

## **Middle East Respiratory Syndrome Corona Virus (MERS-CoV) – A continuous Challenge for Global Health.**

Pandemic COVID-19 affected the global community. This pose the most devastating and critical challenge to healthcare industry and teams as the crisis and impact is more than expected. While the whole world is struggling to control COVID-19 pandemic, Middle East Respiratory Syndrome Corona Virus (MERS-CoV) is still causing clusters of outbreaks in different parts of the Middle East and occasionally the virus is exported to countries outside the Middle East. The virus with a higher mortality, hospitalizations, and admissions to intensive care unit is no doubt posing a continuous threat to the global health security.<sup>1</sup> In comparison COVID-19 has lesser hospitalization, mortality and ICU admissions. A major challenge in complete control of MERS-CoV infection is the gap in existing knowledge about the intermediate animal reservoir. Albeit, few studies in Qatar and Saudi Arabia found some association between exposure to camels and MERS-CoV infection, sporadic cases without any known exposure are quite common, indicating that reservoirs other than camels are also likely.<sup>2</sup> Similarly, the mechanism of transfer of virus from primary reservoir “Bats” to the secondary reservoir “Camels” or livestock or any other intermediate reservoir is also unknown. Moreover, the exact route of transmission between animal-to-human and human-to-human is also yet unknown.<sup>3,4</sup> Besides all these challenges, the importance of camels in Arabs’ culture, tradition and local practices such as camel race, and camels an important livestock for the rural population also pose an important challenge in controlling the animal-human transmission of MERS coronavirus. Camels are expensive commodity and cannot be culled like other small animals to control the chain of transmission of the disease. Keeping in view these gaps in the existing knowledge, challenges in destroying the animal reservoir, repeated transmissions of the virus between animal-to-human resulting in clusters of outbreaks are occurring for the last few years, posing significant risk to the health of the global population.

Vaccines development for human use (which is currently in early experimental stages) should be expedited. Vaccines for animals such as camels, goats and other cattle also seems viable option for the control of the disease. Research on the development of MERS-CoV neutralizing antibodies should also be explored for prophylactic use among high risk groups.<sup>4</sup> More research funds should be allocated to carryout research in the area of MERS-CoV and fill the existing knowledge gaps. Standard precautions with additional focus on respiratory precautions have shown promising results during the past outbreaks including the current COVID-19 pandemic. Healthcare workers in all over the world especially outside Middle East should be directed to adhere with standard precautions in all times when dealing with patients with a travel history to the Middle East. Travel advisory for those travelling to Middle East should be issued with clear and specific messages regarding exposure to camels, raw camel milk, meat and earlier seeking of healthcare in case of any illness. The quick availability of COVID-19 vaccine given us a hope to have a MERS vaccine in near future.

### **References**

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