Hospital outbreak of MERS-CoV in Saudi Arabia

Another hospital outbreak from MERS-CoV has been reported from Saudi Arabia in recent time. In this current outbreak, two hospitals in Riyadh City have been reported to have been involved. Both these hospitals are not operating under the Ministry of Health of the Kingdom of Saudi Arabia (KSA).

Editorial note

Following the hospital outbreak of Middle East respiratory syndrome coronavirus (MERS-CoV) reported from Hofuf city of Al-Ahsa region in the KSA, another hospital outbreak involving two hospitals has recently been reported from Riyadh city. A total of at least 45 laboratory-confirmed cases of MERS-CoV, including 11 deaths (case-fatality rate: 24.4%) were reported from Riyadh city between epidemiological week no 22 and week no 32 (Please see the graph above) so far with at least 25 cases including 9 deaths linked to the outbreak in one of the hospitals while probably 6 cases are linked to the outbreak in another hospital in Riyadh.

The current situation in Riyadh continues to evolve with majority of cases linked to two hospitals which are hospital acquired. A small number of cases turned out to be household contacts of cases admitted in these hospitals and yet, a handful number of cases are reported to be community acquired which were reported sporadically. A number of healthcare workers, possibly 4, were also reported to have been infected from this hospital outbreak who have been put on home isolation.

It has been reported that majority of cases reported from the hospital involved in this outbreak were linked to the exposure with possibly one or two suspected cases of MERS-CoV that were admitted in the emergency department of these hospitals for other causes. By the time, these suspected cases were laboratory-confirmed, nosocomial transmission were already established amongst the patients, visitors of the patients as well as amongst the healthcare workers.

Nosocomial outbreaks of MERS-CoV infections have been confirmed to be reported from the KSA in the recent past (please see the box above). In all these outbreaks, overcrowding in the emergency department was considered one of the major precipitating risk factor for amplifying the outbreak in the hospitals.

The current situation, notwithstanding, once again emphasizes the importance of systematic use and application of stringent hospital infection control measures across all healthcare settings in a consistent and uniform manner. As it is evident that infections were occurring in some healthcare facilities and not in others, this reflects an ominous sign that hospital infection control measures are effective but not broadly implemented. All the core components of infection prevention and control programme (IPC) need to be implemented in healthcare settings instead of fragmentary application or approach. MERS-CoV continues to remain a global threat. Therefore, improving hospital infection control measures as well as systematic global risk assessment will remain the key to prevent a global spread.