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Correspondence

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Dental practice implications during monkey pox outbreak: Ramifications of the lessons learnt from COVID-19 – Correspondence

Dear Editor,

The monkeypox (MPX) re-emergence may not be a major concern to some people, but it is crucial that we should continue to be vigilant as the lessons we learnt from the COVID-19 pandemic cannot be ignored. COVID-19 has led to extraordinary changes in medical education, research and practice. The MPX virus is double stranded DNA virus belonging to Orthopoxvirus genus and Poxciridae family. It is a selflimiting disease with its symptoms lasting between 2 and 4 weeks and the fatality rate is between 3 and 6% [1]. Transmission is mainly through direct contact (respiratory droplets/secretions) with infected patients, contaminated materials and animals. MPX was declared as a global outbreak by the International Health Regulations Emergency Committee on July 23, 2022. The announcement has definitely a major impact on surgery and trauma care. At the time of writing this letter, 56609 cases have been reported across the globe, based on the 2022 outbreak and data by CDC. The major entry and inoculation sites are nasopharynx, oropharynx and broken skin, and following replication it spreads to other organs with an incubation phase which may last up to 21 days. The Centers for Disease Control and Prevention advocate using airborne infection control procedures wherever practical despite acknowledging the potential, danger of airborne transmission.

Dental procedures generate aerosols and it is more likely to contract infections during a dental visit. Therefore the dental community needs to be educated on the additional information about the symptoms of MPX [2]. The dental profession sets itself in a unique position to spot earliest symptoms of facial rash in MPX patients. Dentists may be counted on by patients for help in spotting monkeypox during check-ups. It is important for dental workers to know that the risk of transmission is high in their workplaces. Monkeypox is a viral illness that often begins with a rash on the tongue and other oral mucosal surfaces. The painful rash often starts on the face and spreads from there. It is known to cause intra-oral lesions on the gums, tongue, cheeks, palate, or even the neck, and intraoral lesions can be as diverse as their extraoral counterparts. Dentists can help to diagnose monkeypox by questioning patients about sores in the mouth and physically evaluating the tongue, oral cavity, and cheeks for rashes and lesions. It is more important than ever that dental hygienist and dental professional training programmes are taught to identify symptoms and signs of oral monkeypox and treat them accordingly.

Based on the health ministry recommendations the evolution in personal protective equipment (PPE) and social isolation norms in response to the COVID-19 pandemic are still observed. The centers for Disease Control and Prevention (CDC) also recommends that to curb MPX transmission, self-isolation, often washing hands, and wearing protective gear. If the number of reported cases increases, it may be necessary to re-implement these preventative measures among healthcare employees because of the high contagiousness of aerosols generated during dental treatments. An outbreak of monkeypox, like the COVID disease before it, needs protective measures for the dental community. Patients and staffs need to take steps to avoid contracting an infection while normally performing of dental procedures.

Dental hospitals have a well-established system in place to limit transmission of diseases, and that system has been strengthened in the wake of the recent COVID-19 pandemic. Despite the current monkeypox outbreak, dentists who are already complying with the COVID-19 preventative rules do not need to make any changes to their practise at this time.

In India, the health ministry has issued proper guidelines for prevention and management of MPX and union ministry guidelines for monitoring those who has come in contact with an infected person. In parallel to this, similar guidelines requiring careful monitoring units to check for suspected cases in dental hospitals and to initiate targeted surveillance of affected patients. We take the liberty of providing some of the recommendations that are followed in our dental hospital to inform the readers.

- A. When dealing with procedures that produce aerosols, it is important to use protective gear such as PPE and N95 respirators. Restricting the use of air-conditioners, tower fans and air blowers in hospitals.
- B. Decreasing the outpatient loads by prioritizing patients who require immediate treatments and trauma patients are given high priority.
- C. Patients needing treatments should be done in an isolated area rather than a common shared treatment area.
- D. Patients with suspected or confirmed MPX should wait until they are no longer contagious before undergoing elective dental procedures.
- E. Restrict touching of any materials and equipment's used for patients with MPX. Patients care equipment's needs to be properly sterilized.
- F. Contaminated surfaces in operating room (OR), surgical and nonsurgical equipments, and items like bed linens, gowns and other fabrics should be properly sterilized and also requires proper handling.

With the healthcare systems already struggling with the consequences of the COVID-19 epidemic and have been put under unnecessary stress by increased healthcare expenses. The main goals should aim to stop the spread of MPX in trauma units, maintain regular surgery volumes, and provide care to all patients regardless of their health.

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Please state whether ethical approval was given, by whom and the relevant Judgement's reference number

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Data statement

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No primary data was generated and reported in this manuscript. Therefore, data has not become available to any academic repository.

References

- Saxena, Shailendra K., Saniya Ansari, Vimal K. Maurya, Swatantra Kumar, Amita Jain, Janusz T. Paweska, Anil K. Tripathi, and Ahmed S. Abdel-Moneim. "Reemerging human monkeypox: a major public-health debacle." J. Med. Virol. (In press).
- [2] Lakshman Samaranayake, Sukumaran Anil, The monkeypox outbreak and implications for dental practice, Int. Dent. J. 72 (2022) 589–596.

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