Original Article

Covid action plan: Can we widen the debate?

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Abstract

The authors have gone through all the chapters published in the special issue on Covid 19 in Indian Journal of Community Health carefully to identify areas that need more clarity and offer some suggestions, which are the need of the hour at this time of the pandemic with high communicability, where majority remain asymptomatic. Authors feel that this pandemic invites a larger and inclusive debate to decide the activities to be undertaken in our country for the containment of this pandemic. As epidemiologists, our foremost interest is to understand the epidemiology and the disease spectrum in India. Investigators would also be interested to get preliminary information regarding case definitions like - probable, suspects, contacts, modes of transmission, risk factors, vulnerable population, role of social distancing, physical distancing, symptom surveillance etc. In addition to learning from recently published science and epidemiological characteristics, preventive measures and what needs to be done during and after pandemics could also be highlighted to understand what is best for India and the way forward. Therefore, the authors feel that a comprehensive action plan should be frequently updated and involve stalwarts of public health in India including implementers from the public health department.

Keywords: covid 19, social distancing, physical distancing, symptom surveillance

Introduction

At the outset, authors from our organization appreciate the efforts of Indian Public Health Association and Indian Association of Preventive and Social Medicine for the joint venture of publishing a special issue on Covid 19[1]. It is very pertinent and certainly needed at this time of uncertainty when the world is grappling with this pandemic with high communicability, varied clinical manifestations, no definitive treatment, high fatality compared to influenza. Therefore, this pandemic invites a larger and inclusive debate of what our country needs to address this pandemic. So, with great interest, authors strived to go through all the chapters carefully to identify areas that need more clarity and offer some suggestions.

As public health specialists, our foremost interest would be to understand how the illness is developing and evolving epidemiologically in India. This knowledge would greatly inform in sculpting a plan that is highly relevant to India. When this article was written, 24,04,267 suspects had been tested, of which 1,00,658 were confirmed cases and out of those who tested positive, the fatality was 3171 (3.15% of those tested positive or 0.13% of those tested)[2]. Many public health journals are predominantly publishing manuscripts and updates on this pandemic. There is a large body of literature that has provided valuable preliminary information regarding case definitions, probable cases, suspects, contacts, modes of transmission, risk factors for contacting the illness, risk factors for serious illness and mortality, vulnerable population etc[3,4,5]. Based on that, mathematical projections would have been made and the decisions of nationwide lock down taken. In addition to learning from recently published science and epidemiological characteristics, preventive measures and what needs to be done during and after pandemics can be learnt from historical pandemics in India. In the current pandemic,

epidemiologists have a lot to learn from Vietnam that has battled many deadly epidemics and the state of Kerala in India that has curbed Covid 19 and continues to do better than any state in India[6]. Therefore, the authors feel that a comprehensive action plan should be frequently updated and involve Indian stalwarts of public health including implementers from the health department.

Following are our humble suggestions:

- Sentinel and active symptom surveillance should be targeted to known areas of high density population, areas of high levels of air pollution, areas closer to those in red and orange zones. Targeted surveillance will help to rationalize the available testing resources. One time house to house survey is unlikely to be a fruitful use of resources. Active symptom surveillance without swabbing capabilities is unlikely to be helpful.
- To understand the prevalence in the community following strategies may be used - random samples (not universal) of asymptomatic persons admitted in hospitals with multi-organ failure; persons with influenza like symptoms attending hospitals, TB and NCD clinics and in pregnant women. All deaths need to be audited to understand susceptibility, clinical spectrum of the disease. Water analysis has been found to be a useful and economical method of early warning sign of return of virus[7]. More than a dozen research groups worldwide have started analysing waste-water for the new coronavirus as a way to estimate the total number of infections in a community. So far, researchers have found traces of the virus in the Netherlands, the United States and Sweden. Studies have also shown that SARS-CoV-2 can appear in faeces within three days of infection, which is much sooner than the time taken for people to develop symptoms severe enough for them to seek hospital care (up to two weeks) and get an official diagnosis.
- It is the authors' experience[8] that collecting nasopharyngeal specimens requires even training of the health care professional otherwise the probability of false negatives by RT-PCR for SARS-CoV-2 is high and results in a waste of resources. There are practical difficulties in self swabbing like training of the symptomatic or suspected Covid 19 cases, collection and transportation of the sample by maintaining the reverse cold chain in addition to yield of the samples. Therefore, we do not recommend self-swabbing in India.
- Aggressive testing, technology-enabled contact tracing (Arogya Setu App) and requirements for isolation and quarantine are likely to raise concerns about confidentiality and liberty, that young people value a lot. Administrators will have to grapple with whether the benefits of a heavy-handed approach to public health are worth it.
- Authors feel that the action plan should clearly define the term 'social distancing' and 'physical distancing'. It has been defined as keeping space between two individuals outside of one's home of about two arms (six ft), avoidance of group gatherings, and staying out of crowded places. The community field workers can help in this implementation instead of active surveillance in all areas that do not require it[9]. The term 'social bonding' is likely to conflict with the 'social distancing'.
- Awareness regarding the need for quarantine, information regarding the care, attention and facilities available will help to address the concerns of people who need to be quarantined but conceal their symptoms or history of contact. Asymptomatic or mildly symptomatic persons should be allowed home quarantine with daily monitoring if their home environment is considered suitable, otherwise they may get exposed to higher viral loads at community quarantine facilities. This is a real threat that has been inappropriately addressed.
- The action plan states that there should be mobile Rapid Response Teams (RRT) with district surveillance officers, epidemiologists supported by public health laboratory. However, the reality is that most of the surveillance officers' posts are vacant, there are no district epidemiologists as published in one of the leading news papers and based on the data

available from the Public Health Department, Government of Maharashtra. Similarly, the public health laboratory is mostly equipped to analyze water sample quality. Therefore the RRT should comprise of public health officers currently working and can be assisted by expert help from IPHA/IAPSM members.

- While going through the published literature from different part of the world, it is evident that there are large variations in the case load, disease spectrum, severity, case fatality and association of other co-morbid conditions etc. in different parts of the world, as well as, within the country. Intensive care preparedness needs to be based on available evidence in India regarding case severity and current rate of increase in occupancy of the available intensive care units as the clinical course in India could be different from other countries. Death rates in red districts need to be compared with death rates in that month in the previous year to track increase in mortality as a result of the pandemic. This will help to optimize resource utilization for intensive care.
- The action plan should include statements regarding other public health programs. Their activities should not be disrupted.
- Authors believe that it is practical to mandate the universal covering of the nose and mouth for any person moving in any public area. This may be achieved by mask or cloth cover as studies have shown that on coughing the droplet distribution is restricted if the face is covered thereby reducing the disease transmission. Masks may not be mandatory except for health care personnel in contact with potential cases who should use N95 and in accordance with MOHFW guidelines. This will prevent the shortage of N95 masks where it is most needed.
- The use of full, complement or partial Personal Protective Equipment (PPE) used by health personnel in different risk categories should be in accordance of Ministry of Health and Family Welfare guidelines.
- The private practitioners should follow all the guidelines provided by the Ministry of Health and Family Welfare available in public domain[10].
- It is unclear from this Joint Statement supplement regarding when international travel be allowed to resume. The Action Plan mentions 30 days and the 'way forward paper' mentions till end of the pandemic. These are parliamentary decisions based on International health regulations out of the domain of IPHA/IAPSM.
- The local administration heralding the activities of the pandemic should decide on the extent of assistance they need from district executives, public health personnel and the police force for containment.
- The state and local government directives based on three colour coded categorisation of regions should be followed during or after relaxation from lockdown for all purposes including travel. These are decisions out of the purview of IAPH/IAPSM.
- Vulnerable population needs to be defined for India uniformly and should be provided telecommunication assistance as needed by the district administration responsible for Covid 19 control.
- Public awareness creation with help of social media, press, NGOs and prominent personalities should be done by the district public team to eliminate stigma and promote health care seeking as all general and speciality clinic visits have dropped to less than 30%[11] which may increase morbidity and mortality in following months.
- The MOHFW recommends that the 'Arogya Setu' application be downloaded to inform citizens regarding their risk and their proximity to a known contact. IAPH/IAPSM should promote all efforts of the government.
- It is also recommended that the way forward section of the Joint Statement should also incorporate the guidelines provided by the AYUSH department under the Ministry of Health and Family Welfare, Government of India.

- Authors compliment the MOHFW who have taken cognizance of mental health in this pandemic and provided resources on their website. The rates of domestic violence during lockdown are on the rise, so counselling services and socio-legal assistance for victims need to be augmented[12].
- Some states have withheld resource allocation for developmental activities of many departments and diverted it to public health. This needs to be commended and supported by resources from CSR and other donors.
- Authors also feel that discussions with the government to suggest strategies on how educational and other public places should plan for reopening and what practices they may need to follow.

Finally, authors have lessons to learn from the major pandemics that have raged the world in every century namely the plague pandemic of 1720-22, cholera pandemic of 1817-1824, influenza pandemic (H1N1) of 1918-19 and now Covid 19 during 2019-20. The cornerstones of preventive public health measures remain the same. Meticulous personal hygiene, good sanitation, healthy lifestyle, good nutrition, clean air and traditional remedies that have stood the test of time to combat the assault of any microbes. These basic foundations of public health need to be strengthened with the evolving science and technology.

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