

Risk of acquiring pneumonia among the Malaysian hajj pilgrims vaccinated with 23 valent pneumococcal vaccine

Yusoff Ahmad Faudzi

ABSTRACT

Introduction: Annually, millions of Muslims worldwide are performing Hajj in Saudi Arabia and 0.1% of Malaysian population involved. This mass immigration created extreme congestion which may impose pilgrims to numerous health hazards. It was reported that bronchopneumonia is the leading cause of hospitalisation. Our aim is to study the relative risk of acquiring pneumonia among the Hajj pilgrims who were vaccinated with pneumococcal vaccine. **Methods:** A prospective cohort study was designed. The study populations involved the vaccinated and non-vaccinated groups as a cohort. These cohort groups were monitored for pneumonia during the Hajj pilgrimage and two weeks after they returned to Malaysia. The estimated sample size was 1000 subjects. Case was defined as a person who have signs and symptoms of pneumonia with chest X-ray changes, the white blood cell count) =10,000 cells/mm³; < 4500 cells/mm³) and Gram positive. The demographic data were obtained from Information System and interviews were done by attending medical officers using standardised questionnaire. **Results:** The mean age is 54.6 years old. The incidence of pneumonia was 9/1000 populations, higher in males, underweight, obese and who had lung diseases. The relative risk of pneumonia was 0.125 (CI: 0.016, 0.996). A multiple logistic regression analysis shows that those who were not vaccinated, had COAD, other lung diseases and hypertension were significantly associated with pneumonia. The PPV was 0.2% and the effectiveness of pneumococcal vaccine against pneumonia was 87.5%. **Discussion:** The adjusted relative risk shows that vaccinated group was protected from getting pneumonia. The pneumococcal vaccine shows high effectiveness and efficacies. The authors would like to recommend with the possibility of making it compulsory that all Hajj pilgrims aged above 50 to receive pneumococcal vaccine. It is also recommended for those Hajj pilgrims with COAD, Hypertension IHD and with other lung diseases such as PTB and neoplasm.

Med J Malaysia Vol 72 Supplement 1 August 2017:A75

Situational analysis of dengue in Melaka, 2011-2015

Siti Halimah Syed Shaikh Amirullah Haji Arshad

Melaka State Health Department, Malaysia

ABSTRACT

Introduction: Dengue is endemic in Melaka. The number of Dengue cases in Melaka has been steadily increasing. This study analysed the characteristics of Dengue fever cases in the state of Melaka from 2011 to 2015. **Methodology:** A cross sectional study was done using data obtained from the national web based e-dengue system. Data was downloaded into an Excel format and analysed in terms of frequencies and incidences. **Results:** Cases were higher from the month of May to the end of the year. A five years cumulative analysis of Dengue cases showed that Dengue was more prevalent among males. Dengue incidence was also higher in Chinese followed by Indians and Malays. Adolescents was the age group most affected followed by adults, elderly and children. Non-Malaysian had a higher incidence of the disease compared to Malaysian. **Discussion:** Dengue cases showed an increasing trend notably with the use of dengue rapid test kit to detect cases in 2014. The increasing trend of cases from the month of May onwards corresponds to the rainy season in the country which encourages the proliferation of Aedes mosquitoes breeding sites. The high incidence among Chinese and Indians emphasize the need of health education materials in Chinese and Indian languages. The tendency of children, the elderly and females to stay indoors during the peak biting period of the vector mosquitoes may have contributed to a lower incidence of the disease among them. Based on the high incidence of cases among foreigners, it should be mandatory for all industries to ensure, implement and monitor scheduled vector control activities such as proper waste disposal, environmental cleaning and eradication of mosquitoes breeding campaigns in the residential areas provided to their foreign workers.