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Guest Editorial

Human Monkeypox: Global Health Emergency Warranting Aggressive Onslaught

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Way back in 1980, the World Health Organisation (WHO) took pride in declaring the smallpox, a cause of considerable morbidity and mortality over centuries across the world, as "wiped out" and the world free of it [1-3]. Nevertheless, the apprehension continued to loom large that a similar disease, though relatively less morbid, monkeypox (MPX), may someday cause epidemics and even pandemic. Today, with a lull in the ongoing COVID-19 pandemic [4], we are very much in the midst of that sordid situation.

During the 2022 outbreak, MPX, until recently restricted to Western and Central Africa, has spread its tentacles in at least 100 countries, including India and Singapore where this zoonotic viral disease was not typically seen [5]. Over 55 thousand cases, including children, are on record. These cases are mostly from Western countries, especially United States and Europe. Considering it a major public health threat, the WHO rightly declared MPX as a "global health emergency" of considerable concern [1,6,7]. There is indirect evidence that the current outbreak may well be human-to-human rather than animal-to-human. However, the infection requires a close contact for spread. By no means, it is airborne. The philosophy behind the WHO declaration is that MPX outbreak should be considered a wake-up call - a sort of forerunner to the apprehension of its growing into yet another public health pandemic. Retrospectively, it is felt that this declaration was quite timely in the wake of further escalation in the spread of the MPX to additional countries and a significant further hike in the number of cases. Children too are vulnerable to suffer from it. In fact, there is evidence that a proportion of children with MPX have a relatively more severe illness than the grownups, including adolescents.

The 2022 MPX outbreak has of late demonstrated a silver lining. Thanks to the concerted efforts of the WHO and allied agencies There is a kind of halt in the further spread of the cases. The so-called "containment" may, however be just a "lull" that must not be taken as a signal that the DNA virus shall die out on its own. On the contrary, very energetic, rapid and aggressive onslaught including targeted well-planned preparedness and vaccination to contain the clusters is warranted. A favourable feature is that the MPX virus being a DNA virus stands less chance of undergoing mutation compared to the COVID-19 virus that is an RNA virus.

The JYNNEOS vaccine is approved for prevention of MPX. It is the primary vaccine being used during current outbreak in the United States. The ACAM2000 vaccine is another approved vaccine to help protect against MPX.

A Food and Drug Organisation (FDA) approved antiviral agent, Tecovirimat (TPOXX), Claims to halt/limit spread of the monkeypox virus. The modus operandi is inhibiting the activity of the protein that facilitates the release of the enveloped virus. Since as yet only scant data on the clinical use of this drug are available, more work is needed on tecovirimat and other antivirals.

To conclude, the 2022 MPX outbreak in over 100 nonendemic countries, though at present lying low, must not be taken lightly. There is a dire need for aggressive measures to contain its spread that has the potentials for zooming to another public health pandemic and adding up to the huge damage to world economy caused by COVID-19 pandemic.

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