

Contents lists available at [ScienceDirect](#)

Asian Pacific Journal of Tropical Disease

journal homepage: www.elsevier.com/locate/apjtd

Editorial

doi:10.1016/S2222-1808(15)60941-0

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Korean MERS: A new cross continent emerging infectious disease

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ARTICLE INFO

Article history:

Received 10 Jun 2015

Accepted 20 Aug 2015

Available online 8 Oct 2015

Keywords:

Middle East respiratory syndrome

Korea

Emerging

ABSTRACT

Middle East respiratory syndrome is a new emerging infectious disease that was firstly detected in the Middle East. This disease can cause severe respiratory illness and was proved to be a coronavirus infection. The infection was firstly confined within the Middle East. However, the new emergence of this infection is in Korea and Korean Middle East respiratory syndrome becomes the new concern in public health. In this brief article, the authors discuss on this new cross continent emerging infectious disease.

1. Introduction

Middle East respiratory syndrome (MERS) is a new emerging infectious disease that was firstly detected in the Middle East[1-3]. The infection was firstly confined within the Middle East. The first case was from Saudi Arabia in 2012. As noted by Banik *et al.*[4], since its discovery in 2012, MERS coronavirus has reached 23 countries affecting about 1 100 people, including a dozen children, and claiming over 400 lives. This disease can cause severe respiratory illness and was proved to be a coronavirus infection[5,6]. Acute respiratory distress can be difficult to clinically differential diagnose from other acute respiratory viral disease[7]. In 2015, the new emergence of this infection is in Korea and Korean MERS becomes the new concern in public health[8]. In this brief article, the authors discuss on this new cross continent emerging infectious disease.

2. Existence of MERS outside the Middle East

As noted, MERS, by its name, is primary existed in the Middle East. The identification of the virus is reported from many countries in this area and can also be seen in the nearby area. The report of virus in the camels from Egypt is an interesting finding indicating that the virus has already moved out of the Middle East for many years[9]. In 2013, there are case reports of infected patients in France[10]. The first patient visited Dubai and carried disease back to France[10]. The second patient got nosocomial infection without travel history[10]. In 2014, the first human infection in USA was reported and this brought several attentions from medical scientist due to the migration of disease to the western hemisphere[11,12]. The case was a physician who imported disease from the Middle East. Kapoor *et al.*[13] noted that US clinicians must be vigilant for MERS coronavirus in patients with febrile and/or respiratory illness with recent travel to the Arabian Peninsula, especially among healthcare workers. It can be seen that the traveling is the main factor bringing MERS to the new setting while the nosocomial infection due to poor infection control can be the cause for

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continuous serial infection in the new setting. However, in the previous reports[10-13], the limitation of infection could be done.

3. Korean MERS: New consideration

In 2015, there is a new problem existed in Korea. A patient was identified to have MERS and the local Centers for Disease Control could not early identify this risk patient. The disease firstly occurred in May 20, 2015, then it spread to others and this resulted in local policy for school closing[11]. Quarantine of thousand people was also done. The widespread of the disease in this outbreak is believed to be due to the poor disease control system at the airport and the lack of concern on MERS and poor quarantine technique on the first group of patients. Of interest, the disease is still continuous (9 June, 2015) and there is a note to avoid travel to Korea due to MERS. Of interest, the outbreak generated from the first Korea case caused nationwide spreading and panic. But the disease already attacked many ones who contacted with the first patient including his friend from China[14].

4. Conclusion

The present Korean MERS becomes a big challenge to the global public health system. The cross continent infection is interesting and implies the importance of disease imported by present good air transportation. The disease which is believed to be confined in a region can emerge in new remote setting without prior notification. The existed Chinese case brought several attentions to the local Chinese Centers for Disease Control for implementing a strong disease control measure to stop the progression of the outbreak to the Chinese mainland[14-20]. The global public health has to continuously follow up the situation and have collaborate to stop the possible worldwide pandemic.

Conflict of interest statement

We declare that we have no conflict of interest.

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