% had to work for long hours to earn the same amount of money, 27.05% had health issues post covid. Unemployment status rose to 70.83% in Darrang district after the end of second wave.

Post the second wave, 91.18% could not do any savings, 31.18% only could send their children to school, 42.94% only could invest in minor medical needs.

Using up savings, sending children to work, selling household items and skipping major meals were some of the ways how the respondents tried to cope with the crisis.

Conclusion: The study elaborates about the impact of the pandemic on the lives of the vulnerable section of the society like loss of job, irregular and unstructured pay, difficulty in running families, sending children to work and arranging for basic amenities of livelihood.



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Key words: daily wage labourers, lives and livelihood, covid 19

❖ **Title: Prevalence and pattern of multimorbidity among geriatric older population**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

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Co-authors:

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- **Subrata Kumar Palo**(Scientist-D)
- **Sanghamitra Pati** (Director)

Background: Older population tends to have multimorbidity represented by multiple chronic diseases or conditions due to aging changes of organs, which require a variety of medical management.

Objective: To assess the prevalence and pattern of multimorbidity among older patients.

Materials and methods: It is a cross-sectional study conducted between June 2020 to March 2022 among 76379 population, from which 10142 participants, who were 60 years and above were taken as our study participants. Descriptive statistics computed the prevalence and pattern of multimorbidity presented as frequency and percentage. Multivariable logistic regression was made to find the association of socio-demographic factors with multimorbidity among geriatric participants.

Result: From a total of 10142 participants, 22% of all participants had multimorbidity. The majority of the participants (89.42%) are male. Around one-third (34.86%) of participants are illiterate. Upon looking into the association, it was observed that women (OR:1.21; 95% CI: 0.95-1.53) and recent alcoholics (OR:1.05, 95% CI: 0.71-1.56) are more likely to have multimorbidity than males and nondrinkers, respectively. Also, it was revealed that having a job that required more physical activity was protective against developing the condition (OR: 0.49, 95% CI: 0.37-0.64) compared to jobs that required little to no physical exercise.

Conclusion:In view of the global prevalence of multimorbidity among the geriatric population and their associated factors, policy reform, and awareness creation are recommended to tackle the issue. Additional research is needed to develop an understanding of causal pathways.

Keywords: Geriatric people, Multimorbidity, Socioeconomic status, Alcohol

❖ **Title: Prevalence and predictors of distress among adult diabetics: Current scenario from a life style clinic of a teaching hospital, West Bengal.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

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Background: Diabetic distress(DD) refers to an emotional response with the perceived inability to cope with the challenges and demands of living with diabetes mellitus. Although depression and DD are distinct conditions, DD considerably overlaps with the symptoms of major depression. DD has a negative association with a healthy lifestyle, self-management, self-efficacy, self-care, and adherence to the recommended treatment regimen, leading to worsening T2DM.

Aims and Objectives: The present study was done to find out the prevalence and predictors of diabetes related distress among adult diabetics.

Material and methods: The present observational, cross- sectional study recruited 152 diabetic patients. A standardized Diabetic Distress scale (DDS 17) was used to determine the prevalence of DD. Socio-demographic, clinical and anthropometric examinations were conducted. All the available data were initially coded and then analyzed using the SPSS 22.0 licensed software.

Results: Majority of study participants were literate, married, homemaker/skilled and unskilled workers, belonged to rural, nuclear family and lower middle socio economic class. High blood pressure was noted as the most common co-morbidity and tobacco use was the most common addiction. The prevalence of diabetes distress was (mean DD score ≥ 2) 77.0 %. Emotional DD was found to be more common than regimen, interpersonal, and physician- related DD. Patients with high DD had higher blood glucose levels and other known co-morbidities. Young age, low socio economic class, physical inactivity, longer time duration to reach hospital, associated known co- morbidities and poor glycaemic control were found to be the predictors of the diabetes distress.

Conclusion: The high burden of DD demands for a routine, target- specific and well- planned clinical approach inclusive of proper counseling sessions along with pronged strategic services related to diabetic care and management.

Keywords: Type 2 DM, Diabetic distress, DDS-17, Life style clinic.

❖ Title: Prevalence of Acute Respiratory Infections and associated factors in under-five children in the urban slum areas of Guwahati: A community-based cross-sectional study.

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author:

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Introduction: Acute Respiratory infection is a leading cause of morbidity and mortality in under-five children worldwide. Thus, identification of modifiable associated factors of ARI will reduce the burden of disease and promote their survival, growth and development.

Objective: To estimate the prevalence and to elicit the associated factors with ARI among under-5 children residing in urban slums of Guwahati.

Materials and Methods: A community-based cross-sectional study was conducted in the registered urban slums of Guwahati city from November 2022 to January 2023. Taking the prevalence of ARI from one previous study as 41.6% and absolute error as 10%, the sample size calculated using the formula $N=4pq/l^2$ was found to be 97.17 and was rounded off to 110. Ten slums were selected randomly from total of 99 slums and from each slum 11 households were selected randomly with under-5 children by conducting door to door visit of the houses and one child from each household was included in the study.

Results: The prevalence of ARI was found to be 36%. ARI was significantly associated with inadequate ventilation, location of kitchen in household, presence of overcrowding, poor nutritional status, incomplete immunisation status, lower socio-economic status, lower educational status of mothers.

Conclusion: The high prevalence of ARI in this study was contributed by multiple factors. Health care providers can play a vital role to create awareness on hazards because of exposure to the various contributing factors by lifestyle modifications, good nutrition, immunization coverage and reduction of domestic air pollution and promoting education and healthy environment.

Keywords: Acute respiratory infections; urban slums; Overcrowding; Under-five children; Immunisation

❖ Title: Prevalence of Anemia and its Associated Socio-demographic Factors in Pregnant Women of Selected Villages in a District of North India

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Gaurav Kumar, Post Graduate Student

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- **Dr. Dolly Goswami** (Post Graduate Students) Department of Community Medicine, Uttar Pradesh University of Medical Sciences, Saifai, Etawah (U.P.)
-

Introduction: World Health Organization (WHO)/World Health Statistics data shows that 40.1% of pregnant women worldwide were anaemic. The condition is prominent in Southeast Asian countries where about half of all global maternal deaths are due to anemia and India contributes to about 80% of the maternal death due to anaemia in South Asia.



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Objectives: To study the prevalence of anemia and determine the association of anemia with socio-demographic factors among pregnant women.

Materials and Methods: This cross-sectional study was carried out in rural areas of District Etawah. A total of 200 pregnant women of reproductive age group were included in the study. Data were collected by means of interviewer-administered questionnaire and investigations in the form of complete blood count of venous blood. IBM SPSS software, version 25 was used for statistical analysis. Frequency tables and cross-tables were constructed. Association was determined using Pearson's Chi-square test.

Results: The prevalence of anemia was observed to be 49.5% among the study population. The mean \pm SD haemoglobin level of all the participants was 10.79 \pm 1.65 g/dl. The association was determined for socio-demographic variables with anemia, where only the educational status of study participants shows statistical significant difference ($p < 0.05$).

Conclusion: The burden of anemia in pregnancy was considerably high in the study population. Although, IFA supplementation is available under the national health program for both prophylaxis and treatment of iron deficiency anaemia, but it is important to consider and address other risk factors and interventions to control anemia.

Keywords: Anemia, IFA, WHO, Pregnant women.

❖ **Title: Prevalence of Anemia and its Associated Socio-demographic Factors in Pregnant Women of Selected Villages in a District of North India**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Gaurav Kumar

❖ **Title: Prevalence of cardiovascular disease risk factors in undergraduate medical students of central India: A cross sectional study**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Pratiksha Abhimanyu Gaikwad

❖ **Title: Prevalence of depression and nicotine dependence among undergraduate engineering and medical students - a cross sectional study from West Bengal**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Sarmistha Chakrabarti, 1st Year Md Community Medicine Pgt At College Of Medicine And Jawaharlal Nehru Medical Hospital, Kalyani, West Bengal

Co-authors:

- **Prof Dr Suman Kumar Roy**, HOD Community Medicine At Comjnmh



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▪ **Prof Dr Kaustav Chakraborty**, HOD Psychiatry At Comjnmh

Introduction: Depression among adolescents and young adults are on the rise due to various socio-cultural factors. Tobacco usage and nicotine dependence has detrimental effects not only on the physical health, but also on mental well-being of a person, especially among young adults.

Objectives: The index study was conducted with the aims and objectives to determine the prevalence of depression and nicotine dependence among college students (engineering and medical) and to study the correlation between the above two.

Materials and Methods: This cross-sectional study was conducted among 300 college students -engineering (n=150) and medical (n=150) selected by simple random sampling from 650 M.B.B.S students of COMJNMH and 750 B.TECH students of IDEAL INSTITUTE OF ENGINEERING, KALYANI using a predesigned questionnaire. Beck's Depression Inventory-II and Fagerstrom Test for Nicotine Dependence were used to assess depression and nicotine dependence respectively. Association between variables was analyzed using Chi-square test and Pearson's correlation.

Results: Near about one-third (35.3%) of the students had borderline clinical depression, 23.3% had moderate depression and 13.6% had severe depression. High level of nicotine dependence was seen among 10.6% participants. Engineering students had higher prevalence of nicotine dependence as compared to medical students ($\chi^2=13.54$, $P < 0.001$). A significant association was found between high nicotine dependence and age, male gender, and high socio-economic status. A statistically significant positive correlation ($r=+0.56$, $P < 0.001$) was seen between depression and nicotine dependence scores.

Conclusion: Depressive symptoms and nicotine dependence were common among college students. Thus, awareness campaigns at the community level, motivation and counselling of college students regarding the dangers of nicotine usage is of utmost importance to prevent long term deleterious effects of nicotine. College students should be screened for presence of depressive symptoms and timely referral should be done.

Keywords: Depression; Nicotine Dependence; College Students

❖ **Title: Prevalence of disability at presentation and identifying the geographical hotspots of new cases of Hansen's disease in Chhattisgarh.**

Mode of presentation: Poster; **Theme:**

Presenting author:

Dr. Sylvia George

Co-authors:

- Dr. Anjan Kumar Giri, Additional Professor, Community and Family Medicine, Dr Satyaki Ganguly, Additional Professor, Dermatology, AIIMS Raipur

Introduction: Hansen's disease continues to be one of the significant public health burdens in Chhattisgarh with a prevalence of more than 2/10000 population. This study analyses the newly diagnosed cases presenting in advanced stages of leprosy in a tertiary care centre in the Raipur district of Chhattisgarh.

Objectives: 1. To know the prevalence of disability at presentation in new cases from Chhattisgarh diagnosed at AIIMS Raipur 2. To identify the geographical hotspots of new cases of Hansen's disease in



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Chhattisgarh Materials and Methods: The study is a cross-sectional study using secondary data of all Hansen's disease cases diagnosed in AIIMS Raipur from November 2021 to November 2022. The data was collected from the records of dermatology OPD and entered into excel sheets for analysis using EpiInfo.

Results: 70% of the newly diagnosed patients had disabilities. 21% of them had grade 2 disabilities. 69% of the cases were from Raipur, 10% from Durg, and 4% each from Baloda Abstract ID: 12 for IPHACON 2023 (Auto-Generated March 11, 2023 5:14 am) Copyright 2023 IPHACON 2023 powered by WPAAbstracts Pro Bazar and Gariyabandh.

Conclusion: More than two third of the new cases of Hansen's disease had a disability and one-fifth of them had a grade 2 disability. Most cases were from Raipur followed by Durg.

Keywords: Hansen's disease, disability, hotspot

❖ **Title: Prevalence of headache disorders among adult residents (18-65 years) from rural North India**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Introduction: Burden of headache disorders is not well measured in India except a study from South India. Present study was conducted to estimate prevalence from rural North India.

Objectives: To estimate the current prevalence of headache disorders among adult population (18-65 years) in rural Ballabgarh, Haryana.

Materials and Methods: Cross-sectional community-based study was conducted among adults (18-65 years of age) using a validated and structured HARDSHIP questionnaire (Headache attributed restriction, disability, social handicap and impaired participation). Screening questions were followed by diagnostic criteria using ICDH-III (International classification of headache disorders), participants had headache more than 15 days were evaluated for medication overuse headache and for headache less than 15 days, computer generated diagnostic algorithm was applied to classify as migraine or tension type headache, remaining cases were considered unclassified. Prevalence was estimated with 95% CI (Confidence Interval)

Results: One year prevalence of headache disorders was 53.6% (48.9-58.3), higher among women (adjusted odds ratio, AOR 4.45) and in participants with higher degree of education (AOR 2.09). One year prevalence of migraine was 18.7% (15.2-22.6), higher in women (AOR 5.3). One year prevalence of tension type headache was 28.9% (24.7 – 33.3), higher among higher degree of education (AOR 2.36). One year prevalence of medication overuse headache was 2.8% (2.9-9.6) with female preponderance.



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Conclusion: High community burden due to headache disorders needs to be addressed using a primary health care approach.

Keywords: Headache disorders, Migraine, Tension type headache, Community based study.

❖ **Title: Prevalence Of Health Risk Behaviour And Associated Comorbidities In India And Chhattisgarh: Comparative Study From Nfhs Survey**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

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Co-authors:

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- **Dr. Anjali Pal**, Additional Professor, Department of Community and Family Medicine, AIIMS Raipur

Introduction: Chhattisgarh, the ninth largest state by area and the seventeenth most populous, with 30 million population, formed on November 1, 2000, is a relatively new state in which national population health surveys were carried out by MOHFW in two phases.

Objective: The aim of this study is to compare the prevalence of health risk behaviour and related comorbidities in India and Chhattisgarh as per NFHS-4 (2015-16) and NFHS-5 survey (2019-20), determine the causes of variation and provide recommendations for improvement.

Methods: Literature search was done for related articles in electronic search base, e.g. PubMed, Google Scholar, and other platforms. The parameters included were tobacco and alcohol consumption, nutritional status (BMI), waist hip ratio and associated comorbidities like hypertension, raised blood sugar, cancer screening, and health insurance coverage in India and Chhattisgarh.

Results: The values were tabulated and comparisons drawn. As per NFHS 5, prevalence of tobacco and alcohol consumption among both men (43.1%, 34.8%) and women (17.3%, 5%) respectively are high in Chhattisgarh. BMI and waist-hip ratio for both genders are on the lower side in comparison to national average. Prevalence of HTN was observed on the higher side whereas Diabetes was found to be on the lower side for both sexes in the state. Screening of cancers like cervical and breast are lower in Chhattisgarh.

Conclusion: Anti addiction schemes and measures must be strengthened in Chhattisgarh along with increase in screening and proper implementation of programs for NCDs. There is need to increase awareness and screening of cancers.

Keywords NFHS5, India, Chhattisgarh, Health risk behaviour

❖ **Title: Prevalence of hypertension in tribal population of Bihar- A cross sectional Study**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Akanksha Yadav, Junior Resident, CFM, AIIMS Patna



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Introduction: Hypertension is a serious condition that significantly increases the risks of several cardiovascular diseases. An estimated 1.28 billion adults aged 30-79 years worldwide have hypertension, and two-thirds of them live in low- and middle-income countries. Indigenous (tribal) populations are not exceptional to the threat of hypertension. One out of every four tribal adults suffer from hypertension. Further the prevalence of hypertension increased significantly with age, consumption of tobacco, alcohol and a sedentary lifestyle. More worryingly, only 5 percent men and 9 per cent women suffering from hypertension knew their hypertensive status.

Objective: To assess the prevalence of hypertension in tribal population of Rohtas and Kaimoor district of Bihar.

Materials and Methods:

- **Study design:** Cross sectional study
- **Study population:** Tribal population of more than 40 years of Rohtas and Kaimur districts
- **Study duration:** November 2022
- **Sample size:** 834
- **Sampling technique:** Convenient sampling
- **Study variables:** Hypertensive patients (BP> 140/90)
- **Ethical Approval:** IEC, AIIMS Patna
- **Statistical Analysis:** Data analysis done using JAMOV software. Descriptive statistics, test of association and independent sample t test was used for statistical analysis.

Results: 305 patients were found to be hypertensive out of the 1088 screened. The prevalence of hypertension among the adult tribal population of Kaimur and Rohtas screened was 28%.

Conclusion: The prevalence of hypertension is on a rise in the tribal population of Bihar.

Keywords: Hypertension, tribal health

❖ **Title: Prevalence of Insomnia and its effect on Quality of Life among Elderly Population of Urban Field Practice Area of Tertiary Health Care Centre in Central India: A Community Based Cross Sectional Study.**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Manisha Solanki, Junior Resident

Co-authors:

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- **Dr. Pratiksha Gaikwad** (Junior Resident).



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Introduction: Insomnia is one of the major and unsolved problems in older people. The prevalence of insomnia increases steadily with age. As per National survey of Prevalence and correlates of insomnia symptoms among older people in India: 2017- 2018, the prevalence of insomnia symptoms was 12.7%. Insomnia in elderly people leads to poorer attention, greater risk for falls, poor physical functioning, cognitive impairment, tiredness during day, and thus decreased standard of life. Hence the study aims to find out the prevalence of Insomnia among Community dwelling elderly and its effect on their quality of life.

Objectives: To study the prevalence of insomnia and its associated factors and quality of life among Elderly people of Urban Field Practice Area of Tertiary Health Care Centre in Central India. **Materials and Methods:** The present study was community based cross sectional conducted in Urban Field Practice Area of Tertiary Health Care Centre in Central India. Data collection was done by house-to-house survey. A total of 91 elderly people were included in the study. A predesigned and pretested proforma was used for data collection. Athens Insomnia Scale and WHOQOL-BREF Scale were used for insomnia diagnosis and its effect on quality of life respectively.

Results: The prevalence of insomnia among the studied elderly was 52.7%, while difficulty initiating sleep was the most prevalent insomnia symptoms among them. Insomniac elderly had significantly lower scores in all quality of life domains.

Conclusion: 52.7% of the studied elderly was suffering insomnia which was associated with many different factors. Insomnia was associated with worse quality of life in older adults.

Keywords: Insomnia; Quality of Life; Elderly;

❖ **Title: Prevalence of intimate Physical violence and poor mental health among ever married urban women - a community based study**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author:

Dr. Sphurti Uday Chate, Assistant Professor, Department of Community Medicine, Symbiosis Medical College for Women (SMCW), Symbiosis International University (Deemed University)

Co-authors:

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Introduction: Physical violence at home is a public health issue. Women face abuse within the family several times in various forms such as sexual, physical, psychological or emotional, culturally or economically controlling behavior by her in-laws or husband. A study of the prevalence of such women helps us to understand the probable risk factors of such violence against them and associated poor mental health with it. Thus take actions to prevent or reduce the impact.

Objectives: **1)**To study the prevalence and sociodemographic profile of married women predisposed to domestic violence for assessing the risk factors in urban area of Belagavi. **2)**To know the poor mental health associated with it.



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Materials and Methods: Settings and Design: cross-sectional study. Study area: Urban health centre area Ashok nagar in Belagavi. Study population: Married women within the 15-49 years reproductive age group. Study period: 1 year. Sample size: 600. Sampling method: Simple random sampling method. Data collection: Personal interview conducted through home visit.

Statistical analysis used: percentages, chi-square tests

Results: Results as per discussions from previous studies show that the Domestic violence prevalence was higher among the urban married women who experienced it atleast once in their lifetime. The prevalence of physical violence was 20.6% and 63.7% of them had psychiatric morbidity among them. Overall various risk factors included older age of women, increased age at marriage and its duration, lower education and higher socioeconomic status with nuclear, broken or separated families.

Conclusion: The study showed a comparatively higher domestic violence prevalence and emphasizes the need to create more awareness in the community, educational sensitization of the population in order to prevent future violence. Need to educate young minds and prioritise her mental health to avoid unwanted complications of silently suffering from the abuse.

Keywords: Physical violence, married women, urban, mental health

❖ **Title: Prevalence of Musculoskeletal Disorders in Industrial workers of District Faridabad - A cross sectional study**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Dhairya Aggarwal

❖ **Title: Prevalence of Polypharmacy and its Association with Health-Related Quality of Life in Pre-Elderly Population of an Urban Slum in Kolkata: A Cross Sectional Study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Introduction: Polypharmacy is defined by WHO (World Health Organisation) as concurrent use of multiple medications. Multiple studies have addressed polypharmacy in elderly, but rarely polypharmacy has been studied in pre-elderly population.



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Objectives:

- i. To estimate prevalence of polypharmacy in pre-elderly individuals of urban slum of Kolkata
- ii. To identify the determinants of polypharmacy in study participants
- iii. To find out any association between polypharmacy and health related quality of life

Methodology: A community-based cross-sectional study was conducted in an urban slum of Chetla, Kolkata from October 2022 to March 2023 after getting ethical clearance from Institutional Ethics Committee of AIH & PH, Kolkata, among pre-elderly population of 50-59 years. Cluster sampling method was used, 15 clusters were selected from 27 clusters by PPS method. Sample size of 150 was calculated using Cochran's formula. House to house visits were carried out, participants were interviewed after obtaining informed consent. Data was collected using pretested, predesigned, semi-structured questionnaire. WHO QOL BREF questionnaire was used to assess quality of life of participants. Analysis was done using SPSS software version 16.

Results: Among study participants, 85% were Hindu, 80% were currently married & 49% had education level of primary school or below. Prevalence of polypharmacy was 18.6%. Significant determinants of polypharmacy were education level of primary school or below (p value-0.006), chronic illness (p value-0.001), consultation frequency (p value-0.029) & hospitalisation within last 5 years (p value-0.029). There is significant mean difference in scores (1.807) of physical domain of Quality of life between those not having & having polypharmacy (p value-0.002, 95% CI - 2.937 to 0.677).

Conclusion: Education level, Chronic illnesses, consultation frequency and previous hospitalisation are significant determinants of polypharmacy. Those having polypharmacy have poorer physical quality of life.

Keywords: Polypharmacy, Pre-elderly, Quality of Life

❖ Title: Prevalence of Postmenopausal symptoms using MRS Scale- a cross-sectional study in Rural Aligarh.

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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Introduction: There is an increasing number of women in the post-fertility period owing to improved healthcare and life expectancy. The postmenopausal phase is defined as the period following the termination of menstruation for 12 consecutive months. As there aren't any specific programme/s targeting the menopausal population, the understanding from this study will be useful to formulate health programme/s, in the therapeutic sector as well as for lifestyle modification. Conducting and talking about a study on such a stigmatized subject in the community would help create awareness of its importance, abolish shyness to discuss it, and encourage them to seek healthcare for the same.

Objectives: To estimate the prevalence of postmenopausal symptoms in females aged between 40 to 55 years residing in the rural field practice areas of the Department of Community Medicine, JNMCH, AMU, Aligarh.



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Materials and Methods: A sample of 100 women aged 40–55 years were enrolled in the study via simple random sampling technique. The MRS scale was used as the eleven-item questionnaire, divided into three dimensions reflecting somatic symptoms, psychological symptoms, and urogenital symptoms. It is an internationally accepted tool for the assessment of menopausal variables. Data were analyzed using SPSS v.26.0

Results: The most common postmenopausal symptoms were of the somatic domain, psychological domain and sexual domain in that order.

Conclusion: Women should be educated about the origin of these symptoms and their appropriate treatments.

Keywords: Postmenopausal, Prevalence, MRS Scale, Rural, Somatic, Psychological, Urogenital.

❖ **Title: Prevalence of postnatal morbidities and its association with the type of postnatal care received: A cross-sectional study in urban slums of Bhubaneswar**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Co-authors:

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• **Dr. Partha Sarathi Mohapatra**, Associate Professor, Department of Anaesthesiology, Kalinga Institute of Medical Sciences, Bhubaneswar, Odisha

Introduction: A woman is most vulnerable at the post-partum period which is the period following one hour after the expulsion of the placenta upto 42 days thereafter. Slums being underserved areas make this group more vulnerable. Morbidities during this period often go unnoticed or under-reported thus affecting the maternal as well as child health.

Objectives:

1. To estimate the prevalence of self - reported postpartum morbidity among women aged 18-49 years.
2. Association of such morbidities with the type of postnatal care received.

Materials and Methods: It was a community-based cross-sectional study conducted among postnatal women in urban slums of Bhubaneswar, Odisha. The study was conducted over a period of 3 years including 210 study participants using two stage stratified cluster sampling technique. A semi-structured, pre-tested questionnaire was used for collecting data after receiving written informed consent. The study tool was used to assess the socio-demographic details, type of postnatal morbidity reported and care received.

Results: The prevalence of self-reported postnatal maternal morbidities was found to be 57.62%. Majority of them were in the age group of 21-30 years. Socio-demographic variables like the literacy status of the spouse (**p=0.0001**) and socio-economic status of the family (**p<0.0001**) were found to have statistically significant association with the presence of postnatal morbidity. Around 47.6% women had received a



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postnatal home visit by a health worker. Number of home visits received ($p=0.0415$) and the person giving such visits ($p=0.000$) were significantly associated with postnatal morbidities.

Conclusion: The prevalence of self-reported maternal morbidities in the slums was found to be high with poor postnatal care received by the women. Steps to address the identified gaps should be taken up to improve maternal health in this area.

Keywords: maternal morbidity, postnatal period, urban slums

❖ **Title: Prevalence of postnatal morbidities and its association with the type of postnatal care received: A cross-sectional study in urban slums of Bhubaneswar**

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Background: Globally, 41 million deaths occur each year due to non-communicable diseases and most of them are due to cardiovascular diseases (17.9 million deaths) and diabetes (2 million deaths). Bus drivers have prolonged hours of sitting, stress, irregular sleep and irregular diet habits leading to increase in risk factors for non-communicable diseases.

Objectives: To assess the prevalence of risk factors for non-communicable diseases among bus drivers of Andhra Pradesh Road Transport Corporation in Kakinada district.

Materials and Methods: Community based descriptive cross-sectional study was undertaken among 116 bus drivers of Kakinada bus depot from December 2022 to January 2023. Study subjects were selected by simple random sampling. After obtaining informed consent, data was collected using a pre-tested semi-structured questionnaire, digital weighing machine, stadiometer, measuring tape, automated blood pressure monitor and glucometer. Data was analysed using MS Excel.

Results: Preliminary results indicated that 24.5% were overweight (BMI 23-24.9), 65.3% were obese (BMI ≥ 25), 34.6% were hypertensive (Systolic BP ≥ 140 mmHg or Diastolic BP ≥ 90 mmHg), 40.4% had high capillary blood glucose (Random capillary blood glucose > 140 mg/dL), 82% had central obesity (waist circumference > 91 cm), 55% had waist hip ratio > 1.0 , 23% were smokers, 38.4% consumed alcohol and 46.1% consumed excess salt. Mean duration of sitting (bus driving) per day was ten hours. Mean servings of fruit were less than one per day and that of vegetables were less than two per day.

Conclusion: The study subjects had high prevalence of obesity, hypertension, raised blood glucose and had improper dietary habits.

Dietary, lifestyle modifications, screening are needed to decrease risk of non-communicable diseases among bus drivers.

Keywords: Bus drivers, Hypertension, Obese, Non-communicable diseases, Risk factors



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❖ **Title: Prevalence of tobacco usage and its risk factors among Rural adults of Jharkhand**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author:

Dr. Richa, Associate Professor, All India Institute of Medical Sciences , Deoghar

Co-authors:

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- **Prof (Dr) G Jahnavi** , HOD
- **Dr Anuradha Gautam** (Senior Resident)
- **Dr Dibyanshu** (Assistant Professor)

Background: Tobacco consumption is very common in India. Every fifth adult of India uses smokeless tobacco, while every tenth adult smokes tobacco. As per Global Adult Tobacco Survey 2(GATS 2), in Jharkhand 59.1% of men, 17% of women and 38.9% of all adults either smoke tobacco and /or use smokeless tobacco. Keeping in mind the increasing trend of tobacco consumption the present study was conducted in a rural area of Deoghar district of Jharkhand. **Objectives:** To estimate the prevalence of tobacco usage and its risk factors among adults of a rural area of Jharkhand. **Methodology:** This community based cross-sectional study was conducted in year 2022 in rural villages of Deoghar district. The study included all subjects in age-group of 15-70 years. Subjects with known psychiatric illness or who failed to give consent were excluded from the study. The total sample size was estimated to be 300 and multi-stage sampling technique was used for selection of study subjects. The subjects were interviewed using a predesigned and pretested questionnaire which was based on GATS 2. **Results:** 44.5% of the subjects were tobacco users, in which the males' outnumbered females. Three fourth (76.5%) of the subjects had good knowledge about the ill-effects of tobacco use and 36.5% had knowledge about de-addiction. 61.8% of the users had no intention to quit. **Conclusions:** tobacco usage begins at adolescent age and is on a rising trend. Strict policies need to be implemented to curtail the problem.

Keywords: Tobacco Use, Global Adult Tobacco Survey(GATS)

❖ **Title: Prevalence of Undernutrition & Associated Risk Factors among Under Five Children in Rural Haldwani**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Background: The foundation of any nation is children. Malnutrition in children is global issue that may have both short- and long-term irreversible negative health consequences and thus associated with morbidity and mortality. **Objectives:** To determine the prevalence and associated risk factors of under-nutrition among under-five children in rural Haldwani. **Material and methods:** Community-based cross-sectional study. Four-hundred children were examined. **Results:** The prevalence of underweight, stunting and wasting was 7.75%, 9.25% and 4% respectively among under five children. The risk factors found significantly associated with undernutrition and socio demographic profile were parent's education, mother's occupation and the socio economic class. Intake of iron folic acid tablets during ANC and PNC period, duration of pregnancy, site of delivery are the maternal factors significantly associated with undernutrition. Prelacteal, colostrum given, exclusive breastfeeding and age of introducing complementary feeding were child characteristics found significantly associated with undernutrition. However, the factors as mother's age at the time of first child birth, site of delivery, were not found significantly associated with undernutrition. **Conclusion:** In the present study, it was observed that 17.5% of the children were undernourished. Parents literacy, social class, type and size of family had an impact on better nutritional status of children. Iron folic acid taken during pregnancy, feeding practices, immunization status, history of recurrent diarrhoea and other infections in the past one year etc, were some of the determinants for undernourishment.

Keywords: under-five children, undernutrition, Haldwani, Community-based

❖ **Title: Profile and Outcome of newborns seeking care at Special Newborn Care Unit - District Hospital, Kalahandi, Odisha, 2020-2021**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Dayasis Sahu

❖ **Title: Profile characteristics of beneficiaries and constraints of service provision in District Early Intervention Centre of Purba Bardhaman District, West Bengal: A Mixed- Method Study.**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Haimanti Bhattacharya, Junior Resident, Department of Community Medicine, Burdwan Medical College

Co-authors:

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- Dr. Sulagna Das, Assistant Professor, Department of Community Medicine, Burdwan Medical College
- Dr. Pranita Taraphdar, Professor and Head of the Department, Department of Community Medicine, Burdwan Medical College



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Background: Rashtriya Bal Swasthya Karyakram (RBSK) is an ongoing screening programme which deals with early detection and management of the 4Ds prevalent in children (Defects at birth, Diseases, Deficiencies and Developmental Delays). It runs a District Early Intervention Centre (DEIC) which is an interdisciplinary approach of a multidisciplinary team placed under one roof which provides referral support to children detected with health conditions during health screening.

Objectives: To assess the profile-characteristics of beneficiaries at DEIC from Jan22-Dec22 and to explore the constraints faced by caregivers in accessing service and service providers in providing care.

Materials and Methods: A facility-based, mixed-method study with phenomenological approach was conducted in Burdwan Medical College of Purba Bardhaman district, West Bengal during Jan23-Feb23. In quantitative strand, record-analysis was done involving children enrolled at DEIC during Jan22-Dec22. For qualitative strand, caregivers & service providers were selected purposively and interviewed with In-Depth-Interview guide. 10 IDIs were conducted, inductive thematic analysis was done simultaneously, till achievement of data saturation.

Results: Out of 3332 children enrolled during Jan22-Dec22, more than half (58.4%) were males, 44.2% were aged between 0-1month. More than half (59.3%) of them had Developmental delays, 7.9% had Defects, 42.9% had Diseases and 21.3% had some Deficiencies. Major hindering factors in service provision were presented in six major domains – Resource deficit, Inadequate capacity building, Administrative bottle-necks, limited supportive supervision, Inadequate advocacy and Awareness deficit among caregivers. No major constraints were found from caregivers' perspective in accessing healthcare.

Conclusion: DEIC is running with shortage of proper infrastructure and adequate supervision. Periodic training, appropriate awareness building and continuous flow of logistics are needed to ensure a better quality of life among beneficiaries.

Keywords: Rashtriya Bal Swasthya Karyakram, District Early Intervention Centre, constraints, Mixed-Method Study

❖ **Title: Public health benefits & challenges under the scheme “Swachh Bharat Abhiyaan”: A cross sectional study in coastal areas of Andhra Pradesh**

Mode of presentation: Poster; **Theme:** Climate Change, Environment & Occupational Health
Presenting author:

▪ **Dr. Jarina Begum**, Manipal tata medical college, Jamshedpur

Co-authors:

- **Dr Syed Irfan Ali**
- **Ms Yukta sai N**

Introduction: Although positive perception towards cleanliness exists, there is paucity of studies on evaluating the Swachh Bharat Abhiyaan (SBA) scheme. The present study was planned to explore people's perception, challenges and possible solutions towards it.

Objectives: To assess the perception of rural population, evaluate the utilization of services, discuss the challenges while implementation of the scheme & way forward.



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Materials and Methods: A community based cross sectional study was conducted among the rural population coastal Andhra Pradesh. 330 participants were selected & data was collected using self-administered questionnaire followed by in depth interview.

Results: Among all 56.4% were male, majority (92.4%) were Hindu with Low Middle socio-economic class. Mean age of the study participants was 27.82 years. 92.7% were aware of the scheme, however only 22% knew about all services. 90.4% had access to sanitary latrines, but non utilization was 46% attributed to poor cleanliness, irregular water supply and personal preferences. 5.6% practiced open defecation pertaining to lack of access to sanitary latrine. 54% & 40% were having adequate drainage facility & solid waste disposal respectively. Majority were satisfied with average rating of 3.2. The thematic analysis identified the challenges in terms of internal & external factors along with possible solutions to overcome it.

Conclusion: The study participants were aware & perceived SBA as satisfactory. However, the utilization of services was still lagging attributed to various internal & external challenges. Possible solutions suggested were focused on stringent laws & regulations, a system of feedback, incorporation of technology & innovations.

❖ Title: Randomized Controlled Trials (RCTs) in Pregnant Women in India: A Systematic Mapping

Mode of presentation: Poster; **Theme:** Reproductive & Maternal Health

Presenting author:

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Introduction: In India, maternal mortality rates are amongst the highest globally (8.6% of global deaths from 2000-2020). Evidence-informed medicine is integral to improving interventions and overall standards of maternal healthcare. An overview of existing Indian RCTs can help classify current evidence and elucidate gaps in the literature. **Objectives:** To systematically map all RCTs from India with pregnant individuals as research participants. **Materials and Methods:** We used data from RCT India Mapping project (version 0.9, interim results). The project maps all RCTs conducted in India from the year 1990 to 2019, irrespective of intervention type, or disease condition. The mapping involved screening 119,322 records, of which 30,489 full texts were reviewed. The current analysis only includes RCTs which exclusively had pregnant individuals as research participants. **Results:** Out of a total of 25,011 Indian RCTs, 598 trials reported 7,88,570 pregnant women exclusively as participants. Management of caesarean delivery was the most studied aspect



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(n=140, 23%, ICD Code=JB22). Other conditions studied in a high number of RCTs included vaginal labour management (14%), labour induction (9%), medical/surgical termination of pregnancy (7%), and anaemia during pregnancy (6%). Most RCTs (n=113) included sites in Delhi. Only 271 RCTs reported funding details (106 received funding). Most RCTs were conducted in hospitals (n=539). Majority of studies (n=415) included pharmaceutical interventions. None of the studies examined mobile or web-based interventions. The most reported primary outcomes were clinical outcomes (n=532), followed by adverse events (n=146), medication use (n=59), and life impact (n=51).

Conclusions: There is need for research prioritisation for trials on pregnant women to be distributed across the nation and for community-based studies to develop a more robust evidence base. Many RCTs on pregnant women focus intensively on aspects related to labour and its complications. Focused funding on other aspects including but not exclusive to respectful maternity and mental health of pregnant women might be prioritised.

Keywords: Maternal health, pregnancy, postnatal, childbirth, Indian randomised controlled trials

❖ **Title: Risk factors for retinopathy of prematurity- A retrospective record review.**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

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Co-authors:

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- **Dr. Subrat Kumar Pradhan**, Associate Prof. Dept. of Community Medicine.
- **(Prof.) Dr. Sadhu Charan Panda**, Head of Dept, Community Medicine

Background: Retinopathy of prematurity, previously known as retrolental fibroplasia, is a bilateral proliferative condition of the retina occurring in premature infants with low birth weight who have been exposed to a high concentration of oxygen. Its incidence has been paradoxically increasing with improvement in neonatal care which causes increased survival of these premature infants. Under the Global Initiative for Elimination of Avoidable Blindness, screening, and treatment of ROP are being done to reduce the prevalence of childhood blindness.

Objectives: To find out the risk factors for Retinopathy of prematurity.

Materials & Methods: A retrospective record review was undertaken in the department of ophthalmology, VIMSAR, Burla. A total of 267 records of premature infants born between July 2019 to August 2021 who were screened and followed up, were included in the study. Chi-Square test was applied to find out the difference in the proportion of ROP among different categories.

Results: The mean birth weight of the infants was 1271.22±275.46 grams. The mean gestational age was 30.58±1.94 weeks. Out of 267 infants, 154 were males and 113 were females. Out of the total number of infants screened, 46.1% were found to have ROP. Intraventricular hemorrhage and respiratory distress



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syndrome were found in 77 and 195 cases respectively. The factors that were significantly associated were respiratory distress syndrome and concurrent oxygen therapy, sepsis, and intraventricular hemorrhage.

Conclusion: A high proportion of ROP was found in the screened premature infants. Factors like respiratory distress syndrome, intraventricular hemorrhage, and sepsis were significantly associated.

Keywords: Retinopathy of prematurity, Risk factor, Respiratory Distress Syndrome, Screening

❖ **Title: Risk factors for unfavorable glycemic control trajectory in Type-2 Diabetes Mellitus: A community based longitudinal study in urban-slums of Central India.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

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Introduction: Diabetes mellitus (DM) a chronic disease, requires optimal glycemic control to prevent its ensuing vascular complications. Pathway to optimal glycemic control in T2DM has a complex socio-behavioral construct, especially in vulnerable populations like slum dwellers, who have reduced health-care access and lower prioritization of health needs.

Objectives: To map trajectories of glycemic control amongst individuals with T2DM living in urban slums and to identify key determinants associated with unfavourable glycaemic trajectory.

Materials and Methods: A community based longitudinal study was conducted in an urban slum of Bhopal of Central India. Adult patients diagnosed with T2DM and on treatment for more than one year were included. **Methods:** All 326 eligible participants underwent a baseline interview which captured sociodemographic, personal behavior, medication adherence, morbidity profile, treatment modality, anthropometric and biochemical measurements (HbA1c). Another 6month follow-up interview was conducted to record anthropometric measurements, HbA1c and treatment modality. Four mixed effect logistic regression models (through theory driven variable selections) were created with glycemic status as dependent variable and usage of Insulin was considered as random effect.

Results: A total of 231(70.9%) individuals had unfavorable glycemic control trajectory (UGCT), only 95 (29.1%) had a favorable trajectory. Individuals with UGCT were more likely to be women, with lower educational status, non-vegetarian food preference, consumed tobacco, poor drug adherence, and on insulin. The most parsimonious model identified female gender (2.44,1.33-4.37), tobacco use (3.80,1.92 to 7.54), and non-vegetarian food preference (2.29,1.27 to 4.13) being associated with UGT. Good medication adherence (0.35,0.13 to 0.95),higher education(0.37,0.16 to 0.86) were protective in nature.

Conclusion: - UGCT seems to be an inescapable consequence in vulnerable settings. The identified predictors through this study may offer a cue for recognizing a rational response at societal level and adapted strategy formulation.



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Keywords: Diabetes; Glycemic control; Quality of life; Self-efficacy; Transitional care; Treatment adherence.

❖ **Title: Risk Factors Of Osteoporosis In Young Male Adults In India - A Cross-Sectional Study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

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Co-authors:

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Background. Secondary Osteoporosis, though common in older females, may also arise in males and has attracted recent attention. Studies indicate that males have a loss of bone mineral density (BMD) at a rate of 1% per year. In males, common risk factors for development of osteoporosis are smoking, alcohol, low body mass index, less physical exercise, prolonged steroid use and dietary calcium deficiency. Vitamin D helps in dietary calcium absorption, required for balanced bone mineralization. A remarkably large percentage of otherwise normal healthy males have risk factors of osteoporosis and vitamin D deficiency and be prone to osteoporosis. The present study is an effort to measure the burden of risk factors of osteoporosis in adult male.

Methods. A cross-sectional study was conducted in 400 adult males in an urban area. A questionnaire comprising of Demography, Anthropometry and Nutritional status was distributed. Serum calcium, phosphorus, vitamin D, and parathyroid hormone (PTH) were measured following standardised methods.

Results. Mean age of the population was 43.5 ± 4.76 years and mean BMI was 22.17 ± 2.42 Kg/m². 212 participants (53%) never heard about the disease. Prevalence of Vit D3 deficiency (>19 ng/mL) was more 71%. Low serum calcium and serum phosphorus were found amongst 19.5% and 11.5% participants respectively while a raised serum PTH level was seen in 5.5% participants. Common risk factors like nutritionally deficient food (calcium, phosphorus), less physical activity, smoking and alcohol consumption were prevalent in the population.

Conclusion. Despite significant advances in our understanding and management options for male osteoporosis, there still remain important gaps in knowledge that need to be examined. Both dietary advice and monitoring of risk factors of osteoporosis are required.

❖ **Title: Healthier Food Purchase and its determinants in an urban resettlement colony of Delhi**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

First author :

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▪



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❖ **Title: Sampling strategies for accessing Clients of Female Sex Workers in Health Research: a Compilation of global evidences**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author:

Dr. Sitikantha Banerjee

Introduction: Male Clients of Female Sex Workers (FSWs) are identified as major bridge population in HIV transmission, as they acquire infection from FSWs and in turn transmit the infection in community through their wives/ girlfriends/ other sex partners. Any research or intervention among clients of FSW remain challenging because they are largely hidden within the society, as making such relationship is socially unacceptable in most of the societies.

Objectives: This review was carried out for compiling the global evidence on different sampling strategies used to access male clients of female sex workers.

Materials and Methods: A systematic search was carried out among the electronic peer-reviewed literature database. Those original articles published globally from first record until 01 March 2023, in English language and whose full text articles were freely available were included in this study. Narrative synthesis was carried out across all such articles, and challenges faced by researchers while adopting different sampling techniques were aggregated.

Results: A diverse group of sampling techniques have been adopted globally for capturing clients of FSW, like convenient sampling, purposive sampling, snowball sampling, respondent driven sampling, time location cluster sampling, couple-based sampling etc. Information Technology tools like virtual networks/toll free helpline numbers were also used. Common challenges faced by the researchers include poor response rate, social desirability bias, technical difficulty to carry out data collection as sex work being illegal, biased rejection by known HIV positive clients, disproportionately higher recruitment by those with lower socio-economic status etc. Most of the researches used either local outreach workers/ health officials or NGOs/CBO members to approach the clients. Attempt was also made to incentivize FSWs working in the commercial sex venues to recruit their male clients.

Conclusion: Sampling strategy need to be modified according to demographic and workstation characteristics of FSWs and type of interaction with their clients.

❖ **Title: Screen time and screen-based media usage among medical students in a private medical college, Puducherry: A cross-sectional study**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases



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Presenting author:

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Co-authors:

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- **Dr. Aviral Patpatia**, Tutor
- **Dr. Ajay N**, Tutor

Introduction: The prevalence of overweight and obesity in India is increasing faster than the world average. Prolonged periods of screen-based media usage and increase in screen time are associated with unfavourable levels of cardiovascular disease risk factors in young adulthood.

Objectives: We aimed to estimate the screen time and screen-based media usage among the medical students of a private medical college in Puducherry, India. We also studied the association of multiple determinants with screen time and screen-based media usage among medical students.

Materials and Methods: This was a cross-sectional study conducted among medical students who were enrolled and studying in a private medical college during the study period. The study was carried out from December 2021 to February 2022. The sample size was calculated with 30% as the prevalence of excess screen time usage (screen time greater than 2 hours per day). Screen-based media in the study included watching television, playing video games, and using smartphones, tablet devices, desktop and laptop. Screen time of the weekday and the weekend day was the sum of the time spent on all the screen-based media. It was then weighted separately for the weekday and weekend. The average of this was taken as the screen time. The self-administered questionnaire was prepared to maintain privacy of the participants and informed consent was taken before that. The mean total screen time (95% CI) was calculated. Chi-square test was carried out to determine the significant difference among the determinants and screen time usage. Bivariate and multivariate logistic regression was performed to find the significant association and were reported as odd ratio (95% CI).

Results: A total of 595 medical students participated in this study. Mean age of the participants was 21.4 years. 55.3 % (329) of the students were male and 44.7% (266) were female. The prevalence of excess screen time among the participants was 81.3% (95% CI 78.0 – 84.4). Participants who watched television while eating was 55.9%. Playing video game was the most popular activity involving the students. The least involved activity was observed to be using email. The mean (SD) screen time usage was 92.0 (88.7) minutes on weekdays and 225.4 (222.2) minutes on weekends. The median (IQR) screen time usage was 229.0 (144 – 353) minutes of weekdays and weekends. The screen-based media usage was significantly higher among males than females.

Conclusion: This study showed a high proportion of medical students having excess screen time and screen-based media usage. The COVID pandemic and the technological innovation makes screen-based media a everyday necessity. The ways to reduce the screen time may include starting avenues for better recreational facilities for the students.

Keywords: screen time, screen-based media usage, overweight, obesity, non-communicable diseases



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❖ **Title: Self-medication practices among adults in a Rural Community in West Bengal: A cross-sectional study.**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author:

▪ **Dr. Tuhin Mukhopadhyay**

Introduction: Self-medication is a common practice in health sector especially in a developing country like India. Various community-based studies had found the prevalence of self-medication in India from 12% to as high as 73%.

Objectives: To estimate the prevalence of self-medication among the adults aged 18 years or above of a village in West Bengal and to determine the association between relevant socio-demographic characteristics and self-medication among the study subjects.

Materials and Methods: It was a community based cross-sectional study. Multistage random sampling was used for selection of study subjects. All the adults aged 18 years or above of the randomly selected households were interviewed till sample size of 144 were reached. Data were analysed using PSPP . Association was tested by chi-square test and further analysis was done by binary logistic regression. P value <0.05 was considered as significant.

Results: Overall prevalence of self-medication practice was 65.3% among the study subjects. The prevalence was higher for males (77.9%) than for females (53.9%). Self-medication practices were found to be significantly associated with gender, socio economic status, educational status.

Conclusion: Health education to people regarding responsible self-medication is necessary to prevent misuse and adverse effect of self-medication. Involvement of health care providers especially doctors, ANMs and ASHAs will be very beneficial in this regard.

Keywords: Self-medication, Socio-economic status, Educational status, Gender.

❖ **Title: Sleep Quality And Internet Addiction Among Medical Undergraduate Students: A Cross-Sectional Study**

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author:

Dr. Pooja Nair

Background: In today's world, the rise of the internet and social media has created a parallel universe. Previous studies have shown that screen time can negatively impact sleep quality. However, the extent to which internet addiction affects the sleep quality of medical students remains largely unknown.

Objectives: To evaluate the sleep quality and internet addiction levels in undergraduate medical students.

Materials and Methods: A questionnaire-based cross-sectional study conducted at a medical college in western Maharashtra. The study was open to all students who were willing to participate. Pittsburgh Sleep Quality Index (PSQI) was used to assess sleep quality, and a 10-item Internet Addiction Test (IAT) scale



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was used to assess the severity of internet addiction. Appropriate statistical test were applied to examine the association.

Results: A total 190 responses were received. Majority of the study participants 158 (83.6%) were assessed to have poor sleep quality and only 16.6% were found to have good sleep quality (PSQI 0-4). No significant association was observed between quality of sleep and internet addiction ($p>0.05$) Majority of the participants 135 (71%) were from 1st year, of which 12 were found to have mid-level internet addiction and 115 were found to have poor quality sleep.

Conclusion: Poor sleep quality over a chronic period is a definite recipe for a plethora of diseases. Although addiction to internet among the study participants was not found to be very high, the sleep quality of most students was found to be poor. These findings highlight the need for further research to better understand the factors that contribute to poor sleep quality among medical students and to develop interventions to improve sleep for this population.

❖ Title: Smartphone Use And Sleep Disturbances, Depression In College Going Adolescents: A Cross-Sectional Study

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author:

Dr. Jada Roopini, Postgraduate

Co-authors:

- **Dr. P V V K Subbarao** (Associate Professor),
- **Dr. Dhananjaya Sharma** (Head of the Department)

Introduction: A smartphone is “a mobile phone that performs many of the functions of a computer, typically has internet access, and an operating system capable of running downloaded applications”.¹ Communication channels have been so phenomenally upgraded that communicating a person with thousands of miles apart is simply a game of seconds now using messenger, WhatsApp, voice calls, etc. Young people expand their opportunities for making social relationships using smartphones.² The greater availability of smartphones and their excessive use by adolescents and young adults leads to many problems such as low academic achievement, sleeping disturbances³, depression⁴, and smartphone addiction.⁵

Objectives:

1. To quantify the relationship between prolonged use of smartphones and depression in adolescent students.
2. To determine whether the overuse of smartphones is associated with sleep disturbances in adolescent students.
3. To study the extent of smartphone addiction among adolescent students.
4. To give suitable recommendations based on the study.

Materials and Methods: Study design: Cross-sectional descriptive study

Study Sample: A sample size of 469 was calculated by taking the prevalence as 17%.⁶

Source of sample: Adolescent students (16-19 years) from Agriculture College, Naira, Srikakulam district.



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Method: By using a simple random sampling method & by using a pre-tested questionnaire along with the Ham-D scale for depression.

Results: Among a total of 469 college going adolescents, female preponderance has been observed i.e., 51.82% (243). Mean age of study subjects was 17.72 ± 1.43 years. Smart phone addiction was present in 139 (29.6%) with equal proportion in both the genders. 27.8% of males and 22.6% of females was observed to have depression.

Conclusion: Considering the gender differences in smartphone addiction targeted prevention and intervention strategies based on a multicomponent strategy to reduce these behavioural problems are recommended.

Keywords: Smartphone, Depression, Sleep disturbance, Adolescents

❖ Title: Student satisfaction level regarding online classes

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author :

Dr. M. V. V. Murali Mohan, Medical Officer, Urban Health Center, GIMSR

Co-authors:

- **Dr. Haritha Suman**, Assistant Professor, Community Medicine, Andhra Medical College
- **Dr. Sri Vidhya**, Associate Professor, GIMSR

Background: COVID-19 led to lockdowns and the closure of educational institutions throughout India. To minimize disruption, institutions opted for online learning or e-learning. This offered convenient learning opportunities for students across the country but also presented some drawbacks.

Objectives: The study aims to gauge student satisfaction with their e-learning experience.

Materials and methods: This was a cross-sectional survey in which an online questionnaire was used to gather responses from 125 fourth year MBBS students. The questionnaire consisted of yes/no questions to determine the participants' background and familiarity with tools of e-learning, questions using the 5-point Likert scale regarding their opinion on various aspects of e-learning, and questions to assess their personal experience and difficulties with online learning.

Results: Mobile is the most commonly used instrument 79 (63.2%) followed by Tablet/ I pad 24 (19.2%) and laptop 22 (17.6%). Majority of the students were familiar with Zoom platform 122 (97.6%). 99 students (79.2%) preferred class room teaching compared to 26 (20.8%) preference for online learning. 32.8% students agree that e-learning is difficult than class room teaching, although 32% students agree that home environment was suitable for online learning and 45.6% agree that the software for e-learning is user friendly. Over half the students (52.0%) said they sometimes faced issues with inconsistent or poor communication with the teacher, and 36.8% reported facing vision problems sometimes.

Conclusion: Online learning undoubtedly proved to be an invaluable asset during the lockdown period. However, issues such as poor internet connections and unfamiliarity with e-learning tools can cause difficulties for students. While they may be fixed with better equipment and training, issues such as



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increasing vision problems, poor home environment, limited personal interaction with tutors, and the loss of a stimulating classroom environment might prove detrimental to a student's education and are not easily resolved.

Keywords: COVID-19, online learning, ZOOM, e-learning tools

❖ **Title: Study of access to housing, drinking water, electricity and sanitation by Scheduled Tribes (ST) in eastern Uttar Pradesh**

Mode of presentation: Poster; **Theme:** Public Health Nutrition

First author :

Dr. Poonam Singh Kharwar, Asst. Professor, Faculty Of Education, Bhu, Varanasi

Co-authors:

- **Dr. Devesh Kumar**, Principal Chief Medical Officer, Banaras Locomotive Works, Varanasi;
- **Abhishek Kumar**, Ph.D. Research Scholar, IIT, Kharagpur and
- **Dr. Abhinav Kumar**, Senior Resident (DM Cardiology), AIIMS, Bhubaneswar

Introduction: Tribes are different from the general population because of their different way of living and community life. Given the common backwardness and suffering of ST population in eastern U.P., it is essential to understand and identify the underlying correlates, which place their life to very miserable conditions.

Objectives: Present study analyzes the housing, drinking water, electricity and sanitation facilities available to STs in eastern U.P. and explores possible strategies for improvement.

Materials and Methods: Present study was conducted in 5 districts of eastern U.P. namely Sonbhadra, Varanasi, Deoria, Ghazipur and Ballia covering 11416 ST families by using semi-constructed questionnaire related to general health, education and socio-economic status prepared by the authors, Present research project being extensive field study was performed by survey research method based on the primary as well as secondary data collected by observation and interview.

Results: Most of ST families still live in *jhuggis* (43.9 %) or own house with 1-2 rooms (45.5%) either in rural locality (54%) or in slum (43.9%) devoid of basic facilities to live and earn, only 27.12 % have both tap water supplies and electricity, mostly (92.15%) use hand pump for drinking water out of home, 77.4% of STs do not have latrine facility inside the premises and unsatisfactory sanitation in surrounding.

Conclusion: Although welfare plans such as subsidizing housing exists for poor in rural area, but tribes are not getting benefit; their housing condition continue to remain worse compared to previous census data and other social categories. Protective developmental measures have not yielded any remarkable impact on tribal development; special budget provision remains unutilized largely. The construction of drainage system, village sanitation infrastructure, personal toilets and the environmental measures to control mosquito breeding should be included in welfare schemes and completed on priority basis in Scheduled Areas.

Keywords: Scheduled Tribes, housing, sanitation, drinking water, electricity facilit



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❖ Title: Study of Factors Influencing the Quality of Life of Leprosy Affected Persons in a Tertiary Care Hospital of South India

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author :

Dr. Radhika Lalwani, Public Health Specialist

Introduction: 57% of the global leprosy cases are from India despite being declared eliminated in 2005. Approximately thirty two lakh people in India are suffering from leprosy related deformities and disabilities with the potential for profound social stigma and discrimination.

Objectives: The main objective of the study was to assess the factors affecting the QoL of the leprosy affected persons visiting a public tertiary care hospital in an urban South India.

Materials and Methods: A cross-sectional study was carried out among 120 leprosy affected persons who agreed to voluntarily participate, were 18 years of age and above, visiting tertiary care leprosy hospital in an urban setting of South India from Aug to Oct 2022. The World Health Organization QoL (WHOQOL-BREF) scale was used to measure the QoL and the scale had four domain- physical health, psychological health, social relationship, and environmental health.

Results: Of the 120 participants, 36% were female, 64% were aged between 18 and 45 years and 72% were literate. Almost half of the participants (58) were farmer and labourer and 53 % of the respondents family income was below Rs. 5000 per month. Thirty two (38%) participants had visible deformity. Deformity was seen more in patients (n = 21) from rural areas with no or primary level education and earnings less than Rs 5000 per month. The participants with visible deformity had lower QoL in all four domains of World Health Organization QoL (WHOQOL-BREF) scale than the person without deformity.

Conclusion: Leprosy affected persons with visible deformity had lower QoL. Early detection and management would prevent the deformity and will definitely improve the quality of life of persons affected with leprosy.

Keywords: Leprosy; QoL; Stigma; Discrimination; Disability; Deformity

❖ Title: Study of social media usage, eating habits and nutritional status of school going adolescent: A cross sectional study

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author :

Dr. Hemant Rajput, PG Resident

Co-authors:

- **Dr. Amit Mohan Varshney** (Assistant professor), **Dr. Divyata Sachan** (Assistant professor) .

Introduction: .Adolescence is the most crucial period of life with various physical and psychological changes in human development. These changes increase the demand for nutritious food and a physically active lifestyle among adolescents. In modern society, social media is one of the frequently used medium to communicate with each other. Various forms of social networking sites such as Facebook, Instagram, Snapchat, WhatsApp, etc. are frequently used social media among adolescents. Non-communicable



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diseases are most common among adolescence due to eating patterns, consumption of junk food, and a diet high in sugar, saturated fats, and salts which leads to obesity, cardiovascular diseases and insulin resistance. The increased time spent on social media and its effect on the nutritional status of Adolescents.

Objectives: To determine the social media uses, eating habits, Nutritional status among school going Adolescents.

Materials and Methods: A cross-sectional study has been Carrying out among school going Adolescents district Saharanpur (U.P). Participants studying in 11th and 12th class were selected. Data collection was carried out using a selfadministered, Pre tested Semi structured questionnaire to assess the social media uses ,Eating habits , Nutritional status of the Adolescent of different class of Government inter college Saharanpur.

Result: Study is ongoing and the results will be presented in the conference.

Conclusion: It will be available when the study is complete.

❖ **Title: Study on Knowledge, Attitude and Practice of MDA Programme among adults at urban field area of SCB Medical college, Cuttack**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author :

Dr. Ranjan Kujur, PG Student, Department of Community Medicine SCB Medical College, Cuttack

Co-authors:

- Dr Pragyna Paramita Das, Post PG Tutor, Department of Community Medicine SCB Medical College, Cuttack
- Dr Krishna Kar, Prof and HOD, Department of Community Medicine SCB Medical College, Cuttack

Background: The WHO has called for targeting Filariasis elimination by 2030. India is the largest Lymphatic Filariasis (LF) endemic country and has targeted the elimination of LF by 2027. Wuchereria Bancrofti as a causative organism accounts for over 90% of the global burden. India contributes about 40% of the total global burden and accounts for about 50% of the people at the risk of infection. W bancrofti is the predominant species accounting for about 98% of the national burden. Diethylcarbazine (DEC) is an effective drug acting against the parasite and mass drug administration (MDA) with selective vector control could result in effective elimination of infection by interruption of transmission. Thus, proper knowledge as well as positive attitude and practice of the people help the country towards its elimination. The coverage of MDA in Odisha is low & Cuttack district is one of them. So, this study was conducted to access the knowledge, attitude and practice of the people on MDA in an urban area to eliminate Filaria.

Objective:To assess the knowledge, attitude and practices on MDA in the community.

Material and Method: A cross sectional study was carried out from January to March 2023 in the urban field practice area of SCB medical college & hospital, Cuttack. People of above 18 years were included in this study. This urban area consists of four wards. From each ward households and from each households two people were selected by Simple random sampling. Pregnant ladies and ill patients were not included in this study. A



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pre designed pre tested questionnaire was used for collection of data. Data will be entered in the Excel and analysed using SPSS version 17.0.

Result: As the study is going on, so the results are awaited.

Conclusion: Conclusion will be derived subsequently from the results.

❖ **Title: Study on vaccination status, Knowledge, Attitude and practices towards hepatitis B infection prevention among Medical student and Paramedical Student of tertiary health care institute, in Saharanpur district: A Comparative cross-sectional study**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance

Presenting author :

Dr Jitendra Singh, PG Resident

Co – author :

- **Dr Amit Mohan Varshney**, Assistant professor
- **Dr Samarth Govil**, Assistant professor

Introduction: Hepatitis B is increasingly recognized as a public health problem in World and India. Hepatitis B is a global infectious disease with estimated 240 million people of the world are chronically infected. In India every year 115000 Indians die due to hepatitis B related complications. Health care workers are more prone to get infected with Hepatitis B virus in hospital and clinical settings. So Prevention and Vaccination against of hepatitis B are the only safeguard. Objectives: To find out the Hepatitis B vaccination status among medical and paramedical students and to assess the knowledge, attitude and practices regarding hepatitis B infection and prevention.

Materials and Methods: A cross-sectional study has been Carried out among medical and paramedical students in Government medical College Saharanpur (U.P). All the first year and final year undergraduate students included and data collection is carrying out using a self-administered, Pre tested Semi structured questionnaire to assess the Knowledge, Attitude and practices regarding HBV infection and vaccination.

Results: The results will be presented in the conference as the study is going on. **Conclusion:** It will be available when the study will be completed

Keywords: Hepatitis B, Medical Student, Paramedical Student, Knowledge, Vaccination

❖ **Title: Successful Ageing and its Determinants; a Community-Based Cross-Sectional Study Among Elderly Residents of a Rural Block of Bengal.**

Mode of presentation: Poster; **Theme:** Mental & Geriatric Health

Presenting author :

Dr Soumyajit Moulik, Department of Preventive and Social Medicine, All India Institute of Hygiene and Public Health

Co-author:

- Dr. Monalisha Sahu, Associate Professor, Dept. of PSM, AIIPH&PH Kolkata.



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- Dr. Bobby Paul, Professor and Head, Dept. of PSM, AIH&PH, Kolkata
- Dr. Lina Bandyopadhyay, APH (Professor) Eq. Dept. of PSM, AIH&PH, Kolkata

Introduction: Successful Ageing encompasses the healthy ageing process of an elderly individual. According to Rowe & Kahn, Successful Ageing includes five domains like absence of chronic diseases, freedom from disability, high cognitive ability, free from depressive symptoms & active social engagements. The current study is mainly intended to find the Ageing status of elderly residents of Singur block of WB. Objectives The objectives of the study were to estimate the proportion of study participants having Successful Ageing and also to determine the association of Successful Ageing with socio-demographic & health-related variables.

Materials & Methods: A Community-based Cross-sectional Observational study approved by IEC of AIH&PH, Kolkata was conducted among the residents aged 60 & above in field-service area (64,000 sq. km) of Rural Health Unit and Training Centre Singur, All India Institute of Hygiene and Public Health, Kolkata comprising of 64 villages from December 2022- February 2023. Cluster sampling was done and 195 individuals were taken after conducting a pilot study. An interviewer administered questionnaire which includes Sociodemographic & Economic characteristics, Successful Ageing Scale (SAS), Comorbidities profile, Anthropometric measurements & Physical Activity (IPAQ) was used. Data was collected via Schedule Hardcopy and further analyzed using Microsoft excel and SPSS Ver.25 software.

Results: By the time of abstract submission, data from 94 elderly individuals were taken. Successful agers comprised only 39% of the elderly population surveyed. Among the major co-morbidities prevalence of hypertension & T2DM were found to be 51% & 28% respectively while reported activity limitation due to them were 33% & 42% respectively. Prevalence of Obesity (WHO Grade I & II) was found to be 33%. Considering the physical activity status of the given elderly individuals, almost 49% & 38% of them were involved in moderate & low physical activities respectively.

Conclusion: Successful Ageing process is confined to only to a section of the elderly population studied. There is a high prevalence of non-communicable diseases like HTN & T2DM among them. So physical & mental health of the elderly population needs special emphasis so that they can lead a better life ahead.

Keywords: Rural, Elderly, Successful Ageing Scale (SAS), Co-Morbidities, IPAQ

❖ **Title: Technology enabled and data driven decision making in Health Systems Strengthening Initiatives of MP & CG**

Mode of presentation: Poster; **Theme:** Health Systems Research, Healthcare Management, Health economics & Health Informatics

Presenting author :

Dr. Vaijesh Menkudale, Dr. Prasannjeet Priyadarshi

❖ **Title: The Correlation Of Online Food Ordering With Obesity Among Interns In A Tertiary Care Hospital, Odisha**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author :



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Dr. Subham Mohanty, PG student

Co-authors:

- **Dr Krishna Kar**
- **Dr Manoja Bhuyan**
- **Dr Pragyna Paramita Das**

Background: The prevalence of overweight and obesity among adults is increasing in the developing countries, especially among young adults. As per NFHS 5, 22.9% of total male and 24% of total female are obese in India. The World Obesity Atlas 2022, published by the World Obesity Federation, predicts that one billion people globally, including 1 in 5 women and 1 in 7 men, will be living with obesity by 2030. There is a significant increase in use of online food delivery pattern which leads to easy access of food and also a silent risk factor of obesity. In general, medical students are more prone to sedentary life style, keeping these things in background the study was conducted to determine the corelation between online food ordering and obesity among Interns.

Objectives: To determine the correlation between online food ordering and obesity among interns and to evaluate various factors associated with online food ordering pattern.

Materials and Methods: A cross-sectional study was conducted among interns from January 2023 to March 2023 in a tertiary care hospital. All the interns giving consent for this study were included. A pre designed, pre tested, semi structured questionnaire was used to collect data through google form. Before that a briefing session was conducted for the participants about the study & questionnaire. Those who have completely responded to the questionnaire they are contacted for measurement of weight, height and waist hip circumference. Then the data was analysed using SPSS version 17. A p-value of <0.05 was taken as statistically significant.

Results: As the study is still going on, the data will be analysed after completion of data collection.

Conclusion: The conclusion will be drawn after analysis of data.

❖ **Title: The ten-year risk of developing cardiovascular disease among people attending NCD Clinic in a Primary Health Care facility using Framingham risk score.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author :

Dr. Anubhav Mondal, Post Graduate Resident, Department of Community Medicine, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi

Co-authors:

- **Dr Aninda Debnath**, Senior Resident, Department of Community Medicine, Vardhman Mahavir Medical College and Safdarjung Hospital, New Delhi.

Introduction: Cardiovascular diseases (CVDs) have emerged as the leading cause of death in India since the turn of the century.(1) CVD-related conditions currently account for over two-thirds of non-communicable disease (NCD) mortality in India.(2) Despite this significant burden, the screening of CVD remains uncommon in primary healthcare settings.



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Objectives: To estimate ten-year risk of developing cardiovascular disease among people attending NCD Clinic in a Primary Health Care facility using Framingham risk score.

Materials and Methods: This study utilized data from the NCD register maintained at PHC Najafgarh to investigate the ten-year risk of developing CVD among individuals attending NCD clinic from January 2022 to January 2023. The data collected included socio-demographic information, blood pressure measurements, smoking status, hypertensive medication usage, total cholesterol levels, and high-density lipoprotein (HDL) levels. The Framingham risk score was calculated based on this data, and the study sample was categorized accordingly. The collected data was then subjected to statistical analysis using the SPSS 21.0 software.

Results: 192 people were evaluated using FRS and it was found that almost three quarters (72.9%) were found to be of low risk(<10%), 20.3% were found to be of intermediate risk(10-20%) and 6.8% were found to be of high risk(>20%).

Conclusion: CVD poses as the main cause of mortality of India, with nearly a quarter of all deaths to be attributed to it. By earlier identification of people, more prone to develop CVD, we can enforce lifestyle changes and earlier treatment initiation to prevent complications. By FRS we aspire to assess CVD risk assessment in primary settings and in turn prevent the complications.

Acronyms: FRS-Framingham Risk Score

NCD- Non Communicable Disease

CVD- Cardiovascular Risk

Keywords: Cardiovascular Disease, Framingham Risk Score, Non Communicable Diseases

❖ **Title: The use of a logic model for evidence synthesis of complex interventions: a qualitative study**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author :

Dr. Neha Adsul, Senior Research Fellow, Meta-research and Evidence Synthesis Unit, The George Institute for Global Health

Co-authors

Introduction: Owing to the complex nature of policy questions in public health, it is challenging to communicate the diverse and non-linear pathways by which complex public health or social interventions lead to changes in outcomes. Both systematic reviews and logic models are born of a need for greater knowledge transference to influence policies. However, the academic community has no shared understanding of the prerequisite of a logic model and the underlying mechanisms by which social interventions likely work. **Objective:** The research objective was to explore the understanding of review authors about the benefits and challenges faced while using logic models. **Materials & Methods:** A qualitative research methodology using an exploratory case study approach is followed. In-depth interviews are conducted online with review authors engaged in conducting systematic reviews of complex interventions using logic models. Qualitative data is analysed thematically.

Results: We present interim results of the qualitative study based on six interviews. Five of the six participants were females, and only one was male. Amongst the interviewees, three are from low- and middle-income countries, and the remaining are from high-income countries. All the



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participants are experienced in conducting systematic reviews of complex interventions using logic models. Benefits: Facilitates understanding of complex interventions: Working iteratively with the logic model provides coherence across multiple interlinked elements, which helps to simplify the complexity of how the intervention works overtime. Facilitates transparency to reach a collaborative decision: A collaborative approach in which review authors and key stakeholder's including policymakers, jointly develop a logic model is useful, as it reveals varying perspectives. It further brings transparency to reach a unanimous understanding of the link between what the intervention provides and what it intends to achieve. Thereby, allowing policymakers to take cognisance of the entire process at a glance.

Challenges: Simplified format requires constant iterations and is time-consuming: The limitations arise when elements in the logic model are considered linearised, which often is not the case. Moreover, developing a logic model is an iterative process to account for unforeseen dynamics that influence the process, thus making it time-consuming.

Conclusion: Once the study is completed, it is expected to improve the use of logic models for a systematic review of complex interventions and identify best practices.

❖ **Title: Time management skill, its correlates, and correlation with academic performance among medical undergraduate students of a tertiary healthcare institution in Bihar**

Mode of presentation: Poster; **Theme:** Medical Education & Public Health Ethics

Presenting author :

▪ **Dr. Bijaya Nanda Naik, Assistant Professor**

Co-authors:

Dr Rajath Rao² Dr Manisha Verma² Dr Santosh Kumar Nirala¹ Dr C M Singh³ ; 1. Assistant Professor, 2. Senior Resident, 3. Professor

Introduction: "Emphasizing time on task" has been included in the seven principles of undergraduate medical education, and is more apt due to the high volume of the academic load. So, this study was planned to examine the time management skills and its correlates, and the relationship between time management and academic performance among the medical students of AIIMS, Patna

Materials and Methods: This cross-sectional study was conducted among 295 medical undergraduate students of various academic years using a self-administered semi-structured study tool, which also included Fisher's self-directed learning (SDL) readiness questionnaire and Britton and Tesser's TM questionnaire. A SDLR score of ≤ 150 and TMQ score of ≤ 58 was taken as low readiness for SDL and poor TM skill.

Results: A total of 175[59.3%, 95% CI: 53.6-64.9] had low readiness for SDL and 216[73.2%, 95% CI: 67.9-77.9] had poor TM skills. Academic scores showed a positive weak ($r=0.2$, $p<0.001$) and medium correlation ($r=0.4$, $p<0.001$) with TM and SDLR scores respectively. Females [AOR=2.9, 95% CI: 1.6-5.6], students belonging to rural domicile [AOR=2.3, 95% CI: 1.1-3.8], high readiness for SDL [AOR=4.8, 95% CI: 2.6-8.8] were independent correlates of good TM skills.

Conclusion More than half of the students are not yet ready for self-directed learning and have poor time management skills. SDL being an important component of competency-based learning, success of competency-based curriculum depends upon making the students ready for SDL. The SDL workshops can be organized at the start of each academic year, to start with from foundation course.



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Keywords: Time management, self-directed learning, medical education, academic performance, medical undergraduates

❖ **Title: Prevalence of anxiety, depression, post-traumatic stress disorder, and poor sleep quality following quarantine/isolation due to COVID-19 among youth aged 15-24 years in Puducherry.**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting author :

Dr. Nagarajan G, PSM junior resident, JIPMER

Co-authors:

- Dr. Mahalakshmi, Assistant Professor, JIPMER

Aim: We aimed to estimate the prevalence of anxiety, depression, sleep disturbance, post-traumatic stress disorder among the youths aged 15-24 years, three months after testing for Covid-19 at a tertiary care hospital in South India.

Methodology: This cross-sectional study was conducted among the youths aged 15-24 years three months after testing for Covid-19 testing. The study participants were selected from a list of those who tested for Covid-19 by RTPCR from August 2020 to August 2021. Contacted through telephonic interview using a structured questionnaire. (GAD-7, PHQ-9, and PSQI).

Results: Among the total 410 participants interviewed, 30 were screened positive for 47 for depression, 96 participants for reported poor sleep quality and their weighted prevalence were 7 %, 11.6 %, 27.4% and the weighted prevalence of post-traumatic stress disorders among study participants found to be 2 %. Participants who reported poor sleep quality aPR: 9.42 times and those tested positive during the second wave had aPR: 2.51 times had higher prevalence of anxiety. Participants who had poor sleep quality had 7.8 times higher prevalence of depression when adjusted for other variables in the model. While the presence of friends and significant members infected had aPR: 0.39 lesser prevalence of depression. Those tested positive for COVID-19 aPR: 2.16 and participants who faced difficulty during quarantine /isolation aPR: 1.76 had increased prevalence of poor sleep quality.

Conclusion: The prevalence of anxiety, depression, poor sleep quality, and PTSD was higher among youth who had undergone Covid-19 testing three months back than pre-pandemic period. Poor sleep quality was linked with higher prevalence of anxiety and depression and people with adverse experiences during Covid-19 had poor sleep quality. Interventions that would minimize the impact of pandemic on mental health of youth are needed.

❖ **Title: Treatment compliance among diagnosed patients of Hypertension and Diabetes Mellitus before, during and after the Covid-19 Pandemic**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author :

Dr. Asma Aftab, Junior resident, Department of community medicine JNMC, AMU, Aligarh



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Co-authors:

- Dr Najam Khaliq, Professor, Department of Community Medicine JNMC, AMU, Aligarh

Introduction- Compliance can be defined as "patient's behaviors (in terms of taking medication, following diets, or executing lifestyle changes) coincide with healthcare providers' recommendations for health and medical advice. Patient non-compliance is a significant healthcare risk that makes it difficult to deliver care effectively. Many patients with chronic illnesses had been cut off from their regular medical care as a result of global lockdown, raising concerns about an expected rise in non-COVID medical issues.

Objectives- Compare treatment compliance (Medication and lifestyle) among diagnosed patients of Hypertension and Diabetes Mellitus before, during and after COVID-19 pandemic.

Material and methods- Cross sectional study was conducted among 420 participants by simple random sampling among households registered in field practice area of JNMCH, AMU, Aligarh. Patients diagnosed with hypertension and/or diabetes mellitus were included, patients who were diagnosed during the pandemic were excluded. Patients were interviewed after taking consent maintaining confidentiality using a pre-tested proforma about their socio-demographic history, and treatment compliance. Data was analyzed using SPSS.

Results- The mean age of the participants was 58.6 11.996 ± 11.9 . Most of the participants belonged to the age group 51-60 years (29.5%). Majority of participants were females (64.3%). Most of the participants were illiterate (41.9%).

The level of compliance before lockdowns was higher with 35% compliant with medication and lifestyle before the lockdown, 25.5% of the population was compliant during the lockdown, and 33% of the population was compliant after the lockdown.

Conclusion- There was decrease in medication and lifestyle compliance during the Pandemic, with greater number of patients with poor compliance during the pandemic.

Keywords: - Covid-19, Treatment compliance

❖ **Title: Treatment initiation among hypertension diagnosed in government health facilities, under National Program of Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & stroke at Raigarh, Chhattisgarh, 2021-22.**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author :

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Co – author :

- **Mogan KA**: Indian Council of Medical Research- National Institute of Epidemiology, Chennai
- **Sumi Jain**: State program coordinator, National Program of Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & stroke
- **Yogesh Patel**: District Nodal Officer, Raigarh, Chhattisgarh
- **Madhulika Singh Thakur**: Chief Medical & Health Officer, Raigarh, Chhattisgarh



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- **Ganeshkumar Parasuraman**, Indian Council of Medical Research- National Institute of Epidemiology, Chennai

Introduction: One in four adults in India has hypertension. Prevalence of hypertension in Raigarh district of state Chhattisgarh is 31.6% in males and 26.1% in females, which is higher than state and national burden. The government of Chhattisgarh implemented National Program of Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases & stroke (NPCDCS) in 2017.

Objectives: We described the diagnosis and treatment services under hypertension component of NPCDCS in government health facilities, Raigarh district, Chhattisgarh from January 2021 to December 2022.

Materials and Methods: We conducted secondary data analysis on form 5A under NPCDCS reported by government health facilities from January 2021 to December 2022. We included the opportunistic screening data from form 5A in our analysis. Data was abstracted from the district-level NPCDCS portal and analysed in Microsoft excel. We calculated the program indicators such as proportion diagnosed among screened and proportion initiated for treatment among diagnosed by year and block.

Results: In opportunistic screening, 36,180 and 50,872 persons were screened in 2021 and 2022 respectively. Of the screened, 18,531(51%) and 25,067(49%) were diagnosed with hypertension in 2021 and 2022 respectively. Of the seven blocks, cumulatively Raigarh block reported 32.5% of all hypertension patients diagnosed in 2021 and 2022. Cumulatively, of the 43,598 diagnosed with hypertension, 10,372(24%) were initiated on treatment. Treatment initiation proportion was reported highest in Gharghoda block (72%) and lowest in lailunga block (4%).

Conclusion: Cumulatively, half of the persons screened were diagnosed with hypertension in government health facilities of Raigarh district of Chhattisgarh. Only one-fourth of individuals diagnosed with persons were initiated on treatment. We recommended to investigate the reasons for low initiation of treatment for hypertension and training to medical officers on treatment protocol for hypertension.

Keywords: Hypertension, Diagnosis, Opportunistic screening, Chhattisgarh

❖ **Title: Trend and predictors of tobacco use among Indian males over a 22-year period (1998-2021) using nationally representative data.**

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author :

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Co-authors:

- **Ms. Piyasa Mal**, PhD Scholar, Department of Public Health and Mortality studies, International Institute for Population Sciences, Mumbai, India.
- **Dr. Dhiman Bhadra**, Associate Professor, Production and Quantitative Methods Area, Indian Institute of Management Ahmedabad, Ahmedabad, India.
- **Dr. Sathish Rajaa**, Assistant Professor, Department of Community Medicine, ESIC Medical College and PGIMSR, Chennai, India.



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- **Dr. Sonu Goel**, Professor, Department of Community Medicine and School of Public Health, Post Graduate Institute of Medical Education and Research, Chandigarh, India.

Introduction: Globally, India is the second largest producer and consumer of tobacco, only after China. The World Health Organization lists tobacco consumption as a public health threat, because such use is associated with raised risk of morbidities and mortality. India has a long history of implementing anti-tobacco measures.

Objectives: We assessed the trend of tobacco use among Indian males using data obtained from the National Family Health Surveys (NFHS). Socio-demographic determinants of such use were also assessed.

Materials and Methods: Tobacco-use and relevant socio-demographic data obtained from NFHS rounds 2 to 5 over the period 1998-2021, was used for analysis. We studied the trends in tobacco use among 138951 males from NFHS-2, 74369 from NFHS-3, 112222 and 101839 men from NFHS-4 and 5 respectively. Socio-demographic determinants of tobacco use were assessed using multinomial logistic regression.

Results: Smokeless tobacco was the commonest form of tobacco used. Proportion of smokers and those using both smoke- and smokeless-form peaked during NFHS-3 followed by a consistent dip; however, use of smoke-less tobacco plateaued from NFHS 4 to 5. NFHS-5 shows, 27.0% and 19.2% used smokeless- and smoke-form of tobacco respectively; 6.3% used both. Tobacco use declined significantly since the last two decades – though the change was less prominent in Eastern and North-Eastern parts of the country. The aged, urbanites, Muslims and backward classes had higher chances of being tobacco-users. The educated and wealthier people used tobacco less. Exposure to mass-media had a bi-directional effect on tobacco usage, across all rounds.

Conclusion: There has been a steady decline in tobacco use in India over the last 22 years - the largest impact is seen among smoke-form users. However, smokeless tobacco-use has remained nearly unaffected. Policymakers should target more on smokeless-forms; re-design and implement the tobacco control policies according to the call of the day.

Keywords: Addiction; Smoking; Smokeless tobacco; India; National Family Health Survey; Health policy.

❖ **Title: Unravelling determinants of hypertension among reproductive age group women in India: Evidences from fifth round of the National Family Health Survey**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author :

Dr. Chandra Prabha,

Co-authors:

- **Dr. Vinoth R**, Department of Community Medicine and Family Medicine, AIIMS Jodhpur
- **Dr. Manoj Kumar Gupta**, Department of Community Medicine and Family Medicine, AIIMS Jodhpur
- **Dr. Akhil Dhanesh Goel**, Department of Community Medicine and Family Medicine, AIIMS Jodhpur
- **Dr. Om Prakash Bera**, Global Health Advocacy Incubator (GHAI)
- **Dr. Pankaj Bhardwaj**, Department of Community Medicine and Family Medicine, AIIMS Jodhpur



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Introduction: According to the fourth and fifth rounds of the National Family Health Surveys (NFHS-5), the prevalence of hypertension among women of reproductive age group has increased. This increment, even after concentrated efforts by the Government of India, may be attributed to the changes in the predictors of hypertension.

Objectives: The present study aims to assess the determinants of hypertension among the women of reproductive age group in India.

Materials and Methods: A secondary data analysis was conducted using NFHS-5 data. This study included 7,24,115 women aged between 15-49 years. The determinants of hypertension were assessed with the socio-demographic attributes of the reproductive age group females and their reproductive and maternal characteristics. SPSS v.23 was used for data analysis. Weighted frequencies were calculated for proportions and logistic regression analysis was done to find out the determinants of hypertension.

Results: NFHS-5 estimated that 21% of females over 15 years have hypertension. Twelve percent of women say that on two or more occasions they were told by a doctor or health professional that they have hypertension or high blood pressure. However, among diagnosed hypertensives only 7% of women are currently taking medicine to lower their blood pressure. The prevalence of hypertension is higher among women belonging to the Sikhs (31%), Jains (25%), and Christians (26%) religions. Southern States have a higher prevalence of hypertension than the national average. Hypertension is more prevalent in Urban areas compared to that in Rural areas.

Conclusion: This study shows a higher prevalence of hypertension among reproductive age group women. Addressing these, Identified risk factors through an innovative targeted approach will better address hypertension among the Indian women.

Keywords: Hypertension, Prevalence, Predictors, NFHS-5

❖ **Title: Use of electronic cigarettes and Hookah among medical trainees: a multinational survey study**

Mode of presentation: Poster; **Theme:** Non-Communicable Diseases

Presenting author :

Dr. K Kesava Lakshmi Prasad, Associate professor, Dept of Community Medicine, Andhra Medical College (Vishakhapatnam, India)

Co-authors:

- **Luiza Helena Degani-Costa** – Associate professor
- **Fernando P. Bruno**- Associate professor
- **Fernanda Gushken**- Facilitator, Claudia Szlejf – Facilitator
- **Ana B Tokeshi**- Assistant professor
- **Yasmin F Tehrani** -Medical PG student
- **Daniel Kaufman**- Assistant professor
- **PSS Kumar** – Senior resident
- **L Jamir**- Assistant professor
- **MGK Benesch**, Medical PG student, MG Ryan Medical PG student
- **Hardeep Lotay** - Medical PG student
- **Jonathan P Fuld**, Thiago M Fidalgo, General Practitioner



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Introduction: The increased use of electronic cigarettes (e-cigarettes) and hookah among young consumers represents a public health concern. As young adults, medical trainees (medical students, residents, and fellows) are part of the high-risk population.

Objectives: What are the frequency and patterns of vaping and hookah use among medical trainees?

Materials and Methods: Cross-sectional multinational online survey including medical trainees in Brazil (BR), the United States (US), and India (IN) during study period 2020 -22. Enrolled 6487 students (BR=2768, US=2523, IN=1169) and 1095 residents (BR=328, US=544, IN=197).

Results: Of 7,582 trainees in Brazil, USA and India, 44%, 47%, and 4% reported ever vaping, while 47%, 37%, and 8% ever tried hookah. Higher family income, smoking cigarettes or marijuana, and binge drinking were associated with current use. Cultural and regulatory differences among countries may explain the contrast between the high frequency of e-cigarette and hookah use among trainees in Brazil/USA, and the low prevalence in India.

Conclusion: E-cigarettes and hookah were frequently used by medical trainees in Brazil and the US, which sharply contrasted with the low prevalence in India. Cultural aspects, as well as public health policies may explain the differences among countries.

Keywords: Electronic cigarettes, Hookah usage , Medical students, Medical trainees , India, USA, Brazil, Canada, U K.

❖ Title: Use of Psycho-education for Stress Management among high school students for Mental Health Promotion

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting First author :

Dr. Buddhadev Nath, Psychologist & Hypnotherapist

Introduction: Students also feel stress when they get too little sleep, a poor diet and even from having too much downtime. Being expected to speak up in class, being disorganized and having a fear of change can lead to anxiety among students.

Psychoeducation combines the elements of cognitive-behavior therapy, group therapy, and education. The basic aim is to provide the patient and families knowledge about various facets of the illness and its treatment so that they can work together with mental health professionals for a better overall outcome. Barker, in the Social Work Dictionary, defined psychoeducation as the “process of teaching clients with mental illness and their family members about the nature of the illness, including its etiology, progression, consequences, prognosis, treatment, and alternatives.” According to the target population, psychoeducation can be individual, family, group, or community based.

According to the predominant focus of psychoeducation, it can be compliance/adherence focused, illness focused, treatment focused, and rehabilitation focused.

Active psychoeducation involves the active involvement of the therapist with the patient/family during the process, leading to interaction and clarification. In passive psychoeducation, materials are provided to patients/family members in the form of pamphlets, audio/video material that they are supposed



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to read and assimilate on their own. In a busy clinic with limited available time, a clinician may take resort to passive psychoeducation by distributing leaflets or educative materials about the illness written in a simple language, which the patient and guardians can easily understand and assimilate.

Group psycho-education: This usually comprises patients having similar kinds of illness. Thus, groups may consist of patients with bipolar disorder, schizophrenia, substance abuse, etc. It is not desirable to form a group with members having different kinds of illness. Groups usually have 4–12 members, with the optimum number being 8. The number of sessions usually varies from 5 to 24, with the optimum number of sessions being determined by research and practice. Often, the availability of resources in terms of available time and workforce may lead to modifications in the number of sessions, though the broad areas to be covered for each disorder remain the same. The sessions usually last 40–60 min and are mostly held at weekly intervals. The optimal time and frequency of sessions help in the better assimilation of the information, which has been shared and discussed. It may be useful to hand over printed material after each session, which highlights in simple language the salient features of the topics discussed in that particular session.

Models of Psycho-education:

a. Information model

The focus is on providing families knowledge about psychiatric illness and their management.

b. Skill training model

The skill training model focuses on developing certain skills so that the family members can manage the illness more effectively.

c. Supportive model

The supportive model mainly involves taking help of support groups for engaging the family members of the patients in sharing their feelings.

d. Comprehensive model

The comprehensive model uses a combination of the previous three models.

Methods: Group Psycho-education (skill training model) was applied to the Higher Secondary school students (n=50) at school to manage their stress & enhancing performance related to their studies.

The main session was 120 minute duration, after those 2 follow-up sessions were conducted in 7 days interval.

‘5 finger rule for stress management’ were taught:

Thumb- Thinking modifications

Index- Emotional Intelligence

Middle- Good memory cultivation

Ring- Giving response instead of react

Little- Learning of coping skills

Inclusion criteria include age group 16-18, male & female, High Secondary students.

An exclusion criterion includes not willing to attend the session.

Result: Stress level has been reduced after the training. Subjects reported that their resilience ability also improved after complete the program.



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Discussion & Conclusion: Group psycho-education is an effective tool to reduce stress & enhancing performance for students.

Limitations: More training sessions are required.

❖ **Title: Utilisation Of Anganwadi Services Among Children Aged 0 To 6 Years: A Cross Sectional Study**

Mode of presentation: Poster; **Theme:** Child & Adolescent Health

Presenting First author :

▪ **Dr. Mandava Harshita**, Dept of community Medicine, Government medical college, Anantapuramu.

Co-author:

- Arepalli Sreedevi
- Sumana Gopichand

Background: Launched in 1975, Integrated child development services (ICDS) , is one of the world's largest community based programme providing for an integrated package of services for the holistic development of child. This scheme is open to all eligible beneficiaries irrespective of their income status. It was found that there is less than expected utilisation of services by the beneficiaries.

Objectives:

1. To estimate the proportion of children utilising various anganwadi services.
2. To determine the factors influencing the utilisation of anganwadi services among children.

Materials and Methods: A Community based cross sectional study was conducted among 300 mothers with children aged 0 to 6 years. Simple random sampling was used at two stages to select the villages and then the study subjects. Data was collected through house visits by interview method using a pre tested, pre designed, semi structured questionnaire. Data was analysed by percentages and proportions, chi square test was used to test the association. SPSS version 25 was used for statistical analysis.

Results: Supplementary nutrition (80.2%) was the most common anganwadi service utilised by children followed by health check-ups (75%), Preschool non formal education (69.8%) Immunization (44.6%) and referral services (41.3%). Anganwadi being far (44%) was a major factor for non-utilisation of anganwadi services. Not being aware of the need (54%) was a major reason for not utilising health check-ups. Working mothers compared to home-makers (60% vs 84.1%; p <0.0001) and children with birth order of ≥ 3 compared to birth order of 1 and 2 (65.8% vs 80.4% vs 85.4; p =0.03) were having lower utilisation of supplementary nutrition.

Conclusion: Apart from supplementary nutrition and health check-ups other services provided by anganwadi were underutilised among children.

Key words: Anganwadi, Children, Immunization, Supplementary nutrition.

❖ **Title: VIEW SCORE: An early warning score to detect possible complications among Covid-19 patients.**

Mode of presentation: Poster; **Theme:** Communicable Disease including Antimicrobial Resistance



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Presenting author :

▪ **Dr. Reshma Patil**, Symbiosis Medical College for Women & Symbiosis University Hospital & Research Centre,, Symbiosis International (Deemed University), Pune, Maharashtra

Co-authors:

- Dr. Meenakshi Bhakare
- Dr. Urvi Shukla
- Mr. Gajanan Sakhare
- Mr. Shardul Joshi
- Ms. Aditi Pais

Background: Understanding pulmonary function at various phases after Covid-19 infection is critical for determining the exact pathophysiological mechanism of Covid-19.

Objectives: 1. To assess deterioration or improvement in spirometry parameters including FVC, FEV₁ & ratio FEV₁/FVC in Covid-19 patients. 2. To study correlation between FVC, FEV₁, FEV₁/FVC with oxygen saturation and clinical findings.

Materials and Methods: A prospective observational study was conducted for a 6-week period among 25 Covid-19 patients who were either asymptomatic or mildly symptomatic. Each patient received a handheld linked SpiroPRO™ gadget, a pulse oximeter, and a thermometer from BRIOTA. Patients and healthcare professionals were given the training for performing spirometry twice a day as well as access to mobile apps was provided. Spirometry Indices, patient's symptoms, and vital statistics were used to calculate the VIEW score using machine learning algorithms.

Result: The Bland Altman plots showed FEV₁ reduced slightly up to 21-28 days & comes back to normal around 42 days. VIEW score increased up to day 21 & then decreased towards day 42. Increase in VIEW score increases risk of Covid-19 complication. VIEW score & FEV₁ showed significant correlation.

Conclusion: Home based spirometry acts as an effective tool for Covid-19 patients to predict lung complications and also promote self-monitoring thereby reducing burden on health system.

❖ Title: Women Empowerment and Gender-based Violence: A comparative analysis of Karnataka and India from the National Family Health Survey 4 and 5. (NFHS).

Mode of presentation: Poster; **Theme:** Miscellaneous (e.g. Urban Health, Vulnerable, Marginalized, Public Health Emergencies/Disasters, Digital Health & AI, Health Education & Promotion, etc.)

Presenting author :

Dr. Namratha Kulkarni, Assistant Professor, Department of Community Medicine, JGMM Medical College, Hubballi, Karnataka

Introduction: Women Empowerment refers to collective improvement in women's political, social, educational, economic, and health status. The worldwide theme for this year's 16 days of activism against gender-based violence was "UNITE! Activism to end violence against women and girls" (held between Nov16-Dec10). India aims to achieve United Nations-mandated SDG-5, which focuses on women's empowerment



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and gender equality, by 2030. Karnataka is one of the most progressive states in India and has been actively working on the empowerment of women through various programs.

Objectives: To compare and analyze Women Empowerment and Gender-based Violence parameters of Karnataka state and national (India) data from National Family Health Survey 4 and 5(NFHS).

Materials and Methods: For this study, NFHS-4 and 5 factsheets of Karnataka and India are used which showcase the data related to various health and non-health parameters. Six parameters under the Women empowerment and a few others related to Gender-based violence, health, and educational parameters (which do not fall into the women empowerment umbrella of the survey but help in measuring empowerment) like educational attainment of more than 10 years, marriage under the age of 18, knowing about the HIV, access to the family planning and maternal health services, and others will be considered for the study. Indicators in percentages will be compared and represented in graphs.

Results: Awaited (Results will be discussed at the conference).

Conclusion: The recommendations and conclusion would be based on the results. However, there are several indicators for GBV under the SDGs that are not yet addressed by the NFHS and need to be focussed upon.

Keywords: Gender Based Violence, Women Health, Women Empowerment, GBV, Domestic Violence



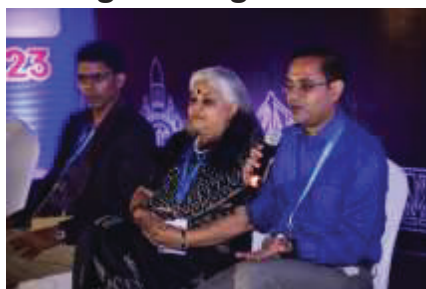
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Session-wise Photo Gallery

World Health Day



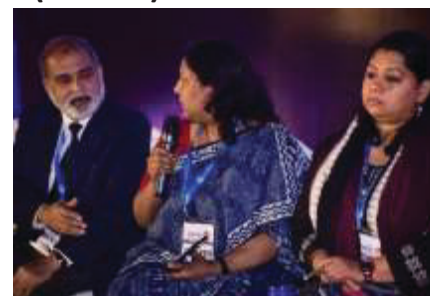
The Evolution of Knowledge Management & Learning (CARE India)



Dr. BC Dasgupta Memorial Oration



Health System Strengthening: Financing and HR (NHSRC)



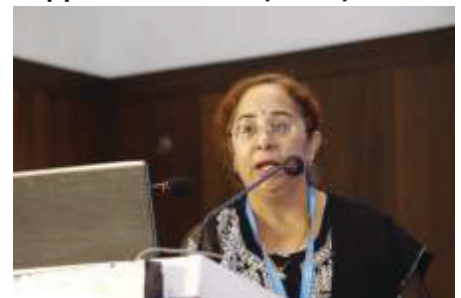


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Prevention and Control of Influenza and Other Respiratory Viruses (ICMR-NICED)



Implementation of ICMR -STWs for Improving Population Health - An Approach to UHC (ICMR)



A Talk with IJPH



Catalyzing Community Actions for Better Health Outcomes (USAID & JHPIEGO)



Dr. KN Rao Memorial Oration





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Key Note Address (Dr. JP Muliylil)



Ending HIV Epidemic by 2030 (Dr. DCS Reddy)



Role of Public Health Professionals in implementing the National Action Plan on Anti Microbial Resistance (WHO)



Inauguration



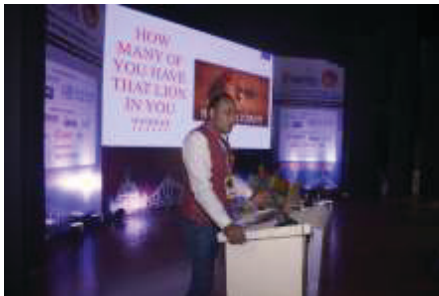


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Climate Change and Health - Vulnerabilities, Coping, Mitigation and Way Forward



Dr J.E. Park Memorial Oration



Validictory Session



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