

## Compare the Effectiveness of Influenza Vaccination for Elderly People with and Without Disabilities in Taiwan

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### ABSTRACT

**INTRODUCTION:** Seasonal influenza vaccination (IV) is considered the most effective way in the prevention of influenza among older people. However, few studies have examined the effectiveness of IV on disabled populations. This study aimed to compare the effectiveness of IV for elderly people with and without disabilities on the risk of mortality and hospitalization in Taiwan. **METHODS:** This is a population-based, retrospective cohort study. By linking the National Disability Registration System and the National Health Insurance (NHI) Research Database, a total of 394,511 disabled and 2,741,425 free-of-disability adults age 65 or older in 2014, were identified. IV records were derived from the NHI database between October 1 and December 31, 2014, when the seasonal IVs were administered for free. Four comparison groups were formed by cross-tabulating the two dichotomies of vaccination-or-not and disability-or-not. Logistic regressions were used to compare these four groups of subjects on their health outcomes measured between January 1 and March 31, 2015. **RESULTS:** About 34.6% of the disabled elderly received IV in 2014, which was higher than that of free-of-disability elderly (30.8%). When compared to the unvaccinated disabled elderly, the vaccinated free-of-disability elderly had a 65% significant lower all-cause mortality; and 50.7%, 48.8%, 58.8%, and 36.7% lower risks of hospitalization for pneumonia and influenza, respiratory diseases, respiratory failure, and heart disease, respectively ( $p < 0.001$ ). **DISCUSSION:** This study indicated IV could reduce the risk of all-cause mortality and hospitalization of influenza-related complications. Findings supported that promoting IV could narrow health disparities between the disabled and general elderly populations.

**KEYWORDS:** Influenza vaccination, Disability, Effectiveness, Health disparity

## Comparison of Health Promotion Methods Using Audiovisual Media and Lecture Towards the Level of Elementary School Childrens Regarding Pulmonary Tuberculosis

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### ABSTRACT

Tuberculosis is the leading of nine causes of death in the world and also known as the main cause of infectious agents. Indonesia is the country with the highest number of new cases in the world after India. This study aims to assess the effectiveness of the lecture methods and audiovisual with the level of children's knowledge regarding pulmonary Tb. The type of research that was used is quantitative research using a quasi experimental design. The nonequivalent pretest-posttest design technique was carried out by giving two different treatments totwo population of groups to see the influence of the intervention given. This study used a population of 6th grade elementary school children in SD Negeri 205 Palembang and YWKA Palembang Private school. The results of the analysis showed that children's knowledge about pulmonary tuberculosis disease was higher in the audiovisual health promotion methods compared to lectures in private elementary school ( $p = 0.006$ ) and in public elementary school ( $p = 0.002$ ). After conducting the significance test on the level of understanding of students regarding TB disease, it was obtained that in the Private Elementary School from the posttest conducted both in the audiovisual media group and the lecture method, there was an increase in the pretest value that was higher than the Public Elementary School ( $p < 0.001$ ). It can be concluded that the audiovisual methods and lecture methods are equally effective with the value of effectiveness in the audiovisual media group higher than the lecture methods ( $p < 0.001$ ).

**KEYWORDS:** Tuberculosis, knowledge, health promotion, lecture, audiovisual