

### Routine Varicella Immunization And The Impact on Its Epidemiology, Medical Expenditure And Social Costs in Taiwan, 2000–2012

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#### Abstract

Varicella vaccine has been approved in Taiwan since 1997 and was introduced into routine immunization program to provide as a free, 1-dose vaccination for 1-year-old children throughout Taiwan since 2004. Information of varicella patients from 2000 to 2012 at National Health Insurance Database were retrieved including the epidemiological characteristics, medical expense and indirect costs from the societal perspective of varicella were analyzed. The implementation of routine varicella immunization has resulted an 87% decline in morbidity. The average age of varicella patients increased from 7.9 years to 16.3 years. The varicella-related hospital admissions decreased, but admission rate increased. Varicella patients with underlying diseases had higher admission rates and longer duration of hospital stay. The annual varicella-related medical expense declined after 2002 and the proportion of medical costs for admission has increased. The estimated indirect costs from the societal perspective of varicella were 8.3 times higher than varicella-related medical expense. The results will be a reference for revising the national immunization policy.

**Keywords:** varicella, varicella vaccine, epidemiology, medical expenditure, social costs

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