

Abstract

# Assessment of Awareness Towards Respiratory Infections Among Qatif District Pilgrims During Hajj 2017

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## Abstract

**Background:** Hajj is one of the largest human mass gatherings. Due to crowding, there is the potential for respiratory infections to spread among attendees. Health education and vaccination for respiratory infections are the main preventive measures taken for Saudi Arabian pilgrims prior to hajj.

**Objective:** To describe knowledge gained from preventive programs in Qatif district in Saudi Arabia's eastern province. This information can improve the health educational programs for Saudi pilgrims.

**Methods:** We randomly sampled pilgrims from 39 troops distributed across Qatif district. Questionnaires assessed pilgrims' awareness towards respiratory infections during hajj and to identify the factors influencing pilgrims' awareness about MERS-CoV in Saudi Arabia. Data analyses were completed using Epi Info 7.

**Results:** We surveyed 400 pilgrims from five different troops. Most (94%) were Saudi, 71% were between 20-40 years of age. For vaccinations, 75% of pilgrims were vaccinated against influenza, 87% for meningococcal, and 4% for pneumococcal. Half (50%) of pilgrims correctly identified drug effectiveness against respiratory infections. For knowledge, 85% of pilgrims identified sneezes and cough products as a cause of infections and contact with ill persons by 72%. Most pilgrims considered cough (65%), dyspnea (58%), sneeze (60%) and fever (56%) as common symptoms. For preventive measures, 91% of pilgrims identified face masks, 86% identified frequent hand washing and 85% identified social distancing as effective. MERS-CoV was identified a serious disease by 76%, and 30% said MERS-CoV was treatable. For transmission of MERS-CoV, 75% identified airborne transmission and 60% identified consuming infected camel. Only 55% of pilgrims correctly responded that MERS-CoV is still circulating in the kingdom.

**Conclusions:** Pilgrim knowledge about causes, symptoms, and preventive measures for respiratory infections were acceptable, but knowledge towards respiratory illness treatment and MERS-CoV were poor. We recommend national health education programs target these areas in the future.

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