EDITORIAL

Need for Pandemic Preparedness Teaching during the Medical Curriculum

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When we talk about 20-20 it goes without saying that we are talking about Indian Premier League matches. But when we talk about 2020, we get goosebumps even remembering the memories of the coronavirus disease 2019 (COVID-19) pandemic! It was just about that time when the National Medical Commission (NMC) rolled out the Competency-based Medical Education (CBME) curriculum for the first Bachelor of Medicine, Bachelor of Surgery (MBBS) batch admitted in the 2019–2020 academic year. Who knew that the timetable so well planned would go for a toss due to the global pandemic? It was indeed a learning lesson for all. The word pandemic is derived from the Greek words pan = all and demos = people. An epidemic that affects large geographic areas across the entire world at the same time is called a pandemic. Most of the pandemics are caused by viruses, for example, influenza, acquired immune deficiency syndrome, and now COVID-19. Susceptible individuals get affected, they transmit the organism to many individuals in a short time. International travel spreads the disease globally in a short time and a pandemic is declared. Hence, it is the need of the hour to sensitize the medical students by incorporating the pandemic preparedness module in the medical curriculum.

The definition of the Indian Medical Graduate (IMG) described in the CBME curriculum mentions lifelong learner as one of the roles of IMG; which turned out to be true for the entire medical fraternity and more so for the medical teachers in clinical branches who had to fight on different fronts managing patients with the new attire of PPE kits, training residents and students, answering to phone calls (24 × 7), attending online meetings and webinars for updating the knowledge, and keeping oneself fit. It was no less than walking on a thin-edged rope balancing the body without falling. One of the desirable outcomes of the CBME is to enable the IMG to be prepared for the unknown and to be able to understand, investigate, treat and prevent new, and emerging diseases as a clinician and a community leader. The emergence of COVID-19 and its rapid spread across the globe has further underlined the need to develop the skills of undergraduate students who form the young working force when they become interns and residents.

Knowledge of the history of pandemics can help the students to learn about the causative agents, their route of transmission, incubation period, protective measures to be taken to prevent the transmission, understanding what are the precipitating factors, successful strategies and steps, and time taken to control it in future. What are the various trends in pandemics from the past; lessons learnt? What are the existing infection control practices? What is the role of the Hospital Infection Control Committee? What are the theories of emerging and reemerging infectious diseases? What are the diagnostic tools available to make the diagnosis? Is there a vaccine already available for the disease or it needs to be developed? The next step is to find out what treatment options are available for treating the disease. What are the signs and symptoms to identify the disease severity and how it is classified? The students should be made aware of the role of national and international bodies like Indian Council of Medical Research and the World Health Organization (WHO), respectively in handling the pandemics and the opportunities that can be available in these sectors in future for their career. The guidelines are prepared by the State and the Central government while handling such pandemics. Outbreak management which includes managing quarantine, isolation, contact tracing and reporting, and active surveillance so that measures to curtail the outbreak can be planned. The signs of an unusual increase in the number of cases during a given time at a particular place or clustering of deaths of individuals with similar signs and symptoms are a warning of a likely outbreak of an epidemic. In the era of social media, there are rumors and fake news which cause scare and havoc in the minds of the common man about any disease outbreak. Any loose talks or general comments in an open public forum should be avoided which can cause panic. Hence, confirmation of the outbreak by public health authorities is necessary to verify the diagnosis and confirm a pandemic. Dissemination of this new knowledge by appropriate and rational use of mass media without producing any scare among the people is essential. The news can be authentic when released by the official spokesperson of the Public Health Department.

The Public Health Administrative authorities take interdisciplinary measures by establishing rapid response teams. The Epidemic Act of 1897 has been referred to for formulating guidelines during the COVID-19 pandemic. Any pandemic is likely to cause the death of individuals on a large scale. The disposal of dead bodies with dignity is another issue in the health sector which has to be handled in a sensitive way and has to be told to the medical trainees. Data management and statistics are another important aspect of the pandemic and reporting of new cases, as well as how many have recovered from the disease and how many deaths have occurred needs to be maintained meticulously. This data is useful in finding out the incidence, prevalence, case fatality rate, and comorbidities in affected individuals. Settlement of the life insurance of the deceased is one more aspect in which a medical graduate should be sensitized and educated, which is not routinely taught in the curriculum.

The pandemic has other facets to be addressed like the restriction of global travel to curb the transmission of the disease and the impact on production in industries that can affect the health sector, for example, the import or export of raw materials in drug production and medical machinery production. What is the impact on health, economics and society as a whole due to the pandemic? This holistic approach is necessary without which the pandemic module will seem to be incomplete. Preparedness for a pandemic is a necessary step to successfully handle minimal loss of life, economic, and social disruption. This needs...
proper planning and coordination between the government and private health sector with the involvement of individuals, families, and the community. Activities that lead to capacity building; like training of trainers at the International, National, and local levels are essential to disseminating this knowledge about the pandemic module. Collaboration with WHO, the World Bank, the United Nations International Children’s Emergency Fund, and the World Food Program is necessary to deliver universal health coverage and basic health services. Teams have to be set up to look after essential supplies of life-saving medicines, personal protection equipment and mass vaccination programs once vaccine is available.

Considering the above facts, the pandemic module has been designed by NMC to ensure that the MBBS student acquires competencies in handling not only the illness; but also the social, legal, and other issues arising from such disease outbreaks. Roles of the IMG viz clinician, communicator, leader, member of the healthcare team, professional, lifelong learner, committed to excellence is ethical, responsive, and accountable to patients as described by NMC are very aptly needed during the pandemic. The pandemic module will also help the IMG in serving the people as a doctor, leader, and healer during the times of pandemic. The module has been very well prepared by the Academic Cell and Expert Group in a very short duration and will serve as a ready reference for the medical colleges and educational institutes that are actively involved in medical education and patient care. The skills needed to be acquired by the IMG in a phased-out manner include the history of the pandemic, infection control, diagnosis, disease management, epidemic management and research, communication skills, various stakeholders involved, how to access and utilize the resources available, coordination between government agencies, Nongovernmental Organizations, and community leaders.

Any module once prepared and released has to be evaluated as regards who are its stakeholders, what’s are its implications to the various stakeholders and the impact it has created on a short as well as long-term basis. Thus there is certainly a need for teaching pandemic preparedness in the current medical curriculum and a positive step has been taken in this direction by NMC. However, wishful thinking would always say “Yeh, Wakt (pandemic) Fir Na Aye Dobara!”

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