

May 10-11, 2018
Frankfurt, GermanyJ Transm Dis Immun 2018, Volume 2
DOI: 10.21767/2471-8084-C1-003

LACK OF MIDDLE EAST RESPIRATORY SYNDROME CORONAVIRUS BUT PREVALENCE OF INFLUENZA VIRUS IN IRANIAN PILGRIMS WITH SEVERE ACUTE RESPIRATORY INFECTIONS- HAJJ 2017

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More than 2.5 million Muslim pilgrims are gathering in Mecca during the Hajj pilgrimage annually. Hajj is one of the largest mass gatherings of its kind in the world. Transmission of different infectious diseases especially respiratory tract infections during mass gatherings in holy places has a global effect when pilgrims return to their country. The aim of this study was to determine the prevalence of Middle East Respiratory Syndrome coronavirus (MERS-CoV) and influenza virus infections among Iranian pilgrims returning from Hajj in 2017. Throat swabs collected from 132 pilgrims with severe acute respiratory infections (SARI) were examined for presence of MERS-CoV and influenza viruses from 10 September until 4 October 2017 in National Influenza Center, Tehran, Iran. Each sample was tested in a 25 µl reaction for MERS-CoV and influenza A/B by using QuantiFast Probe

RT-PCR Kit (Qiagen, Germany). MERS-CoV was tested with targeting the upstream region of the E gene (UpE) for screening and the open reading frame 1b for confirmation. None of the pilgrims tested positive for MERS-CoV, however, 20 (15.2%) were positive for influenza viruses. Influenza A/H3N2, B and A/H1N1 accounted for 60% (12/20), 30% (6/20) and 10% (2/20) of the virus positive samples, respectively. This study showed the prevalence of influenza infections among Iranian pilgrims and suggests continuing surveillance and screening in the pilgrims, appropriate vaccination and other preventive strategies especially nowadays that the risk of influenza pandemic threatens the world. Meanwhile testing for MERS-CoV is necessary for early diagnosis to prevent virus transmission.

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