Prevalence of influenza vaccination and associated factors among Chinese nursing home health care workers
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Introduction
Influenza vaccination (IV) in nursing home staffs can reduce the mortality of nursing home older adults. In Hong Kong, the Department of Health provides free seasonal IV program for nursing home health care workers October to November every year. However, a large proportion of high-risk individuals have not received IV and there is so far no study examines the prevalence of IV in Chinese nursing home health care workers.

Objectives
To study the prevalence of influenza vaccination (IV) and identify factors associated with IV among Chinese nursing home health care workers.

Methodology
A cross-sectional study using self-reported anonymous questionnaire based on Health Belief Model in 2012 in fifty-eight nursing homes in Hong Kong West Cluster. Questions included socio-demographic data, prevalence of IV, perception related to health, perception related to influenza and perception related to IV based on HBM.

Result
1400 questionnaires were distributed and 1300 returned (response rate: 93%). Of all respondents, 55.9% (727) received IV. Up to 40% of respondent believed that IV is non-efficacious or “don’t know” about the efficacy. Similarly, up to 40% of respondent perceived the side effect of IV to be severe/moderate or “don’t know” about the side effect. Multivariate analysis showed that education level of tertiary (odds ratio [OR]: 0.32; p<0.001) or secondary (OR: 0.50; p<0.001), nurses (OR: 0.50; p<0.001) or allied-health (OR: 0.53; p<0.001), those believing that IV was non-efficacious (OR: 0.20; p<0.001) or “don’t know” (OR: 0.24; p<0.001), those believing that side effects were severe/moderate (OR: 0.42; p=0.001) or “don’t know” (OR: 0.56; p=0.03), those not ever vaccinated in the past (OR: 0.09; p<0.001) were less likely than others to have received IV. Age 50-59 (OR: 1.79; p=0.047) and age ≥60 (OR: 3.79; p<0.001) were more likely than others to have received IV. In conclusion, 55.9% Chinese
nursing home health care workers received IV. Inadequate knowledge regarding efficacy and side effects of IV were major factors preventing them from receiving IV. The poor acceptance rate may also be due to the overwhelming media report on the adverse effects following IV. Enhanced promotion strategy and education programs should be launched to address the knowledge gap and improve the vaccination rate.