EFFECTIVENESS OF INFLUENZA VACCINATION IN PREVENTION OF INFLUENZA-LIKE ILLNESS AMONG INHABITANTS OF OLD FOLK HOMES

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Abstract. The aims of the study were to determine the attack rate of influenza-like illness among inhabitants of five old folk homes nationwide using influenza vaccine as a probe and the effectiveness of influenza vaccination in prevention of influenza-like illness. We conducted a non-randomized, single-blind placebo control study from June 2003 to February 2004. VAXIGRIP® 2003 Southern hemisphere formulation was used. Among 527 subjects, the attack rates of influenza-like illness in the influenza vaccine group were 6.4, 4.6 and 2.4% during the first, second and third 2-month periods, respectively. The attack rates of influenza-like illness in the placebo group were 17.7, 13.8 and 10.1%. Influenza vaccination reduced the risk of contracting influenza-like illness by between 14, and 45%. The vaccine effectiveness in reducing the occurrence of influenza-like illness ranged from 55 to 76%, during the 6-month study follow-up. The presence of cerebrovascular diseases significantly increased the risk of influenza-like illness (p < 0.005). Vaccine recipients had fewer episodes of fever, cough, muscle aches, runny nose (p < 0.001) and experience fewer sick days due to respiratory illness. Subjects who received influenza vaccination had clinically and statistically significant reductions in the attack rate of influenza-like illness. Our data support influenza vaccination of persons with chronic diseases and >50 year olds living in institutions.