Clinical Audit on Pneumococcal Vaccination

Lee CL, Wong KW, Wong TK, Chao DVK
Department of Family Medicine and Primary Health Care, United Christian Hospital, Kowloon East Cluster

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Introduction
Introduction: Pneumococcal infection represents a wide range of diseases caused by the bacterium Streptococcus Pneumoniae. Invasive pneumococcal diseases have serious complication carrying high mortality rate in the elderly. Evidence showed that the 23-valent pneumococcal polysaccharide vaccine (23vPPSV) could reduce the incidence of invasive pneumococcal disease. Family physicians have an important role in disease prevention and anticipatory care. Potential areas for enhancements were observed in the process of pneumococcal vaccination. Therefore, an audit on pneumococcal vaccination was conducted.

Objectives
Aim: To enhance the pneumococcal vaccination process and to improve coverage in the target population in our clinic. Objectives: 1. To define the criteria and standard of care on pneumococcal vaccination according to local and international evidences. 2. To evaluate the process of providing pneumococcal vaccination. 3. To identify area for enhancement and devise strategies for implementation of changes. 4. To evaluate performance after implementation of changes. 5. To improve coverage rate of pneumococcal vaccination.

Methodology
Methodology: Patients aged 65 years old or above on attendance were included. The consultation summaries and computer vaccination records during the periods 1st October 2011 to 31st March 2012 (first audit cycle) and 1st April 2012 to 31st October 2012 (second audit cycle) were reviewed. After evaluation of the results of the first cycle, areas for enhancement in patient care were identified and discussed in a practice meeting in our clinic. Improvement measures implemented include educational presentation, review meetings, introduction of guidelines, education pamphlet and consultation templates. Process indicators included documentation of previous PPSV status, promotion of PPSV in unvaccinated patients and proper documentation of explanation and checking contraindication. Outcome measures included the total vaccination rate and the percentage of patient agreed with vaccination after physician’s advice. We set a vaccination rate of 75% in the target
population.

**Result**

Results: 372 patients from each cycle were randomly selected in the audit analysis. 2 out of 3 process indicators and all outcome measures achieved the set targets in the second cycle. 91.9% of cases had documented record of pneumococcal vaccination status in the second cycle. 54.2% of unvaccinated patients agreed to receive pneumococcal vaccination after doctor's advice. The vaccination rate rose from 59.1% in the 1st cycle to 77.2% in the 2nd cycle.