## A Review of a Severe Acute Respiratory Illness Cases Among Umrah / Hajj Pilgrims in Perak, Malaysia 2016

Husna Maizura Ahmad Mahir, Masliza Mustafa, Hairul Izwan Andul Rahman, Nadrah Arfizah Ariffin, Alvin Tan Lik Hooi, Asiah Ayob, B Venugopalan

Communicable Diseases Control Section, Public Health Division, Perak State Health Department, Malaysia, Communicable Diseases Control Unit, Kinta District Health Office, Perak, Malaysia, Communicable Diseases Control Unit, Batang Padang District Health Office, Perak, Malaysia, Surveillance Section, Disease Control Division, Ministry of Health, Malaysia, Public Health Division, Selangor State Health Department, Malaysia

## ABSTRACT

INTRODUCTION: Air travel increases risk for rapid transmission of communicable diseases including Middle East Respiratory Syndrome Coronavirus (MERS-CoV) particularly in mass gathering events such as umrah/hajj pilgrimages. Following MERS-CoV emergence, nations worldwide conduct enhanced surveillance for severe acute respiratory infections (sARI) among returning hajj/umrah pilgrims. METHODS: A cross-sectional study conducted on notified cases of suspected MERS-CoV cases (>18years), presenting within 14-days of returning from hajj/umrah, registered in the 2016 Perak MERS-CoV Surveillance Database. This study aimed to describe possible risk factors of sARI among the study population. **RESULTS:** A total of 85 suspected MERS- CoV cases were analysed. The median age was 61.0 years (IQR14.0), comprised of 43(50.6%) males and 42(49.4%) females. Forty six percent (20 cases) of the males were smokers. All cases were vaccinated for meningococcus, while 23 patients (27.1%) had influenza vaccination and 22 patients (25.9%) had pneumococcal vaccination. Seventy percent of the cases had awareness on MERS-CoV, while 12 cases had exposure history to camels (14.1%). No confirmed MERS-CoV cases were detected. The main diagnosis was Community Acquired Pneumonia (41 cases), Influenza (35 cases) and other respiratory infections (9 cases). Diabetes Mellitus was an important co-morbidity among the cases (p=0.03) and influenza vaccination was protective against influenza infections, OR:0.21 (95%CI: 0.06-0.69). **DISCUSSION:** This study recommended the need for mandatory influenza and pneumococcal vaccinations and optimal diabetic control for umrah/hajj pilgrims. This is in addition to regulation of travel agencies to reduce the risk of MERS-CoV exposure by avoiding recreational trips to camel farms during the pilgrimage.

**KEYWORDS:** MERS COV, pneumococcal vaccination, influenza vaccination, respiratory illness, umrah/hajj pilgrimage

## A Study of the Leadership Styles of Healthcare Managers in Northern Malaysia

Chiew Wye Lee

Pakar Perubatan Kesihatan Awam

## ABSTRACT

**INTRODUCTION:** An effective organization needs competent management and skillful leadership. Leaders exhibit different leadership styles, namely transformational leadership style, transactional leadership style and laissez-faire leadership style to carry out and achieve organization goals. The aim of this study is to determine the dominant leadership style of healthcare managers. METHODS: Using simple random sampling, 208 healthcare leaders and 406 subordinates were selected to answer a self-administered Multifactorial Leadership Questionnaire 5X. **RESULT:** The mean age of healthcare leaders was 43±8 years with the majority of them from the public health (48%), hospital (34%) and state department (18%). The mean age of their subordinates was 37±9 years. The self-rating survey revealed that the healthcare leaders were more inclined towards transformational leadership (mean 3.03±0.63) compared to transactional leadership (mean 2.90±0.70) and avoidant leadership  $(0.67\pm0.62)$ . The outcomes of their leadership had a mean score of 2.94±0.58. However, the subordinates rating suggested that their leaders' leadership styles were more of transactional leadership (mean 2.82±0.75) than transformational leadership (mean 2.69±0.78). Rating by the subordinates of avoidant leadership  $(0.86\pm0.71)$  had a higher mean value than self-rating. To the subordinates the overall leadership outcomes rated a score of 3.03±0.74. DISCUSSION: Self-perceived as transformational, healthcare leaders prioritize individualised consideration and intellectual stimulation of their subordinates. However, as revealed in this study, they exhibit transactional leadership. Healthcare has strict and varied regulations transactional leadership is most likely to be dominant. Transactional leadership should evolve into transformational leadership, in order to be better and effectively manage an organization.

**KEYWORDS:** leadership style, MLQ5X, healthcare leaders