

EFFECTIVENESS OF INFLUENZA VACCINE IN THE COMMUNITY-DWELLING ELDERLY

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Background and Aims: Influenza vaccines are reviewed each year, and often changed, in an effort to maintain their effectiveness against drifted influenza viruses. There is however no regular review of influenza vaccine effectiveness during, or at the end of, Taiwan's influenza seasons. The main purpose of this study was to estimate the effectiveness of influenza vaccination of the high risk and healthy elderly population lived in non-institutionalized.

Methods: The present cohort comprised subjects who vaccinated and unvaccinated were select from Taiwan's National Health Insurance Research Database. Over seven seasons 2000–6, data on age, sex, area and vaccination status were collected. We used a retrospective case control design in seven consecutive influenza seasons, and estimated influenza vaccine effectiveness (VE) for patients of elderly.

Results: The major measurement found that, after adjusting confounding factors, the vaccinated could reduce a rate of 36% to catch a common cold, 2% to infect influenza-like illness as well as 45% to have hospital admission for pneumonia or cardiac disease. In the reduced medical expenditure of influenza vaccination, we estimated the saved of it based on the risk difference between the vaccinated and unvaccinated.

Conclusion: We deducted the cost of purchasing vaccine, diagnosis fee of national health insurance, the influenza vaccination could reduce the medical expenditure of 2.35 billion dollars if the vaccinated rate was 80%.

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