

# Coverage and Influencing factors of Influenza Vaccination among the elderly in Minhang District, Shanghai

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## Abstract

**Objectives:** To describe the influenza vaccination coverage and identify its influencing factors, and understand the reasons for not receiving influenza vaccination among the elderly in Minhang District, Shanghai. **Methods:** The influenza vaccination coverage among the elderly in Minhang District of Shanghai was described by collating the data of influenza vaccination from August 1, 2014 to July 31, 2019 for elderly people aged  $\geq 60$  years provided by Minhang District Center for Disease Control and Prevention (CDC). And a telephone survey was conducted among vaccinated and unvaccinated older adults during the 2018-2019 influenza season using a self-designed questionnaire in August-December 2020. **Results:** Influenza vaccination coverage rate among the elderly was 0.68%, 0.62%, 0.67%, 0.92% and 1.36% in the influenza season from 2014/2015 to 2018/2019 respectively. Higher influenza vaccination was associated with females (odds ratio (OR):1.937), independent living (OR:8.700), self-perceived poor health status (OR:4.445), having recommendations from physicians (OR:5.052) or family members (OR:3.449), former smokers (OR:4.509), past pneumococcal vaccination (OR:52.172) and past influenza infection (OR:15.184). In addition, the elderly with chronic bronchitis (OR:1.808), COPD (OR:3.161), bronchiectasis (OR:5.146) and diabetes mellitus (OR:2.030) were positively associated with vaccination. The main reason for not receiving influenza vaccination were believing they were healthy and did not need to get vaccinated (40.0%). **Conclusions:** The influenza vaccination coverage rate was relatively low among the elderly in Minhang District, Shanghai. The awareness and willing about vaccinations in elderly people should be increased.

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