Knowledge, attitude and practices and influencing factors related to seasonal influenza vaccination among healthcare workers in Qingdao, China, 2013-14: A prospective cohort study

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**Background:** Seasonal influenza vaccination among healthcare workers (HCWs) can prevent influenza infection among patients in healthcare settings. We investigated the HCWs' awareness and knowledge of seasonal influenza and the influenza vaccine and analyzed factors affecting vaccination to formulate targeted strategies to increase vaccination.

**Methods:** Cluster sampling was used to select eight health institutions in Qingdao, China. A prospective cohort study was conducted in November, 2013 and the random follow-up survey was in June, 2014. Eligible HCWs were full-time employees providing direct patient care. We applied χ²-test and logistic regression to analyze factors influencing vaccination.

**Results:** 1852 eligible HCWs were recruited and 1301 (70%) completed the cohort study. At the post-influenza season follow-up survey, 63 (5%) HCWs reported receiving influenza vaccination during the prior influenza season. The main reason for not being vaccinated, given by 412 (43%) unvaccinated respondents was concerned about side effects. Among all HCWs completing the pre-season survey, 258 (21%) ones responded correctly about how long the influenza virus remains alive in the air, 557 (43%) believed the influenza vaccine was safe, 113 (9%) believed they could become infected due to vaccination and 216 (17%) thought they would likely get vaccinated in the upcoming season. In multivariate analysis, factors increasing vaccination included working in a primary care level hospital, prior vaccination history, positive attitude towards vaccination and a greater vaccination intention in the pre-season.

**Interpretation:** The influenza vaccination rate among HCWs in Qingdao is low. The vaccination intention was weak and knowledge about influenza transmission and the effect of influenza vaccination was poor. Healthcare education focusing on safety and importance of seasonal influenza vaccine might increase vaccination coverage in this group.

**Biography**

Xiaoning Hao has completed her PhD in 2007 from Shandong University and Postdoctoral studies from Tsinghua University in 2010. She is the Director of the Public Health and Risk Management Research Center of China National Health Development Research Center, NHFPC. She has published more than 30 papers in reputed journals and has been serving as an Editorial Board Member of repute.

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