

Abstract

The purpose of this study is to evaluate the epidemiology and impact of complication and mortality from chickenpox in Taiwan. Furthermore, to determine the direct medical utilization and costs associated with complicated chickenpox in healthy person and immunocompromised person. The scrambled ID claimed data of National Health Insurance (NHI) from June 2001 to December 2002 were used to identify varicella cases from primary and secondary diagnostic codes and determined the complication and direct medical resource consumption patterns. A total of 137,770 persons with varicella were identified from claimed data. The incidence rate of varicella was 0.61 per 100 total population per year. The most common complication rate within 1 month after confirm varicella diagnosis was secondary infections (7.08%) and pneumonia (1.66%). Hospitalization rate within 1 month after confirmed as varicella was 11.96 cases per 100 thousand population. Hospitalization rate among Varicella with hemorrhagic was highest (59.2 per 100 cases). The medication fee related with varicella was around 105.62 millions per year. The average medical fee was 847NTD per varicella case. Varicella complications among immunocompromised person were more severe than healthy persons. The number of hospitalizations with herpes zoster was 1.86 times that with primary varicella. In any future evaluations of the potential cost-effectiveness of universal varicella vaccination, it will be critical to consider the additional impact of vaccination on medical costs due to herpes zoster as well as to varicella.

Keywords : varicella ; chickenpox ; complication ; medical utilization ; immunocompromised children