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Letter to Editor

Coronavirus: An Emerging Public Health Issue in Kingdom of Saudi Arabia

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Dear Editor

In September 2012, a novel Coronavirus was isolated almost simultaneously from a patient with pneumonia in Saudi Arabia, and a patient from Qatar in the intensive care unit of a hospital in the United Kingdom. During the subsequent year, another 136 cases of MERS-CoV including 58 deaths were confirmed from patients hospitalized in 10 countries in Europe and the Middle East.

The first known MERS-CoV outbreak was a retroactively identified cluster of 2 confirmed fatal cases and 11 probable non-fatal cases that occurred in Jordan during March-May 2012.[1] This index outbreak in Jordan was especially notable because the cluster involved cases treated at three different hospitals, with apparent human-to-human transmission between and among the apparent index case, family members, and health care workers.[2] More MERS-CoV cases were reported during April 2014 (n=217), than were reported during the two years following the beginning of the outbreak in March 2012 (n=207). Most of the new cases were confirmed from Saudi Arabia (n=179) and the United Arab Emirates (n=32). The underlying cause of the apparent rapid increase in new cases in the Arabian Peninsula during April 2014 was unknown at the time.[3]

The typical clinical features of MERS-CoV disease are similar to those associated with the Severe Acute Respiratory Syndrome Corona virus (SARS): an acute lower respiratory disease syndrome (ARDS) with fever and dyspnea. Other common presenting symptoms include chills, rigor, headache, myalgia, malaise, and diarrhea.[3]

The available evidence indicates that the dromedary camel is the most likely animal reservoir for MERS-CoV, and the proximate source for zoonotic human infections with the virus. MERS-CoV specimens have been isolated from camels in contact with human MERS-CoV patients in Qatar and Saudi Arabia, and genetically identical MERS-CoV specimens recovered from infected camels and humans.[4][5][6] A significant number of reported confirmed MERS-CoV cases are known to have had recent contact with camels, or had consumed camel milk.[7][8] Travelers who have been to the Arabian Peninsula or its neighboring countries, their family members, and those who have been in close contact with them must be screened for the virus using quantitative polymerase chain reaction. Currently, there is no particular treatment regimen or vaccine available for the illness, but recently a combination of two standard antiviral agents (ribavirin and interferon alpha 2b) has given good outcomes.[9]

Because not much data are available regarding novel CoV and experts suspect an upcoming pandemic, it has become a growing concern, especially for Hajj pilgrims. As there have been no travel restrictions to the Middle East, people travelling to and from there must be vigilant about their personal hygiene and should avoid contact with people suffering from respiratory symptoms. If they develop respiratory symptoms, medical assistance must be sought immediately. Further research is required for a better understanding of this virus.

Conflicts of interest

The authors declare that they have no conflicts of interest related to the content in this letter.

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