Comparison of Influenza Vaccination Rates between the General Elderly and the Elderly with Intellectual Disability in Taiwan

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Abstract

Objective: Vaccination is one of the most effective strategies in preventing seasonal influenza, especially for the immune-compromised elderly. However, few studies have investigated the difference in vaccination against seasonal influenza among these vulnerable populations. This retrospective cohort study aimed to examine the vaccination rates between the general elderly and the elderly with intellectual disability (ID) in Taiwan. Vaccination rates for the elderly with different level of ID were also investigated. Method: The subjects of the general elderly aged 65 and over in 2007 were derived from the NHI sample files, Longitudinal Health Insurance Database 2005 in 2007. For the elderly with ID, they were identified from enrollees of NHI aged 65 and over with a diagnosis of ID (codes 317-319 were defined based on the International Classification of Diseases, Ninth Revision, Clinical Modification). The two samples of elderly were pooled together and multivariate logistic models were used to compare the rates of vaccination against seasonal influenza. Results: Results showed that, in 2007, the overall vaccination rate for the general elderly and the elderly with ID were 33.2% and 36.9%, respectively. Compared to the general elderly, the elderly with ID were 1.17 times (95% CI=1.08, 1.28) more likely to be vaccinated. In terms of the vaccination rates for the elderly with different level of ID, it was found that the elderly with a moderate or unspecified ID were less likely to be vaccinated in 2007, when compared to the elderly with a mild ID. Conclusions: It's normally expected that people from a disadvantaged group would use less needed preventive services. However, our findings suggest that the opposite is true. Plausible explanations are directed to the differences in the time/opportunity costs between the general elderly and the elderly with ID.

Keywords: Elderly, influenza vaccination, intellectual disability