

Report

Webinar on Finding the way forward in the COVID 19 pandemic:

Spotlight India

Organised by Indian Public Health Association

20th June

The COVID situation on the world has posed a huge challenge to the world order. It has caused immense disruption in economy, healthcare and the thinkers are yet to come up with a suitable solution of the problem. There is another epidemic of information, which is of such a huge magnitude that the scientific world is struggling to pick and choose pertinent from it. Indian Public Health Association, the largest and oldest umbrella for Public Health practitioners in India has stood up to the challenge and is closely working with the Central and State Government to devise suitable policies for the epidemic management. It has been vocal to raise various issues regarding this authored by several experts in the field and issued as advisory. IPHA organised a Webinar on 20th June, 2020 from 5:30 pm to review the situation as it stood and make a comprehensive discussion regarding the COVID pandemic. This was the first of its kind by IPHA, and CLIRNet was the web partner in the said event. This was attended by about 100 people and they had provisions of putting their questions in advance to the experts and also participate in live questions answer session.

The session was inaugurated by Prof Sanjay Ra, President, IPHA who reiterated the contributions of IPHA towards the epidemic and spelt out the objectives of the webinar. The session was moderated by Prof Rajib Dasgupta, Member of Editorial Board of IPHA. The first speech was by Dr Sanjeev Kumar, Chairman, Indian Academy of Public Health who talked on "COVID 19: Interventions to reduce transmission Including Lockdown".

He brought the pertinent question whether the lockdown needed. He mentioned that it curtailed super spreading events by not allowing people to come together and gave time to educate people. It was also a good measure to increase capacity for treatment facility, Intensive therapy, and testing. On the other hand the lockdown caused huge disruption in economy, created a massive migrant crisis, and the routine healthcare services suffered.

He mentioned a recent article by Kucharski which suggested that three basic steps can reduce transmission by 65%, ie Self isolation in home or outside, Quarantine, contact tracing. Evidence from National University of Singapore also suggests that Quarantine, School closure, and 50% working office staff reduced transmission by 50%. Thus instead of a drastic step like lockdown the steps like Isolation, testing and prompt reporting, quarantine may be better ways to curb the epidemic.

The next part of the deliberation was by Prof Forhad Akhtar Zaman, Member Editorial Board, IJPH. He mentioned about the results of the recent serosurveillance by ICMR and its fallacies. He said that the results of first round, tells us that community transmission has not occurred, with the seroprevalence stalled at 0.73%. There is a serious debate regarding this as the sampling frame was the whole of India, and they assumed 40% allowable error, taking 24000 samples only at a point one month before. So neither spatially nor temporally did the methodology suffice. Multiphasic strata wise sampling was done from whole of India, the population was definitely under represented. They selected cases from three zones, according to the case loads and testing done in those areas.

But forecasting for whole of India was probably not a prudent idea. As already mentioned different regions of India are having different stages of epidemic, so area wise demarcation of Community Transmission would have been a better idea.

The next part was deliberated by Dr Thomas Matthews, who shared the Kerala experience with the audience, which was a state that showed the world how to combat the epidemic. He suggested that three steps were followed diligently in Kerala. First was Quarantine of foreign persons who could have spread the disease, secondly was good contact tracing and early reporting, and third was early quarantine of contacts and isolation if required. Thus strict vigilance regarding this helped a long way in controlling the chain of transmission. They had stringent enforcement of law and order and tracking by GPS to trace proper isolation. Also they involved the local community in keeping the isolated person segregated. Thus by maintaining basic measures properly, they were able to achieve a miraculous result.

The next session was on the uses and misuses of models of this epidemic, presented by Dr Sitangshu Kar. The models are abstract mathematical interpretation of natural processes. Though the art of developing a model has improved especially after the power of computers, still limitations are there. Neither a forecasting model (trend based) nor a mechanistic model, where the process has got more importance than the outcome, will perform good with the data regarding the parameter lacking. The various compartmental model theoretically fits the epidemic like the SIR, SEIR models, as well as more complex models like the individual models. As a matter of fact most of the models have failed with respect to COVID pandemic. Not much is known about the transmission dynamics of the virus, its latent period, and other parameters, its novelty makes it difficult to model. Also there is a lot of parameter uncertainty like how many people have been infected, with the testing strategy determining the number of cases in different states. Thus the infected and reported are not the same number. Also the immunogenicity data is lacking, thus the compartment models are hard to find. Most of the models assume the law of mass action to occur that is the number in a particular compartment determines the transmission to the next compartment. But this assume random mixing, often in this pandemic it is more of selective mixing rather than random mixing i.e. the healthcare workers are mixing with some patients, among their family members selectively, again the migrant workers have their specific genre of mixing, Thus a random mixing would be a oversimplification. Also, the R_0 may not be equal in all strata of people, this heterogeneity makes the modelling even more complicated. There are reasons to believe that the epidemic is not a single source, but multiple source with different parts of India having the curves at different levels. Thus the spatial variation also exists with temporal variation. So, modelling becomes more difficult.

The discussion was wrapped up by Dr Punnet Misra, Professor, AIIMS, New Delhi. He mentioned a few steps as the way forward. He emphasised that, India has a rich cadre of trained epidemiologists and public health specialists, who are capable of handling this situation. There has been a large hue and cry of not involving the same at the state level in some states and the national level. Thus major policy decisions may have been jeopardised and there was a lack of proper advocacy at the initial stages. So epidemiologist and public health specialists can be installed at key positions to make contributions to the entire process. Medical Colleges should be involved as far as possible to work with the district in various aspects. Decisions should be taken on scientific evidences. Continued efforts should be given for upscaling of tertiary care of COVID in form of Intensive care and treatment of complicated cases. Proper training and infrastructure upscaling should be a priority of the government. Routine health services should be resumed as the breakdown of routine services will affect the health system even more. Last but not the least, proper steps should be taken to educate the community and answer their illogical stigma regarding the disease.

The session was then followed by question and answers by the audience. The moderator then concluded the session by saying that there was a “failure of imagination” from the part of the point of view of the scientific world that made the humankind not able to see a crisis of this magnitude and thus they messed up with so much volume of information, which they did not know how to use properly due to cognitive overloading.

Prof Sanjay Rai ended the session by saying that there are a few possible ways how this pandemic will end. One way is that the virus will suddenly disappear of its own which is quite unlikely. Next, there can be herd immunity or mass vaccination and the virus will stay with us as an endemic disease, occasionally causing epidemics. It even may have a seasonal character. All of this is speculation, but the herd immunity theory is now most commonly acclaimed by epidemiologists. Thus the discussion may have given some insights into the future course of the pandemic. IPHA will strive further to strengthen its position as a leader in this field.

The event was coordinated by Dr Anirban Dalui and Dr Rivu Basu.

Report compiled by Dr Rivu Basu, Assistant Professor, Community Medicine, R G Kar Medical College