INDIAN PUBLIC HEALTH ASSOCIATION

(Founder Member, World Federation of Public Health Associations, Geneva)

IPHA Newsletter

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Contents

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Message from President's Desk

Greetings from IPHA!

IPHA is going to publish the newsletter to aware members about recent activities. IPHA is the organization to protect and promote the health of the people of India by facilitating the exchange of information, experience & research & advocating for policies, programs and practices that improve public health and current leaders are determined to serve the society with these mission and vision even during the pandemic.

Wish you all a good health!

Regards,

Sanghamitra Ghosh

Dr. Sanghamitra Ghosh
President,
Indian Public Health Association

IPHA Life Membership Fee : Rs. 5000/-

- Lifetime membership validity.
- Discounts to attend IPHACON.
- Exclusive CME for members.
- IJPH Digital copy; four issues yearly and all special issues.
- Reduction in article processing charges (APCs) for member's scholarly work featuring in the esteemed indexed journal of the association, IJPH (Indian Journal of Public Health)

Message from Secretary General

Dear Members,

Greetings from Indian Public Health Association!

It gives me a great pleasure to re-introduce the Newsletter of Indian Public Health Association in a fresh new look. The newsletter from now onwards will come out in regular interval under the leadership of Dr. Prasad Waingankar.

All the reported public health activities of headquarters, state and local branches and members under the banner of IPHA will feature in this newsletter. The newsletter will now have new and dynamic features for our junior members, faculties, fellows and all those who are working in field of public health.

This Newsletter will be in tune with Go Green Policy of IPHA. Please feel free to give your suggestions and opinions and articles in the designated email of the Newsletter.

Regards,

Long live IPHA!

Kaushik Mitra

Dr. Kaushik Mitra
Secretary General,
Indian Public Health Association

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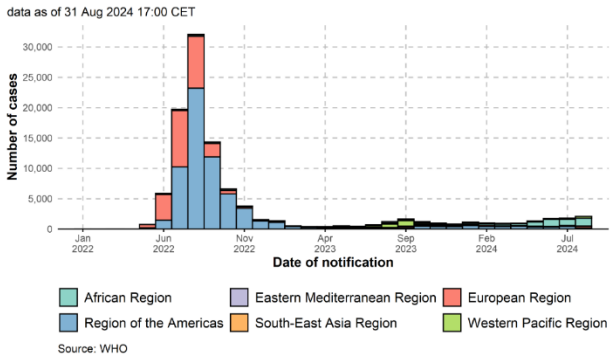
Mpox: A Public Health Emergency of International Concern

Dr. Prasad Waingankar

Professor & Head, Community Medicine, MGM Medical College, Kamothe, Navi Mumbai

WHO Director-General Dr. Tedros Adhanom Ghebreyesus has declared mpox a public health emergency of international concern (PHEIC) twice, the first time in May 2022 and the second time in August 2024.

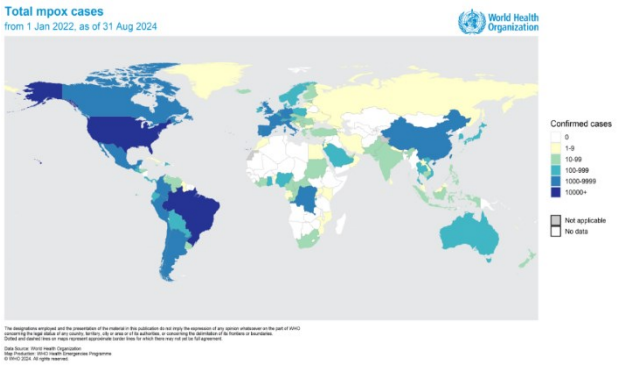
Mpox has traditionally been reported from some countries in central and west Africa. In 2022, an outbreak erupted and became global, when the disease spread to many countries that had never seen the virus before. What is happening in 2024 is a large number of cases in the Democratic Republic of Congo including the appearance of a new virus strand clade Ib, which is spreading fast from person to person. Unlike the outbreak in 2022, where it was affecting mostly men who have sex with men, this time it is affecting everybody, women, men and children.



Mpox, formerly known as Monkeypox, is a zoonotic viral disease caused by the monkeypox virus (MPXV). According to the WHO, Mpox can spread through direct contact with bodily fluids, respiratory droplets, and contaminated materials, similar to smallpox, though it is less severe.

The renaming of Monkeypox to Mpox by WHO in 2022 aimed to avoid the stigma associated with the original name. The decision was part of a broader effort to reduce discriminatory language in global health discourse, ensuring that diseases are named in ways that do not alienate or marginalize populations. The WHO's International Classification of Diseases (ICD) guidelines emphasize the need for neutral and culturally sensitive terminology in disease nomenclature.

Mpox was first discovered in 1958 when two outbreaks of a pox-like disease occurred in colonies of monkeys kept for research. The first human case was recorded in 1970 in the Democratic Republic of the Congo (DRC). Mpox has primarily affected communities that live in close proximity to wildlife. Lack of proper health infrastructure, poor sanitation, and close interaction with animals create a fertile environment for zoonotic diseases like Mpox to spread. After decades, global travel and trade have led to outbreaks in countries far from the virus's traditional strongholds. Cases were reported in the U.S., U.K., and several European countries during the 21st century. The 2022 outbreak, however, brought Mpox to the forefront as cases surged across multiple countries, prompting international concern.



MPXV is an enveloped double-stranded DNA virus of the Orthopoxvirus genus in the Poxviridae family, which includes variola, cowpox, vaccinia and other viruses. There are two distinct clades of the virus: clade I formerly known as Congo Basin Clade (with subclades Ia and Ib) which is more virulent and transmissible in comparison with clade II formerly known as the West African Clade (with subclades IIa and IIb). In 2022–2023 the global outbreak of mpox was caused by the clade IIb strain. Since early 2024, there has been an upsurge in the number of cases and deaths due to Mpox (Clade Ib) in African region. As of August 2024, clade Ib has also been detected beyond Africa. The virus is continuing to evolve, including several small changes in the genetic code, minor gene variants and a deleted gene.

In India, the first case of Mpox was reported in Kollam, Kerala on 14th July 2022. Over 120 countries have reported mpox between Jan 2022 – Aug 2024, with over 1 lakh

laboratory-confirmed cases reported and over 220 deaths among confirmed cases.

Data as of August 2024

WHO Region	Total cases[†]	Total deaths[†]	Cases in Jul 2024	Cases in Aug 2024	Monthly % change in cases
Region of the Americas	64,879	148	447	207	−54.0%
European Region	27,965	9	151	285	89.0%
African Region	7,662	54	1,016	1,298	28.0%
Western Pacific Region	3,979	10	163	274	68.0%
South-East Asia Region	956	11	15	16	6.7%
Eastern Mediterranean Region	869	2	9	2	−78.0%

[†] From Jan 2022

Incubation period of Mpox ranges 5-21 days. The Physicians are currently recommended to monitor patients up to 21 days. clade Ib is spreading primarily through household contacts and frequently infects children. Clade IIb, which had prompted the previous WHO global warning in 2022, spread mainly through sexual contact. While clade Ib causes a similar illness to clade IIb, it is considered capable of spreading faster and killing more people.

Suspected case:

A person of any age having history of travel to affected countries within the last 21 days presenting with an unexplained acute rash AND
one or more of the following signs or symptoms
- Swollen lymph nodes
- Fever
- Headache
- Body aches
- profound weakness

Probable case:

A person meeting the case definition for a suspected case, clinically compatible illness and has an epidemiological link to a confirmed case (Example of epidemiological link include face-to-face exposure, including health care workers without appropriate PPE; direct physical contact with skin or skin lesions, including sexual contact; or contact with contaminated materials such as clothing, bedding or utensils).

Confirmed case:

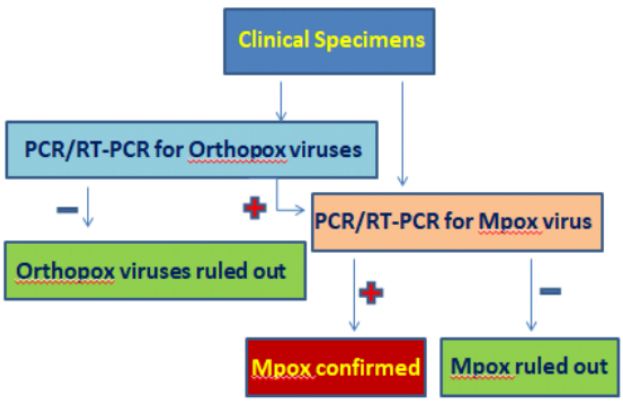
Any case which is laboratory confirmed for Mpox virus (by detection of unique sequences of viral DNA either by polymerase chain reaction (PCR) and/or sequencing).

The key stakeholders in surveillance are NACO, IDSP, points of entries (PoEs), Hospitals (Derma OPDs, RTI/STI clinics, Antenatal clinics & pediatric OPDs) and the designated lab network.

Mpox can be transmitted in different ways. The first way is close contact, skin-to-skin, mouth-to-mouth or sexual encounters. When a sick person is speaking very close to another person who is not sick, they may have some micro particles that are infectious. Another transmission way is from animal to human, during the hunting, skinning or cooking of the animal. The third transmission way is through contaminated objects, such as sheets, towels and needles. Finally, the transmission may be vertical through a pregnant woman to fetus or baby.

The Mpox rash often begins on the face and spreads over the body, extending to the palms of the hands and soles of the feet. It can also start on other parts of the body where contact was made, such as the genitals. It starts as a flat sore, which develops into a blister filled with liquid that may be itchy or painful. As the rash heals, the lesions dry up, crust over and fall off. Some people may have one or a few skin lesions and others have hundreds or more. These can appear anywhere on the body including palms of hands and soles of feet, face, mouth and throat, groin and genital areas & anus.

The preferred laboratory test for mpox is detection of viral DNA by polymerase chain reaction (PCR). The best diagnostic specimens are taken directly from the rash – skin, fluid or crusts – collected by vigorous swabbing. In the absence of skin lesions, testing can be done using swabs of the throat or anus. Testing blood is not recommended. Antibody detection methods may not be useful as they do not distinguish between different Orthopoxviruses.



Flowchart for Lab diagnosis of Mpox

[Source: CD-Alert – August 2024]

Treatment of Mpox is primarily supportive.
Principles of Management include:

- ✓ Patient isolation
- ✓ Protection of compromised skin and mucous membranes
- ✓ Rehydration therapy and nutritional support
- ✓ Symptom alleviation
- ✓ Antibiotics to treat secondary bacterial infections if they develop
- ✓ Monitoring and treatment of complications

Drugs may be considered in special severe cases, strictly as per treating physician and are NOT to be self-administered. These include:

- ✓ Tecovirimat
- ✓ Vaccinia Immune Globulin Intravenous
- ✓ Cidofovir & Brincidofovir - effective against orthopoxviruses in *invitro* & animal studies

Three vaccines are currently licensed.

1. Modified vaccinia Ankara-BN (e.g., MVA-BN or JYNNEOS, Imvamune or Imvanex), a 2-dose 3rd generation smallpox vaccine that is a highly attenuated replication-deficient vaccinia virus vaccine, approved in the USA, Canada and Europe
2. LC16-KMB (licensed in Japan)
3. OrthopoxVac (licensed in the Russian Federation).

WHO advises vaccination for only individuals at high risk of exposure, such as those with certain occupations or circumstances, and travelers who may be at risk, as determined by a healthcare provider. Based on currently assessed risks and benefits, mass vaccination is NOT recommended by WHO for Mpox at present. India has also not issued any advisory pertaining to Mpox vaccination at present.

Human-to-human spread of Mpox can be controlled by public health measures including enhanced surveillance, early case-finding, diagnosis and care, isolation and contact-tracing.

There is a need to strengthen awareness among healthcare providers and community at large, on recognizing symptoms and the necessity of timely notification to the surveillance system and following the basic preventive measures.

For suspected cases, alert the surveillance system via this link:
https://ihip.mohfw.gov.in/cbs/#!/

[Source: WHO, NCDC Websites & CD-Alert]

Recent Activities of IPHA Maharashtra State Branch

Artificial Intelligence & Digital Tools for Public Health Professionals: My Health, My Right

On April 27, 2024, the Maharashtra State Branch, in collaboration with MGM Medical College, MGMIHS, Navi Mumbai had conducted a webinar based on World Health Day Theme with benefit of MMC Credit points. More than 300 Delegates joined the webinar. The webinar commenced with an introduction to AI and the World Health Day theme by Dr. Shashank Dalvi, Dr. Sanghmitra Ghosh, Dr. Gajanan Velhal, and Dr Deepak Khismatrao. The sessions included: Use of AI Tools by Public Health Professionals, Empowering Health Care with Generative AI: Exploring Role of Chat GPT, Application of Artificial Intelligence in Infectious Diseases of Public Health Importance, Simple Digital Tech to Develop Public Health Database for AI-Based Research, Demystifying Artificial Intelligence for Public Health Professionals, Ayushman Bharat Digital Mission: Health Practitioner & Health Facility Registration and Panel Discussion: Artificial Intelligence & Digital Tools for Public Health Professionals: My Health, My Right. The faculties were Dr Prasad Waingankar, Dr. Amir Kumar Dey, Dr Aparna Chaudhary, Dr. S V Kulkarni, Dr. Alok Modi, Dr Ashlesha Tawde, Dr Narendra Singh, Dr. Sanjay Agarwal, Dr. Ketan Mehta, Dr Anuj Maheshwari & Dr Harshad Thakur. Also Dr. Prakash Doke, Dr. Murlidhar Tambe and Dr Kaushik Mitra shared their views briefly.

Seminar For Accredited Social Health Activists (ASHA)

The branch in collaboration with MGM Medical College, MGMIHS, Navi Mumbai and Unnat Bharat Abhiyan, MGMIHS organized a Seminar to promote breastfeeding awareness and practices for, Accredited Social Health Activists (ASHA) workers under UBA Villages along with villages under Primary Health Centre, Nere on 6th August 2024 based on theme of "Closing the gap: Breastfeeding support for all" aimed towards bringing together the field workers at ground level to discuss and explore latest developments on Maternal & Child Health Care. With the help of a series of activities which included Educational Seminar and Interactive sessions, wherein experts discussed the benefits of breastfeeding for both the infants and mother, addressing common challenges and solutions. ASHA workers from all the 5 sub-centres under PHC, Nere attended the seminar. Pediatrician Dr. Vijay Kamale, Gynecologist Dr. Shaifali Patil, Public health experts Dr. Nisha Relwani, Dr. Madhavi Mankar, Dr Ratnaprabha Pedhambkar addressed the gathering.

Role of an Orthopedician in Preserving Public Health

Dr. Jeff Walter Rajadurai

Assistant Professor, Orthopaedics, Madha Medical College & Research Institute, Chennai

The medical field of Orthopedics plays a crucial role in the broader landscape of public health, as Orthopedicians specialize in the diagnosis, treatment, and prevention of injuries and diseases affecting the musculoskeletal system. Their expertise extends beyond the individual patient and into the realm of community-level health interventions. One of the primary roles of an Orthopedician in preserving public health is their involvement in the rehabilitation of acute and chronic injuries. By providing comprehensive care and developing effective treatment plans, they help individuals recover from musculoskeletal trauma, restore functionality, and prevent the development of long-term complications

Furthermore, Orthopedicians work in conjunction with other healthcare professionals, such as physical therapists and athletic trainers, to implement measures that reduce the risk of injury and illness occurrence or severity. Moreover, the Orthopedicians play a vital role in promoting injury prevention and musculoskeletal health at the population level. By educating the public on best practices for injury prevention, such as the importance of using safety equipment or implementing workplace ergonomic improvements, Orthopedicians can help reduce the burden of musculoskeletal injuries & their associated healthcare costs. In the geriatric population, Orthopedicians face unique ethical considerations when providing care. They respect the patient's self-determination as the primary standard of decision-making, utilize advance directives or appropriate surrogate decision-makers when patient decisional capacity is lost, and carefully balance the benefits and burdens of any intervention and its alternatives. This ethical approach ensures that elderly patients receive the appropriate level of care, preserving their autonomy and promoting their overall well-being.

Orthopedicians also contribute to public health through their involvement in the management of chronic musculoskeletal conditions, such as arthritis & osteoporosis. In this scenario, Orthopedicians develop and implement comprehensive treatment plans that address the physical, social, and emotional needs of individuals living with these conditions. Another important responsibility of Orthopedicians in public health is to address disparities in musculoskeletal care. Racial, ethnic, and socioeconomic factors can significantly impact an individual's access to quality orthopedic care, as well as their risk of experiencing complications or poor outcomes from orthopedic interventions.

Orthopedicians must be cognizant of these disparities and work to develop strategies to ensure equitable access to care, such as by advocating for policy changes or collaborating with community organizations. In conclusion, the role of the Orthopedician in public health is multifaceted and essential.

Recent Activities of IPHA West Bengal State Branch

BP Collection Drive on World Hypertension Day: On May 17, 2024, the West Bengal State Branch, organized the event aimed to promote hypertension awareness and management. The successful drive fostered community health awareness, encouraging early detection & prevention of hypertension, aligning with IPHA's mission to promote public health.

World Breastfeeding Week 2024: The branch in collaboration with Maharani Kasiswari College, Kolkata, on August 5th organized the seminar and workshop, titled "Breastfeeding Technique," aimed to promote awareness and education on optimal breastfeeding practices. Dr. Surajit Ghosh, President of IPHA's West Bengal Branch, and Dr. Sima Chakrabarti, Principal of Maharani Kasiswari College, delivered welcome addresses, setting the tone for the event. Eminent speakers shared valuable insights on breastfeeding benefits, guidelines, and best practices. Demonstrations of correct positioning, attachment, and suckling techniques provided hands-on knowledge to the attendees. Over 150 students from the college participated in the event, engaging with experts and clarifying doubts. The seminar and workshop successfully equipped the students with essential knowledge and skills to support breastfeeding mothers.

The event's success underscored the value of collaborative efforts in advocating for optimal breastfeeding practices.

Condemnation of heinous rape and murder of a lady doctor in RG Kar Medical College, Kolkata and demand for swift justice

The Indian Public Health Association (IPHA) has been deeply shocked by the heinous rape and murder of a lady doctor at the R G Kar Medical College & Hospital. We pray for the departed soul and offer our heartfelt condolences to her parents and family members. The IPHA unequivocally joins the healthcare fraternity and the civil society at large in condemning the incident and demanding a swift, impartial and effective inquiry with judicial oversight that should lead to exemplary punishment. We are also troubled by the administrative responses in the immediate aftermath of the incident and related developments where peaceful protestors have been harmed by unidentified mobs and parts of the hospital vandalised. The IPHA leadership has sent six petitions to the President of India, Prime Minister of India, Home Minister of India and Health Minister of India as well as the Governor of West Bengal and Chief Minister of West Bengal demanding swift justice. We shall continue to be part of the larger protests and movements in demand for justice and a corruption and crime free workplace.

IPHA HQ: Recent Academic & Public Health Activities

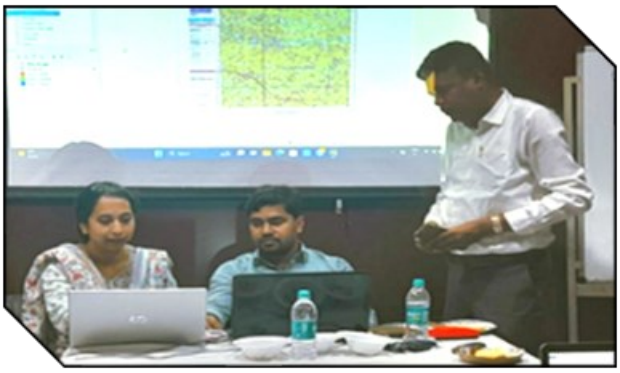
Public Health Masterclass: Geographical Information System 16 – 18 Februarv 2024

The Public Health Masterclass on GIS for Public Health Professionals was held from 16th to 18th February 2024 at IPHA Bhaban in offline mode. Dr. Zakir Hussain, Professor at Presidency University, Kolkata, was the lead course facilitator. He taught various topics related to GIS.

Dr. Arijit Majumder, Assistant Professor at Jadavpur University, took classes on introduction to GIS and taught basic lessons to the participants. Dr. Sadik Mahammad and Dr. Mousumi Chowdhury of Jadavpur University conducted separate

sessions on working with vector data, attributes, and symbols, creating maps, and vector data.

Dr. Sattwik Santra, Professor at the Centre for Studies in Social Sciences (CSSS) Calcutta, conducted separate sessions on vector data creation and raster data. Dr. Zakir Hussain covered advanced topics such as spatial analysis, Choropleth maps, excess risk maps, spatial weights, spatial autocorrelation, and bivariate spatial analysis.



The three-day workshop was well-received by the participants. The registration fee for the workshop was Rs. 2500, with preference given to IPHA members.

National Webinar: My Health My Right
07 April 2024 – World Health Day

Indian Public Health Association HQ observed World Health Day and organized a webinar on "MY HEALTH MY RIGHT" on 7th April 2024 from 7 PM-8 PM. Esteemed members from corners of the country joined through the zoom platform and the webinar was also streamed live on IPHA's official YouTube channel. The event was started with inaugural address by the president of IPHA, Dr. Sanghamitra Ghosh followed by welcome address by Secretary General of IPHA, Dr. Kaushik Mitra.

Prof. Dr. Sitanshu Sekhar Kar (HOD, Preventive & Social Medicine, Jawaharlal Institute of Postgraduate Medical Education & Research JIPMER, Puducherry nicely illustrated the role of the public health professionals to establish right to health. Prof. Dr. Rajib Dasgupta (Professor of Centre of Social Medicine and Community health, JNU, New Delhi & Editor, IJPH wonderfully deliberated on right to health and its status along with the lacunae. Enthusiastic audience participated wholeheartedly, and their questions were addressed after each presentation.

The Facebook page of UPH was also launched by the President in presence of other leaders including Editor, Managing Editor etc. World Health Day Essay competition for IPHA members was announced by Secretary General.

All the prominent personalities of public health and leaders of public health joined. The whole program was coordinated by Dr. Anirban Dalui (CC Member HQ) with the help of Dr Arnab Sarkar.

National Webinar: Fight Against Malaria
26 April 2024 – World Malaria Day

Indian Public Health Association HQ observed World Malaria Day and organized a webinar on "Fight Against Malaria" on April 26th at 7 pm. Esteemed members from corners of the country joined through the Zoom platform. The webinar was also streamed live on IPHA's official YouTube channel. The event included sessions led by Dr. Harsh Rajvanshi (Advisor, Foundation for Disease Elimination and Control of India), Prof. Dr. Pankaja Raghav (HOD, Dept of Community and Family Medicine), AIMS Jodhpur) and Dr. Kaushik Sarkar (Director, Institute for Health Modeling and Climate Solutions).

Topics ranged from the global and Indian scenarios of malaria to strategies for elimination and leveraging AI and big data for precision strategies in combating malaria. The webinar also included an insightful open house discussion and Q & A session, providing attendees with an opportunity to engage with the speakers. Dr. Sanghamitra Ghosh, President – IPHA and Dr. Kaushik Mitra, Secretary General - IPHA delivered the welcome address, while Dr. Pritam Roy (WHO Coordinator) coordinated sessions.

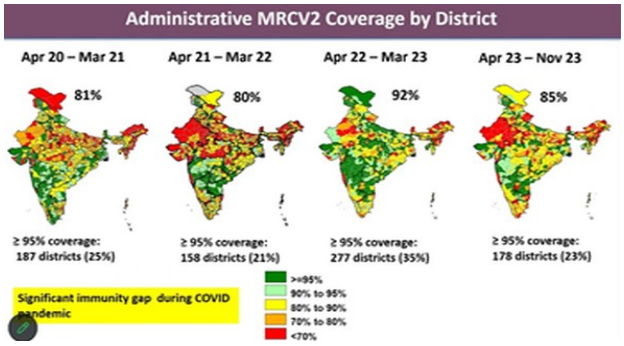
The event concluded with a vote of thanks highlighting importance of collective efforts in the Malaria prevention & control. The delegates gathered very valuable insight and valuable information to fight further against malaria.

Panel Discussion: Measles Rubella Elimination

24 - 30 April 2024 – World Immunization Week

The Indian Public Health Association Headquarters commemorated World Immunization Week 2024 through a virtual panel discussion on the topic "Is India on track to achieve the Measles Rubella

Elimination Goal by 2026?" The event, conducted on the Zoom platform on April 30, 2024, saw the active participation of association members.



Prof. (Dr.) Rajib Dasgupta, a Member of the National Verification Committee for Measles Rubella Elimination, efficiently moderated the panel discussion. Dr. Ratnesh Murugan, National Professional Officer at WHO-India, and Prof (Dr) Narendra Kumar Arora, Chairperson of the National Verification Committee for Measles Rubella Elimination, delivered enlightening lectures

on the subject matter.

The discussion further extended to include open questions and answers, and a collaborative discourse. Prof. (Dr.) Suneela Garg, Chairperson, IAPH also contributed her insights to the panel discussion, enriching the discourse with her perspectives.

The event concluded with expressions of gratitude from Dr. Sanghamitra Ghosh, the President, and Dr. Kaushik Mitra, the Secretary-General of the Association, acknowledging the contributions of all participants. The insightful discussion and shared expertise during the event are likely to further propel efforts towards achieving the Measles Rubella Elimination Goal in India by 2026. The session was coordinated by Dr. Anirban Dalui, CC member – HQs.

Masterclass: Tool Development for Public Health Professionals

11th-12th May (Online) & 17th - 19th May (Offline)

The Indian Public Health Association HQ recently organized a Masterclass on Tool Development for Public Health Professionals. The event included an online class on 11th and 12th May, followed by an offline class at the IPHA Bhaban on 17th - 19th May. The course was facilitated by Dr. Sumona Datta, Assistant Professor in the Department of Psychology at the Government General Degree College, Singur. The event was moderated by Dr. Shibaji Gupta, Dr. Arnab Sarkar, and Dr. Debdutta Halder.

The training focused on various software tools such as R, IRT approaches, Poly IRT, and DIF scripts. Participants received hands-on training to enhance their skills in tool development for public health initiatives. A total of 22 individuals registered for the course, with 17 attending the physical sessions and 20 participating in the online classes. Feedback from participants was overwhelmingly much positive, particularly highlighting Dr. Sumona Datta's facilitation skills, patience, and ability to create an effective learning environment. The participants appreciated the practical nature of the training and the opportunity to directly apply their new skills in real-world scenarios.

Overall, the Masterclass on Tool Development for Public Health Professionals

was successful in providing valuable insights and practical knowledge to participants in the field of public health. The event served as a platform for professional development and networking, helping attendees enhance their tool development skills for effective public health interventions.

National Webinar: Measure Your Blood Pressure Accurately, Control it, Live Longer
17 May 2024 – World Hypertension Day

The Indian Public Health Association (IPHA) observed World Hypertension Day by hosting a webinar on the theme "Measure Your Blood Pressure Accurately, Control it, Live Longer". The event was streamed live on YouTube and the Association's Facebook page, reaching a wide audience.

Dr Anand Krishnan, Professor at the Centre for the Community Medicine, AIIMS Delhi, delivered keynote address. He emphasized the importance of accurate blood pressure measurement and control in preventing hypertension-related complications.

Prof. Dr. Pankaj Bharadwaj, Professor of Community Medicine and Family Medicine at AIIMS Jodhpur, presented a lecture on "Scope of Research & Innovations in Hypertension Management in India". He highlighted the need for innovative approaches to tackle hypertension in the Indian context.

The webinar was inaugurated by the President and Secretary General of IPHA, setting tone for the informative sessions that followed. Dr. Suneela Garg, Chairperson Indian Academy of Public Health, delivered the end note, summarizing the key takeaways from the webinar and emphasizing the importance of continued efforts in hypertension management.

National Webinar: Smokeless Tobacco

31st May 2024 – World No Tobacco Day

Indian Public Health Association (IPHA) organized a webinar on May 31st, 2024, to mark World No Tobacco Day. The webinar focused on the topic of smokeless tobacco, including its uses, harms, and ways to prevent its consumption.

The event featured eminent public health professionals as speakers: Dr. Shalini Singh, Director, National Institute of Cancer Prevention and Research, ICMR; Dr. Sayan Paul, Senior Consultant Radiation Oncologist, Apollo Hospital Kolkata; Dr. Ranjan Bhattacharya.

The webinar was chaired by Dr. Suneela Garg, Chairperson, IAPH, who provided a way forward & concluding remarks.

The webinar was conducted on the Zoom Meeting platform and was also live streamed on the Association's YouTube page, allowing for wider participation and engagement. The webinar served as an important platform to raise awareness about the dangers of smokeless tobacco and discuss strategies to combat its usage, in line with the goals of World No Tobacco Day.

The first announcement of IPHACON 2025 was done officially at the end of the webinar. Professor Dr. Mubashir Angolkar, Professor and HOD, J.N. Medical College, Belagavi released the first announcement poster of the next Annual National Conference scheduled to be held on 21-23 March 2025 at JNMC, Belagavi.

INDIA'S AYUSHMAN BHARAT DIGITAL MISSION (ABDM) - A STRATEGIC OVERVIEW -

MAJ (Dr) ASHLESHA TAWDE - KELKAR (Retd.)
Associate Professor, Community Medicine, MGM Medical College, Kamothe, Navi Mumbai

India's Ayushman Bharat Digital Mission (ABDM) represents a transformative approach to reimagining health services delivery across nation. This comprehensive article is designed to provide an academic, informative, and data-driven exploration intended for policymakers, government officials, and stakeholders in the healthcare and technology sectors. We delve into the rationale behind India's unique position in deploying ABDM, its phased implementation, infrastructural backbone, digital services, and the intricate ecosystem that facilitates a citizen-centric, quality, and accessible healthcare environment.

Rationale: India's Strategic Position for ABDM Rollout

India's robust infrastructure and widespread adoption of digital technologies provide a fertile ground for the effective deployment of the Ayushman Bharat Digital Mission. The nation's extensive mobile network connectivity, a significant number of wireless subscriptions, and the prominence of the internet usage epitomizes the readiness for a digital health revolution. Further, as the global leader in data consumption, the mechanics for handling voluminous health-related data transactions are already in place, effectively positioning India at the forefront of digital healthcare implementation.

Digital Public Services Backbone

The foundation of digital public services in India is fortified by the massive scale of unique Aadhar IDs and the billions of Aadhar authentication transactions demonstrating the country's capability in managing large-scale digital identification systems. This facet, when blended with extensive electronic Know Your Customer (e-KYC) transactions and the burgeoning Unified Payments Interface (UPI) ecosystem, speaks to an already ingrained digital framework. Such infrastructure is instrumental in supporting the seamless Integration of health services within ABDM's digital infrastructure.

Phased Implementation Strategy of ABDM

Phase 1: Pilot Rollout

Begin with a targeted deployment in Union Territories to assess and refine the system within controlled environments, ensuring readiness for broader expansion.

Phase 2: State-Level Expansion

The mission grows to embrace states and diverse services, acknowledging the critical role of state-level actors and the federal nature of healthcare in India.

Phase 3: Nationwide Rollout

Ambitiously scaling to a pan-India coverage, ensuring universal accessibility and integration into the nation's healthcare fabric.

Four Pillars of Ayushman Bharat

Health and Wellness Centres: These primary care centres cultivate the grassroots of healthcare and preventiveness with broad outreach.

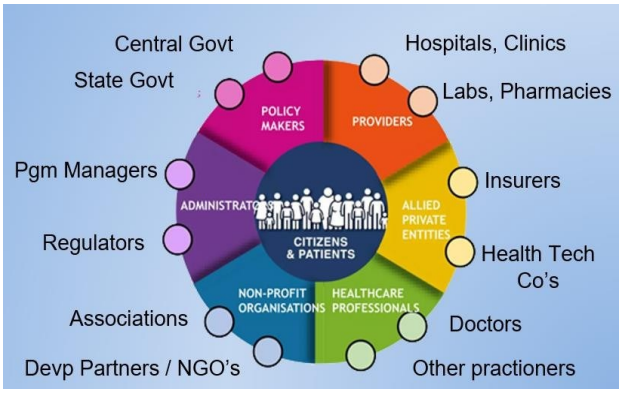
Pradhan Mantri Digital Missions: Various digital missions under the Honorable Prime Minister's vision aims to bridge the gap between citizens and health services.

Ayushman Bharat Insurance: Pradhan Mantri Jan Arogya Yojana (PM-JAY) focuses on providing health insurance to the underprivileged.

Health Infrastructure Mission: Infrastructure development underpins the ability to deliver advanced healthcare services across the nation.

Vision of ABDM

ABDM envisions the creation of a national digital health ecosystem that enhances universal health coverage and efficiency while remaining accessible, inclusive, affordable, and secure. The emphasis on utilizing interoperable digital systems and protecting health-related personal information is pivotal to this vision, ensuring a future where data informs healthcare improvements & balances innovation with privacy.



Objectives of ABDM

1. Enhancing Ease of Living: ABDM aims to simplify hospitalization and related processes, significantly improving the ease of living for citizens.
2. Healthcare Strengthening: Strengthen the foundations of India's healthcare facilities while promoting accessibility and affordability through digital means.
3. Data Privacy & Security: Underscore the importance of health- related data security, privacy, and the responsible handling of personal information.
4. Digital Health Systems: Establish and manage cutting-edge digital health systems for effective data and infrastructure management.

Scope of ABDM

ABDM's scope is vast and encompasses an ecosystem approach to holistic health services. With focuses on universal health coverage and citizen-centric, accountable, and quality services, the mission is structured to revolutionize the care delivery model of India. The cornerstone lies in optimizing service delivery mechanisms to accrue efficiency, effectiveness, and a patient-centric healthcare experience.

ABDM's Diverse Ecosystem

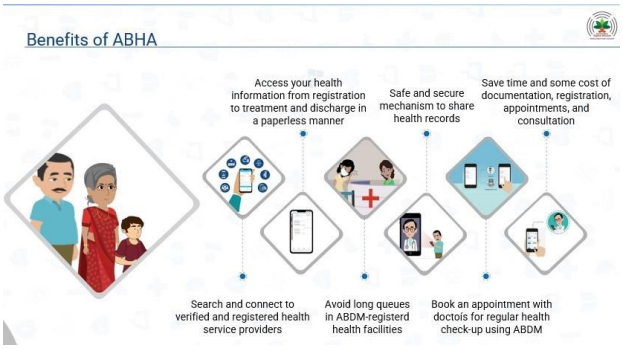
Government Entities: The central and state governments' coordination is quintessential in implementing policy frameworks and strictures that guide the ABDM.

Healthcare Providers: Hospitals, clinics, and individual practitioners are key operational units delivering health services within the ABDM paradigm.

Technological Support: Health tech companies, along with labs and pharmacies, form the backbone of the technological infrastructure essential to ABDM's success.

BUILDING BLOCKS OF ABDM

Health ID (ABHA No): The Health ID, a cornerstone of ABDM, is designed to streamline the process of individual identification across health services. With this unique ID, a standardized layer is brought to the complex landscape of medical records, ensuring the right records are accurately attributed to the correct individuals, thus driving precision healthcare.



ABDM – Certified Mobile App (ABHA APP): The ABHA application, created by the Indian government is a reference application that allows user to:

- Create their ABHA ID
- Link their ABHA ID across various healthcare providers registered in ABDM.
- Fetch and store health records on their personal devices.

Users can also provide consent to share their health records with any healthcare provider of their choice. More such applications are

expected to be available soon, giving users the freedom to choose the application that suits them best.

Access to health records by healthcare providers: As earlier, healthcare providers have access to the medical records which are created by them, this will continue. For other hospitals/doctors who do not have access to the patient's health records, consent of the patient is required. Without proper consent they cannot have access to the patient's health records. ABDM does not store any health records of any patient. These are always created and stored by healthcare providers as per their retention policies and this will continue.

Only the data collected for registries such as ABHA registry, Healthcare Professional Registry and Healthcare Facility Registry is stored centrally. It is necessary for these datasets to be stored centrally because they are essential to provide interoperability, trust, and identification and single source of truth across different digital health systems. This data is stored and processed in secure and safe manner.

Data Anonymization and Aggregation: Anonymizing a particular data involves removing all the data fields by which identity of a person whose data is related to is erased or masked. This includes name, address, mobile number, email ID and such other details by which it may be possible to identify the person. This can be done by use of specific software and algorithms which can mask or erase such data before forwarding it for further analysis.

Anonymization and aggregation can ensure that the trend of diseases and other such information can be made available to policy makers, while ensuring privacy and confidentiality of patients, who can then decide on appropriate policy interventions.

Consent Based Sharing of Health Records: Only you can share your own records with other doctors/ hospitals using different digital health systems after giving your consent. No other entity will have access to such data. No additional means of accessing such data is being created or envisaged in the current ecosystem.

As of 4th September 2024, the total no of ABHA accounts registered is 66,49,84,151. Out of which, the state of Maharashtra has 538.1 lakh ABHA registries.

Health Claims Exchange (HCX): The HCX - Sandbox Environment, introduced by the National Health Authority (NHA), is a testing platform for developers in the health insurance and provider sectors. It enables thorough testing of systems against HCX communication standards before they go live. Successful testing and certification in the sandbox grant access to the HCX production environment. This process ensures interoperability, reliability, and smooth integration within the HCX network, while also fostering collaboration among stakeholders.

ABDM-certified healthcare apps, validated by the National Health Authority (NHA), allow individuals to create an ABHA address, link and view health records, and manage consent for sharing records, facilitating seamless integration with the ABDM ecosystem.

Health Professional Registry (HPR)

- It is a systematic and comprehensive database of all healthcare professionals in both modern and traditional medical systems.
- This includes all types of doctors, nurses, paramedics, and other healthcare providers.
- HPR is intended to evolve into a citizen-centric and practitioner-centric platform.
- Provision of a unique healthcare professional ID will facilitate accountability, discoverability, trust and communication
- Facilitate telemedicine in India

As of 4th September 2024, total no of verified healthcare professionals registered on ABHA are 4,68,045. The state of Maharashtra has 30,344 verified healthcare professionals registered on ABHA.

Benefits of ABDM to Doctors

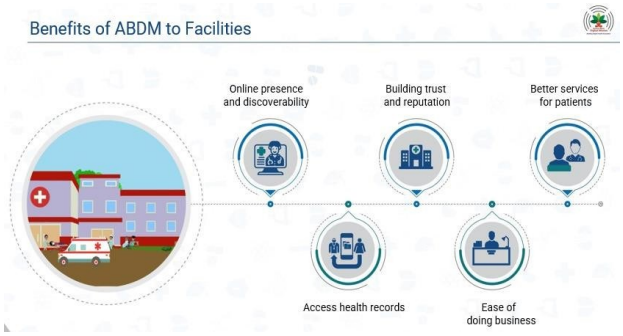
- Doctors engaging with ABDM can expect to interact with a wider patient base through comprehensive digital services.
- ABDM fosters a more efficient management of clinical responsibilities while providing a centralized platform to manage professional credentials,

ultimately contributing to improved patient care and medical decision-making.

Health Facility Registry (HFR)

1. This is a comprehensive repository of health facilities across the country in various medical systems, both modern and traditional Hospitals, clinics, labs, imaging centres, pharmacies, blood banks, and other healthcare facilities, both public and private.
2. Trusted online verified info of available specialties, services offered, contact info, and geolocation, allowing individuals easier access and fostering citizen trust.
3. Facilitates license registration and renewal, as well as ease of empanelment with insurance agencies.

The total no of verified health facilities linked to ABHA registered accounts are 3,30,333 as of 4th September 2024. Out of which the state of Maharashtra has 20,396 verified health facilities.



PERSONAL HEALTH RECORDS APP

Centralized and standardized patient and hospital and health data management software which are available and approved to be sold in the Indian market such as AROGYA SETU, ABHA & PM-JAY app. This in turn will alleviate errors by ensuring easy management of health records of people improving visibility to the healthcare sector and eventually enabling patient-centric digitization.

ABDM Enabled HMIS

When selecting Health Management Information System (HMIS) software, healthcare facilities must ascertain that the system aligns with operational and technical requirements, ensuring optimal cloud-based performance. Assessing product reputation, implementation, support and cost structure are critical elements of the decision-making process, ensuring a cohesive and supportive digital health environment.

Unified Health Interface (UHI)

The UHI initiative under ABDM is a groundbreaking effort to dismantle silos and engender a comprehensive digital health service framework. By enabling diverse health applications to communicate seamlessly with interoperability, UHI empowers patients and providers to transact across an integrated network without being bound to a singular platform.

With the advent of the Unified Health Interface, benefits poised to revolutionize the healthcare landscape include enhanced citizen access to health services, better coordination amongst healthcare providers, and a vast improvement in data accrual for informed policy-making and healthcare outcomes.

Healthcare providers can now have their profiles available across all ABDM-enabled apps, eliminating the need to register on multiple platforms. This improves their visibility and makes them easier to discover within the digital health ecosystem. UHI allows various applications to access a doctor's calendar, creating more business opportunities

UHI stands to catalyze innovation in the health sector by creating a platform where patients can access verified health service providers and transparent pricing structures. This initiative not only increases discoverability for healthcare providers and facilities but also sets the stage for an inclusive and competitive environment fostering quality care.

SCAN & SHARE INITIATIVE

NHA's QR-Code based solution, introduced within ABDM-empowered facilities, streamlines patient engagement by minimizing wait times and inaccuracies in data entry. Displayed in waiting and registration areas, these QR codes leverage smartphone technology to enable faster registration and data sharing with HMIS systems, revolutionizing patient experience at the outset of care.

DATA SECURITY IN ABDM

ABDM's design principle of security-by-design is at the core of ensuring safe health data exchange. The initiative leverages

a federated architecture that decentralizes the storage of Personal Health Records (PHRs), thus fortifying against data vulnerabilities and maintaining consistency across the health record spectrum.

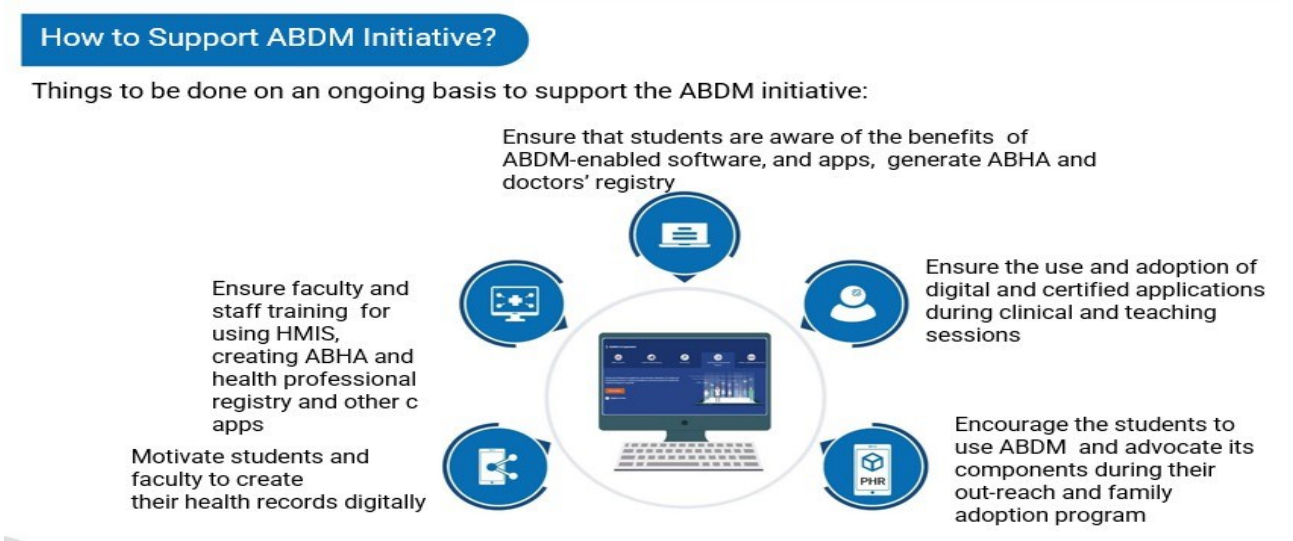
ABDM's stringent security protocols ensure that the sharing of personal health records (PHRs) is subject to patient consent as the Data Principal owner. Moreover, the anonymization of this sensitive data happens at the source, securing privacy while abiding by robust policies, rules, and surveillance systems always safeguarding data integrity and privacy.

Doctor's Participation in ABDM

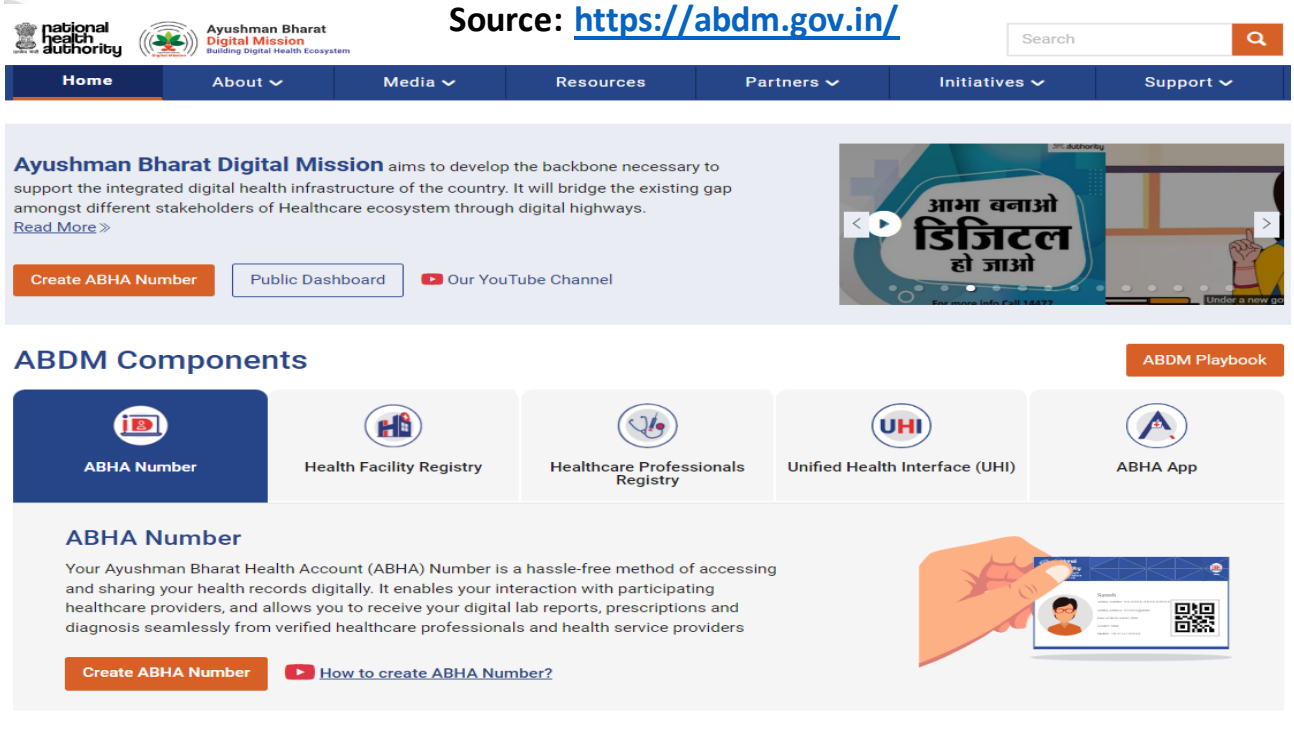
Doctors are encouraged to motivate patients to digital health record sharing, ensure all attached medical staff are trained in HMIS usage, record notes digitally, and promote the use of ABDM-certified PHR apps. Ongoing support for ABDM initiatives includes consistent utilization of ABDM-enabled HMIS software, ensuring a unified approach to healthcare delivery.

Participation in ABDM as Healthcare Educators

Healthcare educators have the unique opportunity to integrate ABDM into medical education, fostering an environment where students create digital health records and understand the significance of nation-wide health initiatives. By instilling awareness and advocacy for digital health among future healthcare professionals, educators play a fundamental role in the propagation of ABDM's e



Source: https://abdm.gov.in/



Modified vectors to control vector borne viral infections

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Associate Professor, Community Medicine, RG Kar Medical College, Kolkata

Arthropod-borne viruses (arboviruses) has been a threat to human health since the dawn of civilization. The dominant vector, Aedes aegypti mosquito thrives in urban environments where domestic and peri-domestic water collections provide plentiful larval habitats and close proximity to human blood meals. [1] Medically relevant viruses like Dengue, Zika, Chikungunya and Yellow fever are endemic in multiple countries and add considerably to the global burden of morbidity and mortality.

Vector control programs to reduce incidence of these diseases have traditionally focused on environmental management, larval control, insecticide spraying, and personal protective measures. However, even after many years of control programs, success achieved can be rapidly reversed. It is also challenging to sustain such vector control activities at scale and emergence of insecticide resistance limits the effectiveness of this approach. [2] With ever-increasing threat and difficulty to control aedes borne viruses, the World Health Organization launched a Global Integrated Arbovirus Initiative on 31st March 2022. This initiative is anchored on six pillars, one of which is to enhance innovation and new approaches. [3]

The Centre for Tropical Medicine, Gadjah Mada University, Indonesia pioneered an innovative approach to vector control by using Wolbachia- infected modified aedes mosquitoes. Wolbachia is a gram-negative intracellular bacterium that infects invertebrates. The wMel strain of Wolbachia pipientis influences female mosquito fecundity, fertility, and re-mating incidence and significantly extends the longevity of virgin females. There is also alteration in feeding behavior. [4] For these mosquitoes, there is a significant time delay for saliva to get infected along with lower salivary viral titre. [5,6]

At Yogyakarta, Wolbachia-transinfected mosquitoes were regularly released into a wild mosquito population over a period of several months. Following this, Wolbachia facilitated its own population introgression (perpetuated its genetic code) by manipulating reproductive outcomes in favor of the progeny infected with Wolbachia.

A cluster-randomized trial conducted at Yogyakarta to assess protective efficacy of modified vector deployments reported 77.1% protective efficacy against virologically confirmed dengue and 86.2 % protective efficacy against dengue hospitalizations. [7] Previously, mathematical modelling predicted wMel-vectors would reduce the basic reproduction number, R0, of Dengue virus transmission by 66 to 75%. Complete elimination of transmission in Dengue-endemic regions was predicted with another strain wMelPop-infected A. aegypti.

Besides Indonesia, trials had been conducted at Australia and Brazil with similar encouraging results. Laboratory studies have suggested besides Dengue, wMel could also attenuate transmission of other A. aegypti borne infections like Zika, chikungunya, yellow fever, and Mayaro viruses.

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Health Equity and Access: Addressing Disparities in Healthcare Access and Outcomes

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Ensuring that every individual, regardless of their background, has the opportunity to achieve their highest level of health is a fundamental goal. Unfortunately, disparities in healthcare access and outcomes persist, impacting millions of people across the globe. Let's explore these disparities and discuss ways to bridge the gap for a healthier, more equitable future.

Health equity is the principle underlying a commitment to reduce and, ultimately, eliminate disparities in health and in its determinants, including social determinants. Pursuing health equity means striving for the highest possible standard of health for all people and giving special attention to the needs of those at greatest risk of poor health, based on social conditions.[1]

Healthy People 2020 defined a health disparity as "... a particular type of health difference that is closely linked with economic, social, or environmental disadvantage. Health disparities adversely affect groups of people who have systematically experienced greater social or economic obstacles to health based on their racial or ethnic group, religion, socioeconomic -status, gender, age, or mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion". [2]

Health disparities, which are sometimes referred to as health inequities, have garnered an increasing amount of attention from physicians and health policy experts, as well as a renewed focus from federal health agencies. As a complex and multi-factorial construct, differential access to medical care, treatment modalities, and disparate outcomes among various racial and ethnic groups has been validated in numerous studies. The antecedents of such differences involve such "drivers" as cost and access to the healthcare system, primary care physicians, and preventive health services. In addition, the subtle role of bias in creating and/or exacerbating health disparities is well documented in literature. [3]

Health outcomes are defined as those events occurring as a result of an intervention and are measures of quality of care. A health outcome refers to both physical and psychological well-being and takes into account the length of life as well as the quality of life. Measuring outcomes helps make decisions about how to best care for patients.

Measuring, reporting, and comparing outcomes are important steps in achieving better health outcomes. Improving health outcomes can improve the performance and accountability of health care teams by uniting the interests and activities of stakeholders around a common goal.[4]

This article highlights the dimensions and extent of health inequities and emphasizes the challenges facing physicians and others in addressing them

Key Areas of Concern:

1. Racial and Ethnic Disparities
   - Minority groups often experience higher rates of chronic diseases, such as diabetes and hypertension, and face barriers to receiving timely and appropriate care.
   - Systemic racism and implicit bias within healthcare systems contribute to unequal treatment and poorer health outcomes for these populations.
2. Socioeconomic Disparities
   - Low-income individuals are more likely to be uninsured or underinsured, limiting their access to necessary medical services.
   - Economic instability can lead to delayed care, medication non-adherence, and higher rates of preventable illnesses.
3. Geographic Disparities
   - Rural areas often lack sufficient healthcare facilities & providers,

forcing residents to travel long distances for care.
- Urban areas, while having more resources, can still exhibit disparities in certain neighborhoods due to socio-economic factors.

4. Gender and Disability Disparities
   - Women and people with disabilities may face unique challenges in accessing healthcare, including biases and inadequate provider training on specific health needs.
   - Sexual and reproductive health services are often less accessible to these groups.

Statistics:

1. Healthcare Access Disparities:
   Urban vs. Rural Access: The National Health Profile 2020 indicates that while nearly 70% of India's population lives in rural areas, only about 20% of healthcare facilities are located there. This uneven distribution highlights significant access issues.[5]
2. Public vs. Private Sector
   Healthcare Financing: According to the ICMR, about 75% of healthcare expenses are borne out-of-pocket by patients, with a predominant share of services being provided by the private sector.[6]
3. Socioeconomic Factors:
   Income Inequality: The National Family Health Survey (NFHS-5) 2019-21 reports that stunting affects 38.6% of children from the poorest quintile, while only 14.3% are affected in the richest quintile.[7]
   Education Level: NFHS-5 data shows that anemia prevalence among women with no schooling is 60.2%, compared to 49.2% among women with 12 or more years of schooling.[8]
4. Health Insurance Coverage:
   Insurance Penetration: As per NFHS-5, approximately 37% of households have health insurance, indicating significant coverage gaps across different states and demographic groups.[9]
5. Maternal and Child Health:
   Maternal Mortality Ratio (MMR): The Sample Registration System (SRS) 2018 reports an MMR of 113 per 100,000 live births. The MMR is notably higher in states like Uttar Pradesh and Bihar compared to states like Kerala and Tamil Nadu.[10]
6. Regional Disparities:
   State Variations: According to the National Health Profile 2020, life expectancy varies significantly across states, with Kerala having a life expectancy of around 77 years compared to Uttar Pradesh's 66 years.[11]

Potential solutions

Health care leaders and medical professionals can advance health equity by working to improve access to care and reduce uninsured rates. Additionally, care facilities can implement community outreach efforts and chronic disease management programs to advance health knowledge in affected populations. Below are other possible solutions.

Raising Awareness Among Health Care Providers

Raising awareness through education can help address health equity. Improving resource coordination can also help populations most harmed by health disparities. For example, health care organizations can help reduce ethnic health disparities by offering cultural competency training to health care providers.

Increasing Health Literacy in Affected Communities

Health care organizations can play a pivotal role in increasing the health literacy of affected groups by expanding educational programming. For optimal impact, health care organizations should identify the highest-risk groups and accordingly target educational and support programs.

Advancing Health Equity

Social, racial and economic inequities cause many examples of health disparities. Health care providers can engage with policymakers, urging action to help communities impacted by these factors. For example, they can use health disparity data and evidence-based clinical knowledge to recommend expanding health coverage to individuals with limited health care access.

Providing More Resources

Racial and ethnic groups are less likely to have proper access to health resources and are typically underrepresented in the health

care workforce. Similarly, rural and low-income communities typically have fewer health care professionals per capita than urban and high-income areas.[12]

Partnering with Organizations
Health care facilities can collaborate with agencies, organizations, coalitions, boards and councils working on initiatives to address the root causes of health disparities. For example, working with the Anganwadi workers, Asha workers, etc.

Tracking Results
Monitoring and documenting a program's effectiveness and health impact enables health care organizations to determine what's working and find improvement opportunities to improve health outcomes for all.

Innovative Programs already making a Difference

Community Health Workers (CHWs)
CHWs are trusted community members who connect individuals with healthcare services and provide education on managing chronic conditions. Their culturally sensitive approach has been shown to improve health outcomes in marginalized communities.

Telehealth Expansion
Telehealth services have grown significantly, especially during the COVID-19 pandemic, providing remote access to care for those in rural and underserved areas. Continuing to expand telehealth can help bridge the gap in healthcare access.

Policy Initiatives
Recent policies aimed at expanding Medicaid, funding for community health centres, and enforcing non-discrimination in healthcare have been steps toward greater health equity. Advocacy for these and similar policies is essential for continued progress.

Conclusion:
Overall, while India has made notable strides in improving healthcare access and equity, significant challenges persist. Addressing these issues requires a multifaceted approach, including targeted investments in rural healthcare infrastructure, policies aimed at reducing socioeconomic disparities, and efforts to improve health insurance coverage and financial protection. Ensuring equitable access to healthcare for all, regardless of geographic, economic, or social factors, is crucial for advancing public health and achieving sustainable development goals in India.

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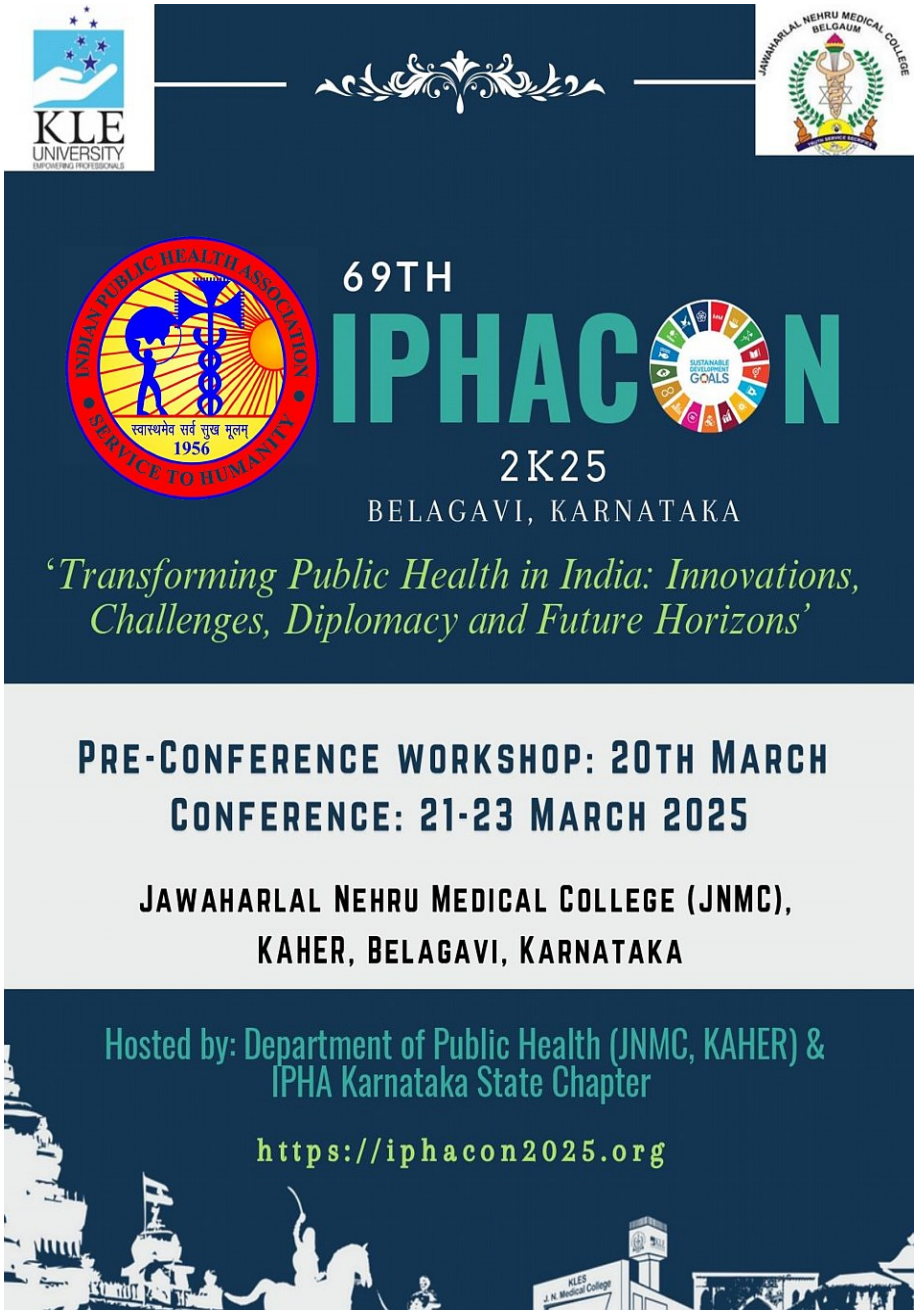

Registration Fee	Category	Early Bird:Upto 30 Oct 24	1 Nov 24 – 31 Dec 24	1 Jan 25 – 28 Feb 25	1 Mar 25 – 15 Mar 25	On spot registration
1	IPHA Member	₹6000	₹7000	₹9000	₹11000	₹12000
2	Non-Member	₹11000	₹12000	₹14000	₹18000	₹20000
3	Student (Member)	₹5000	₹6000	₹8000	₹10000	NO
4	Single day for UG (Except Banquet)	₹2000	₹2000	₹2000	₹4000	NO
5	Co Delegate (No Delegate Kits)	₹5000	₹6000	₹8000	₹9000	NO
6	Foreign Delegate	₹20000	₹22000	₹30000	₹35000	NO
7	Pre conference Workshops	₹1500	₹2000	₹2500	₹3000	NO
8	Pre conference CME	₹2000	₹2000	₹2500	₹3000	NO

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