Effect of influenza vaccine on prevention of acute attack of chronic airway disease in elderly population:a randomized controlled trail.

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August 7, 2021

Abstract

Objective To investigate the effect of influenza vaccination on prevention of acute attack in elderly patients with chronic airway disease, and to provide evidence for the prevention and control strategy of chronic airway disease in elderly population. Methods Elderly patients in Linquan County of Anhui Province of China who under stationary phase of chronic airway disease were selected and randomly vaccinated with tetravalent or trivalent influenza vaccine. The number of patients with acute attack, the number of outpatients with acute attack, the number of outpatients, the number of inpatients, the number of inpatients, the total cost of patients, the cost of outpatients, the cost of hospitalization and the length of hospitalization were collected before vaccination and after one year follow up. Results A total of 348 subjects were included in this study, 248 were vaccinated with trivalent vaccination and 100 were vaccinated with tetravalent vaccination. There was no significant difference in age and sex ratio among two vaccination groups. The ratios of acute attack, outpatient visits and hospitalization, and number of outpatient visits, number of hospitalizations, total medical expenses, outpatient expenses and hospitalization expenses were significantly higher before vaccination than those after vaccination in both trivalent vaccination group and tetravalent vaccination group. While, there was no significant difference in the length of stay between before and after vaccination in neither trivalent vaccination group nor tetravalent vaccination group. The protection effect between trivalent vaccination group and tetravalent vaccination group was not significant. Conclusion Influenza vaccination can effectively prevent the acute attack of chronic airway disease and delay the progress of the chronic airway disease.

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