India’s need for long-term solutions to COVID-19-like pandemics: A policy paper by Organized Medicine Academic Guild

Sunil K. Raina¹, Raman Kumar², S. Natrajan³, Ishwar Gilada⁴, Suneeela Garg⁵, AC Dhariwal⁶, Sagar Galvankar⁷, Sunil D. Khaparde⁸, Ramesh Bhatt⁹, Uday Bodhankar¹⁰, Praveen Agarwal¹¹

¹Department of Community Medicine, Dr. R.P. Government Medical College, Tanda, Himachal Pradesh, ²Academy of Family Physicians of India, New Delhi, ³Aditya Jyot Eye Hospital, Wadala, Mumbai, ⁴India Unison Medicare and Research Centre, Aliibhai Premji Marg, Grant Road-E, Mumbai, Maharashtra, ⁵Department of Community Medicine, Maulana Azad Medical College, New Delhi, ⁶National Vector Borne Disease Control Programme (NVBDCP), Directorate General of Health Services, Ministry of Health and Family Welfare, ⁷Department of Emergency Medicine, Sarasota Memorial Hospital Florida State University, Florida, USA, ⁸Former Deputy Director General TB Control, ⁹Department of Dermatology, Father Muller Medical College, Manglore, Karnataka, ¹⁰Department of Emergency Medicine, AIIMS, New Delhi, ¹¹Bodhankar Childrens Hospital, Sharhari, Central Bazaar Road, Nagpur, Maharashtra, India

ABSTRACT

The entire world seems to have responded to COVID-19 pandemic in a knee-jerk manner with a short mindset without building on the existing strengths of public health infrastructure. National governments cannot be blamed for this as we are dealing with a crisis that comes once in a lifetime. Realising this, the Organized Medicine Academic Guild (OMAG) an association of major health associations in this country has suggested measures for long-term solutions to COVID-19-like pandemics in the form of a policy paper by OMAG.

Keywords: COVID-19-like pandemics, long-term solutions, Organized Medicine Academic Guild, paper, policy

Background

From lockdowns to zoning and containment, the entire world has responded to COVID-19 pandemic in a knee-jerk manner with a short mindset without building on the existing strengths of public health infrastructure. National governments cannot be blamed for this as we are dealing with a crisis which comes once in a lifetime. India’s initial response has been measured and builds on the knowledge obtained from responses mounted by some other countries fighting COVID-19. As the pandemic is getting protracted, the nations are beginning to realize the seriousness of the pandemic as well its long-term impact on social life, economy and philosophy of living. Therefore, long-term solutions are being sought. Organized Medicine Academic Guild (OMAG), an association of major health associations in this country, has been involved in responding to the pandemic from the very beginning. Epidemic preparedness has been a core objective...
of the OMAG, since its foundation in 2018. The organization gathered its key stakeholders in epidemic preparedness to develop policy and strategy and have been mobilizing technical assistance to the local self-government agencies, the states and the central government agencies to help build capacity for the Ministry of Health and Family Welfare, Government of India.[3]

Purpose of the Document

Since the World Health Organization (WHO) declared COVID-19 outbreak, a Public Health Emergency of International Concern, cases of COVID-19 have been reported across all parts of the world.[3] From the earliest reports of the epidemic being restricted to China or among individuals with travel history to China, the pandemic has now been reporting larger number of cases from Europe, the USA, Brazil and India. Currently, India is a part of the top three nations contributing to the maximum number of COVID-19 cases across the world. National authorities across the globe have demonstrated that epidemics like COVID-19 can be slowed or stopped. Despite a few successes, COVID-19, if anything has glaringly exposed a lack of a firm policy on epidemics. The reasons variable although is mainly economic. India despite having mounted a strong response and demonstrating a firm national commitment has also shown this lack of a firm policy.

The impact (of COVID-19), however, is going to be long term. Therefore, sustainable solutions are needed. OMAG has realized this lack of an ecosystem for policies on pandemics and gathered experts from academic disciplines to identify strategic components of a sustainable policy on epidemic preparedness.

The committee opines that the policy document will help national authorities (i) in identifying gaps in pandemic preparedness, (ii) in performing pandemic risk assessments, (iii) prepare and execute plans for additional investigations, response and control, (iv) build and strengthen institutional capacities and (v) develop and strengthen health infrastructure to meet new challenges. Available evidence points to three important priorities in near future: (i) Test, (ii) protect healthcare workers, and (iii) produce better and open scientific data. But this policy document intends to go beyond immediate priorities and is aimed to identify areas crucial to preventing epidemics, protecting against environmental hazards, responding to epidemics and ensuring the quality and accessibility of health services that are given below:

1. National Epidemic Intelligence Services (NEIS): The COVID-19 outbreak has revealed how the State and the centre Government have to use their constitutional responsibility of public health management despite budgetary, institutional and capacity constraints to evolve strategies for reducing impact of the pandemic. It has also revealed how dependent states are on the central government for technical expertise, laboratory and financial support. In the past, outbreaks, such as NIPAH in Kerala, ZIKA in Gujarat, Rajasthan, Madhya Pradesh, Crimean Congo Hemorrhagic Fever (CCHF) in Gujarat Rajasthan, H1N1 and avian flu, Kyasanur Forest Disease (KFD) in Karnataka, Kerala, Goa or Japanese Encephalitis and Acute encephalopathy in Uttar Pradesh and Bihar, not only exposed the shortcomings in the institutional framework for public health management at the state level, but also the lack of technical strength available with state governments to respond to such outbreaks. Despite public health being a state subject, the central government is the key actor in designing health policies and programmes. This has largely been due to greater spending ability and availability of better technical resources. For instance, to advise the Ministry of Health and Family Welfare, the government is assisted by the National Centre for Disease Control, National Health System Resources Centre and the Indian Council for Medical Research (ICMR).[4‑6] Unfortunately, the state governments have been unable to invest in such agencies and benefit from their advice, leaving them to rely on the Centre's aid and advice not only for nationwide pandemics, but local public health matters as well. Another important aspect; medical or nursing education is regulated by a central body (MCI); however, the implementations of such regulations are largely within the domain of state governments. The committee, therefore, recommended ending such dichotomy and creation of a National Epidemic Intelligence Services, more or less on lines similar to central security forces or civil services.

2. Institutionalized public health surveillance: All public health emergencies are not apparent always. To make preparedness and response effective, monitoring disease patterns, investigating individual case reports, eco-epidemiologic, laboratory, entomological and veterinary surveillance to target public health interventions are mandated. Such activities would
provide input to NEIS for urgent response. Newer approaches to public health surveillance include syndromic surveillance, biosurveillance, remote sensing, AI etc. Analyses of large data sets for nontraditional markers of the disease can be used for rapid detection and response. The committee recommended an institutional setup with a capability of demonstrating itself in many ways and at multiple levels. This institutional setup could be centered on the elements of implementing policy guidelines like a National Health Advisor (NHA) and something similar to a National Security Advisor (NSA). One Health Approach should be the guiding principle for such activities.\(^7\)

3. **Transparent epidemiological investigations and analysis:** All major surveillance activities are expected to lead to extensive and focussed epidemiologic investigations to determine the identity, source and modes of transmission of disease. Epidemiologic investigations require trained manpower. The committee recommended that a committee comprising leading public health experts, lab scientists, entomologists, veterinarians and infection control specialists needs to be constituted with a fixed tenure. The commission will act as a National Rapid Response Team (NRRT) and reports to NHA on a routine basis. NRRT will be useful in a crisis like COVID-19 and will also help keep officials and common citizenry well informed and allay fear and panic. The NRRT functions more or less like the National Disaster Relief Force (NDRF).\(^9\) The committee also recommended a strengthening of existing programs of IDSP and EIS, however, with an inbuilt mechanism of fixing their accountability.

4. **Strengthening of Laboratory investigations and analysis.** Laboratory capacity is critical. The committee recommended the creation of multidisciplinary units in medical colleges with the capacity to investigate and plan control of outbreaks and epidemics. In addition, the committee recommended strengthening of public health laboratory facilities with strong microbiological component inbuilt to make these capable of investigating pandemics like COVID-19 at all district health facility. A further upgradation of medical college labs into reference labs for these district labs is recommended. The Medical Council of India/Board of governors direction to host BSL-2 level laboratories in all medical colleges is considered a welcome step.\(^9\)

5. **Development of Intervention Packages.** Pandemics like COVID-19 leave examples of what works best in a particular public health emergency. The committee recommends a strong focus on community engagement while planning interventions. From relief, rehabilitation to economic revival; measures involving community participation need to be undertaken to help better tackle the health crisis.

6. **Risk Communication:** The exchange of real-time information, advice and opinions between experts and people facing threats to their health, economic or social well-being is risk communication. Risk communication works like Counselling by enabling people at risk to take informed decisions to protect themselves and their loved ones. Risk communication is carried through various communications techniques: print, electronic including social media communications, mass communications and community engagement. The committee recommended the creation of sub-committee for responsible communication under the NRRT to develop Risk Communications Tools (RCT) and identify channels to execute these.

7. **Community-wide response:** A pandemic raises a shortage of manpower and resources in most communities and throughout the nations. The role of local community in overcoming this shortage cannot be overlooked. Training is the key in this.

The committee recommended capacity building of Panchayati Raj Institutions (PRIs) and the Urban Local Bodies members to improve their coordination with local health departments. This would prove useful in functions like the contact tracing and mask distribution during the COVID-19-like pandemic. There is a shortage in most communities throughout the nation: a shortage that can be alleviated by enlisting community representatives. Establishment of Corona committees at Panchayat level on behest of IAPSM and endorsed by Niti Aayog is a welcome step in this direction.\(^7\)

8. **Private healthcare providers and other partners:** In developing countries including India, people visit a Private healthcare Provider (PHP) first to seek treatment for most diseases. Private healthcare facilities (e.g., standalone practitioners) run successful healthcare markets. At some place, these PHP tend to be more popular than public sector services. The reason for their popularity could be greater responsiveness to service user preferences as also ease of geographic access, shorter waiting periods, longer or more flexible opening hours, etc., The committee recommended the involvement of PHPs through capacity building into delivering healthcare during pandemics from the beginning itself to ensure a continuity of care. Accordingly, appropriate changes in the Ayushman Bharat are to be suggested by the National Health Authority. This should also be complemented by a regular updating mechanism where organizations like OMAG can play a critical role.

9. **Primary healthcare practitioners:** India’s extensive network of Health and Wellness Centres, about 25,308 primary health centres and 5396 community health centers spread across all regions and States seems underutilized at this moment.\(^7\) Empowering primary care will help them play a critical role in managing the epidemic and providing the required support in delivering key messages on pandemic to general population. Pandemic COVID-19 should serve as a learning experience for a country like our India. The lockdown (a lesson we learnt from others) should give way to increasing access based on the fundamental principles of public health and epidemiology or otherwise we will keep missing the bus. The committee recommended that strengthening primary health care and making primary healthcare practitioners responsive and responsible to pandemic management is needed. This will start instilling
trust among the common masses in our healthcare system and improves compliance to guidelines.

10. Global Preparedness plan: Pandemics pose Public Health threats of International Health Concern and challenge global health security. It calls for strengthening of Epidemiology Intelligence Services. There is an urgent need for augmenting human resources in this direction through already established mechanisms which need to be revived by providing technical expertise to public health experts.

11. Workplace preparedness. Businesses are the key to run economies and economies drive nations. Businesses working in the domain of healthcare are needed to rapidly respond to the requirements of epidemics by being Epidemic Ready (ER). Epidemics raise shortages. The current epidemic saw a shortage of masks, sanitizers, etc., Mission-critical enterprises need to be prepared. Practical plans need to be in place to continue to operate and respond to the needs of the public during epidemics. Continuing to plan, teach, learn, research and work will reduce disruption. The committee recommended that businesses should be encouraged to develop an Infectious Disease Preparedness and Response Plan (IDPRP).

12. National public health preparedness and response coordination: The committee recommended establishing mechanisms for public health preparedness and response coordination during emergencies. It was felt that a coordinated effort builds around emergency management protocols will support public health initiatives and help standardize these and make them scalable and consistent with jurisdictional standards and practices of the National Incident Management System (NIMS).

13. National incident management system and national response plan: The committee recommended the creation of NIMS under the commission. The system (NIMS) has been conceived to conduct initial assessments and provide inputs regarding activation of public health emergency operations. Concurrently, NIMS will build and implement an incident response strategy.

14. State and local preparedness and response coordination: At the state level, the health department needs to constitute a state health authority capable of rapidly responding to pandemics and epidemics. The committee recommended constitution of a State Rapid Response Team (SRRT) headed by the State Health Advisor (SHA). The SHA will be the nodal agency to develop policies and implement plans for epidemic management in the state and as part of the National Rapid Response Team (NRRT), the SHA will approve the pandemic management Plan for the state. The committee also recommended a similar creation of District Level Committees with a provision to report to SHA on routine basis. The district level committee will act as the planning, coordinating and implementing body for epidemic/pandemic management at the District level and take all necessary measures for epidemic management in accordance with the guidelines laid down by the NRRT and SRRT.

15. National COVID-19 Research Consortium: In order to ramp up India’s response to COVID-19 prevention and control, the committee recommends constitution of National COVID-19 Research Consortium with the aim to align all efforts in COVID-19 treatment, control and mitigation. OMAG volunteers to build and steer this consortium. The National COVID-19 Research Consortium will bring together diverse stakeholders to develop new tools – diagnostics, vaccines and drugs. This will help India take a leadership role in fast-tracking translational COVID-19 research and, simultaneously, offer newer solutions to mitigate the impact of COVID-19 across the world.

16. Vaccine policy in Pandemics: India is at the top of the ladder in vaccine manufacturing. India can lay claim to top vaccine giants supplying basic and advanced vaccines to nearly 150 countries. As per reports, Indian vaccine market reached a value of around INR 59 Billion in 2016, growing at a CAGR of nearly 18% during 2009–2016.18 The committee deliberated on the development, delivery, availability and accessibility of vaccines in wake of COVID-19 pandemic and suggested need for a long-term “Vaccine policy” in wake of pandemics.

Financial support and sponsorship
Nil.

Conflicts of interest
There are no conflicts of interest.

References
1. Raina SK, Galwankar SC, Bhat R, Bodhankar U, Prabhoo R, Mishra SK. Organized medicine: Need for a guild of associations. J Glob Infect Dis 2018;10:35-6.
2. Available from: https://www.ncdc.gov. [Last accessed on 2020 Jul 13].
3. COVID-19-World Health Organization. Available from: www.who.int 'Emergencies' Diseases' Coronavirus disease 2019. [Last accessed on 2020 Jul 13].
4. National Centre for Disease Control. Available from: https://www.ncdc.gov. [Last accessed on 2020 Jul 13].
5. Indian Council of Medical Research. Available from: https://www.icmr.nic.in/. [Last accessed on 2020 Jul 13].
6. National Health Systems Resource Centre. Available from: http://www.nhsrcindia.org. [Last accessed on 2020 Jul 13].
7. Raina SK, Kumar R, Galwankar S, Garg S, Bhatt R, Dhariwal AC, et al. Are we prepared? Lessons from Covid-19 and OMAG position paper on epidemic preparedness. J Family Med Prim Care 2020;9:2161-6.
8. Home | NDRF-National Disaster Response Force. Available from: www.ndrf.gov.in. [Last accessed on 2020 Jul 13].
9. MCI India. Available from: www.mciindia.org. [Last accessed on 2020 Jul 13].
10. Indian manufacturers account for 60% of vaccine supplies made to UNICEF. Available from: https://www.biospectrumasia.com › opinion › indian-manufacturers-accou. [Last accessed on 2020 Jul 13].