

Conclusions: Prior exposure to YF vaccination or live, attenuated dengue vaccine virus, did not adversely affect the safety and viremia profile of a this recombinant, live attenuated tetravalent dengue vaccine, and appeared to increase immunogenicity.

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Estimating the Hemophilus influenzae type b (Hib) disease burden and Economic analysis of Hib vaccination in Korea

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Background and objectives: Haemophilus influenzae type b (Hib) vaccination is not a routine immunization service in Korea yet. This study was performed to estimate the disease burden of Hib and the cost-benefit of providing Hib vaccine to children in Korea.

Method: We used the Rapid Assessment Tools (RATs) of WHO to estimate the pre-vaccination Hib incidence and mortality; one based on meningitis incidence in community and the other based on under 5 year mortality statistics in 2004. The fatality and sequelae of Hib diseases were obtained from multi-center based registry data. The direct and indirect cost of Hib were calculated from the National Health Insurance data (hospitalization and outpatient cost) in 2004, National Health and Nutrition Survey (transport cost to hospitals), Report of Ministry of Labor (indirect cost of work loss and death) in 2004. Sensitivity analysis was done.

Results: The annual incidence of Hib meningitis was 10.8 (95% CI: 3.8–15.0) per 100,000 children <5 years and the case fatality rate was 6%. The average treatment cost for an Hib meningitis case was about US \$ 2,157. For a fatal case, the average life time discounted economic loss was about US \$ 849,085. The Total annual cost of Hib diseases was about US \$ 42.5 million. The break-even vaccine price, where the annual vaccination costs equal annual Hib disease burden averted was US \$ 23.3 per dose in base case scenario with 3% discount rate. In sensitivity analysis, due to the wide confidence interval of meningitis incidence rate, the burden of Hib was from 15.9 million to 58.6 million.

Conclusion: In base case scenario, the routine Hib vaccination to children would be cost-benefit in Korea.

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The Efficacy of Influenza Vaccination of Elderly: Population-Based Influenza Vaccination Program in Taiwan during 1998–2006

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Background: In Taiwan, average influenza associated mortality is approximately 4,500 per year. Influenza vaccination is the most effective method to prevent influenza infection and reduce its potentially severe complications. In 1997, Taiwan launched the influenza vaccination campaign. Since 1998, the government continually provides free influenza vaccines to elderly aged 65 and above and other high risk groups. The purpose of this article is to assess the effectiveness of influenza vaccination in the elderly.

Method: For this retrospective observational study, vaccination coverage was collected through weekly based reporting system and data regarding medical attendance was retrieved from National Health Insurance databank from 1998 to 2007 influenza seasons. Medical attendance rate and hospitalization rate was adjusted by age according to 2000 world standard.

Results: Influenza vaccination coverage among elderly ranged from 9.9% to 68.4% with the peak in 2003. The annual hospitalization rate (per 1,000 population) declined steadily from 33.1 in 1998 to 28.8 in 2000, but rebounded slightly from 30.8 in 2001 to 38.4 in 2005. The annual medical attendance rate (per 1,000 population) declined from 202.2 in 1998 to 75.8 in 2006. The correlation analysis was height relation ($r = 0.7$) between coverage and medical attendance rate.

Conclusion: The declining medical attendance rate attributes to vaccination upholds the influenza vaccination program for the elderly. There is no evidence that influenza vaccination is effective in reducing hospitalization in the elderly. But it could be due to the National Health Insurance confers full accessibility to the medical resources. As the influenza vaccination coverage among elderly declines year by year, a more aggressive and comprehensive educational promotion strategy should be enhanced.

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Factors Influencing Taiwanese Community Elders to Receive Influenza Vaccination - What Strategy We Can Have for the Goal of High Vaccination Rate?

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Nearly 4,500 persons die of influenza and related complication yearly in Taiwan (20 / 100,000 population), 80% of them is 65 years or older. Policy of providing free influenza vaccination for all people aged 65 and older started from 2001, but vaccination rates remained low with decreasing trend. Understanding the relevant factors of influenza vaccination would be helpful for the vaccination strategy.