



## Service Priorities and Programmes Electronic Presentations

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### **Acceptance of influenza vaccine in healthcare workers in New Territories East Cluster using a Health Belief Model**

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#### **Introduction**

Influenza vaccine is recommended for healthcare workers (HCW) to reduce mortality and morbidity attributable to influenza. Influenza vaccination coverage among HCW remains the lowest compared with other priority groups for immunization. Little is known about the acceptability and compliance with seasonal influenza vaccines among HCWs in New Territories East Cluster (NTEC).

#### **Objectives**

To examine the risk perception regarding seasonal influenza and influenza vaccination in HCW as well as the acceptance and compliance of influenza vaccine among HCW; to find out the reasons for accepting or refusing influenza vaccination, and to determine information sources regarding the effectiveness of influenza vaccine.

#### **Methodology**

We conducted a cross-sectional survey in Family Clinics and four hospitals in NTEC, namely, Prince of Wales Hospital, Tai Po Hospital, Alice Ho Miu Ling Nethersole Hospital, and North District Hospital. HCWs are defined to include doctors, nurses, allied health professionals, administrative and supporting staff. Multiple logistic regression analysis was performed to identify factors associated with immunization acceptance.

#### **Result**

Six hundred and sixty-three HCWs returned their questionnaires in the end of January, 2016. The overall response rate was 22.1%. They were asked about their influenza immunization history as well as the reasons for accepting or declining the influenza vaccination. Response rate in different groups of HCW is as follows: doctors 14.5%, allied health 9.7%, nursing staff 45.7%, administrative 6.2% and supporting staff 24%. Forty-two percent of HCW had received influenza vaccine in the last three years but only 24.9% of medical staff had received influenza vaccine in past 12 months and 24

% intended to receive vaccination in coming 12 months. The most frequently cited reasons for accepting the seasonal flu vaccination were “for family safety”, “better to be protected” and “worry about catching flu”. Approximately 62.1 % of HCW who refused to have influenza vaccination cited “fear of developing undesirable reaction from the vaccine” and “they do not think that are susceptible to influenza” as the reasons for refusing vaccination. Other reported barriers include ambivalence about the efficacy and fear of side effects. Hospital Infection Control information provided by Hospital Authority was the most easily accessible source of information, which was followed by information from Centre for Health Protection and opinions from medical colleagues. A significant proportion of doctors or nurses are more willing to take the vaccination while those of allied health or supporting staff were less likely to have the vaccination. This may imply that we should arrange more publicity on influenza vaccination to improve their acceptance in receiving the vaccination. Besides, middle-aged group was more willing to take vaccination while the younger aged group tended to resist to vaccination. Conclusion: The seasonal influenza vaccination coverage among the HCWs in our cluster was low. We have identified a number of specific attitudinal barriers and misconceptions about immunization in NTEC. Targeted health education and health promotion campaigns may improve staff immunization acceptance rate.