In recent time, an international traveler with a history of recent visit to four countries in the Eastern Mediterranean Region was laboratory-confirmed as a case of Middle East respiratory syndrome coronavirus (MERS-CoV) infection after the traveler returned back to the Republic of Korea (RoK). This triggered a wave of unprecedented transmission of the virus in the country and till 14 June, a total of 150 laboratory-confirmed cases of MERS-CoV infection including 15 deaths were reported from RoK. All cases were linked to the index patient which is the international traveler and all cases were reported to have been acquired the infection in hospital settings.

Editorial note

As of 15 June 2015, a total of 1,316 laboratory-confirmed cases of human infection with MERS-CoV have been reported to WHO since 2012, including at-least 463 deaths. To date, 25 countries (10 of these countries are from the Eastern Mediterranean Region of WHO) have reported laboratory-confirmed cases of MERS-CoV. Majority of cases (over 85%) have, however, been reported from Saudi Arabia.

On 20 May 2015, the Republic of Korea notified WHO of the first laboratory-confirmed case of MERS-CoV. The patient had a travel history to four countries in the WHO Eastern Mediterranean Region before he returned back to RoK. The patient was not ill during travel and his source of infection is under investigation.

Following the introduction of MERS-CoV infection into RoK by a single infected traveler, an unprecedented wave of infection was reported from RoK and as many as 150 cases of MERS-CoV infections were reported from the country in less than a month making this outbreak with the largest case cluster of MERS-CoV infection outside the Middle East. Though the situation raised a major public health concern, globally, it was reported later and confirmed by a recent mission of WHO that the outbreak has been amplified by infection in hospitals and movement of cases within and among hospitals. The report also suggests that no household transmission has been observed during the current wave in RoK.

The current situation in RoK has again pointed out the need for applying optimal infection prevention and control measures for all patients in healthcare settings irrespective of the diagnosis of the patients. In addition to applying personal protective measures, both administrative (triaging and avoiding crowding in emergency rooms, and environmental controls (proper spacing of patients, proper ventilation and use of proper environmental disinfectants) are equally important for preventing nosocomial transmission in health care environments specially when a novel respiratory virus emerges.

The current outbreak in ROK will soon be over. But the current lesson is that with global connectivity, a novel virus emerging anywhere in the world is a threat everywhere. Public health vigilance would be key to prevent any local health security threat becoming global.

International spread of MERS-CoV infection in 2015 (Travel associated)
- Germany: 1 death
- Philippines: 1 case
- Republic of Korea: 150 cases; 15 death
- China: 1 case

The current outbreak in ROK will soon be over. But the current lesson is that with global connectivity, a novel virus emerging anywhere in the world is a threat everywhere. Public health vigilance would be key to prevent any local health security threat becoming global.