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EDITORIAL

SWINE FLU

"The world is now at the start of the 2009 influenza pandemic"— these were the words of Dr Margaret Chan, Director-General of the World Health Organization (WHO) when she announced pandemic alert level 6 on 11th June, 2009.[1] In less than 20 days this alert level was raised from 5 to 6 and now the infection has spread to 94 countries all over the world with 55,867 confirmed cases and 238 deaths.[2] Level 6 indicates widespread human infection where a global pandemic is ensuing.[3]

This is the first influenza pandemic since 1968 when the influenza A (H3N2) swept across the world.[4] In late April, 2009 it was confirmed in Mexico and the United states that a novel influenza virus with unique genetic and antigenic characteristics has emerged.[5] Now the virus is spreading from person-to-person in multiple countries in Europe, the Americas and the Far East. For the first time in history, health authorities around the world are watching the situation very closely with "real-time" data on outbreak emanating from every corner of the world. This can be attributed to the synchronous and prompt sharing of information unlike the early days of SARS outbreak in China in 2003.[6]

This latest pandemic has its unique characteristics. Unlike seasonal influenza, it has a preference to infect young people— particularly under 25 years. Nearly 2% of all infections progress to severe illness resulting in life-threatening pneumonia. Most cases of fatalities are seen between 30 to 50 years of age while seasonal influenza kills older people. Different underlying chronic illness contributes to this mortality.[7] Respiratory diseases, asthma in particular, cardiovascular disease, diabetes, autoimmune disorders, and obesity are the most prevalent conditions in the fatal cases. The clinical features vary from a mild, self-limiting, non-febrile upper respiratory tract illness to severe or fatal pneumonia. Most common presentations include cough, fever, sore throat, malaise and headache. Some patients may experience vomiting or diarrhea, which are atypical of seasonal influenza. Hospitalization may be required in patients who develop weakness, lethargy, unconsciousness, convulsions, obstructed breathing or shortness of breath, inability to drink fluids and dehydration, high fever.[8]

Signature features have been proposed for an influenza pandemic like the current one. These are —shift in the virus subtype, shifts of the highest death rates to younger populations, successive pandemic waves, higher transmissibility than that of seasonal influenza, and differences in impact in different geographic regions.[5] These were formulated with the hope that it will strengthen global surveillance and international co-operation, expedite development of vaccine, emphasize on non-medical protective measures.

Travel, particularly air-transport, around the world has hastened the spread of the epidemic. In contrast to the previous epidemic that took around 6 to 9 month to spread to different parts of the world, the current pandemic is fast-paced. WHO in collaboration with The International Civil Aviation Organization and The International Air Transport Association has developed comprehensive guidelines for its member countries to follow in dealing with possible cases of swine flu among air travelers.[9]

The first case of swine flu in Bangladesh was detected on 18th June, 2009. A total of 9 cases have been confirmed as of writing this article. The National Rapid Response Team (NRRT) is investigating all reported cases. The Institute of Epidemiology, Disease Control and Research (IEDCR) & National Influenza Centre (NIC) has taken the lead role in conducting preliminary laboratory investigation with Real Time-PCR (RT-PCR) and confirming the diagnosis with the help of Center for Disease Control (CDC), Atlanta, USA and WHO. The IEDCR is currently taking steps to procure confirmatory test equipments.[10]

Dealing of such a pandemic in a low-resource setting like Bangladesh it would be very difficult task for us. Most cases can be dealt at home by following measures like social distancing, respiratory "etiquette", hand

hygiene and household ventilation. In health-care settings, a system of triage, patient separation, prioritization of use of antiviral medicines and personal protective equipment (PPE) according to risk of exposure, and patient management should be in place.[10] A particular vulnerable group is the pregnant women who have an increased probability of developing complications compounded by the fact that maternal health care is often neglected in these low-income countries.[1]

The Government of Bangladesh (GOB) has taken appropriate measures in combating this pandemic. Screening of passengers at airport, seaport and land ports has begun. Antiviral drugs and PPE have been stockpiled upto the district levels. Isolation units at 29 district hospital have been setup and by the end of the year all district hospitals will have this facility ready. At the national level, National Institute of Chest Disease Hospital (NIDCH) and Infectious Disease Hospital is prepared to manage emergency. Adequate numbers of health professionals have been trained on influenza epidemic.[10]

Influenza pandemic is not a new phenomenon to the world. Proactive measures rather than panic are warranted in dealing with this problem of global scale. Concerted efforts will help mitigate the damage it will leave on its trail. Perhaps, Dr Chan has summed it up nicely— "We are all in this together, and we will all get through this, together."[1]

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