

Adult anti-pneumococcal primo-vaccination: what can the pharmacist do to achieve better implementation of the guidelines?

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Background In adults, the incidence and mortality of invasive pneumococcal disease (IPD) increase incrementally with age, from 3,8/100 000/year for adults aged 18-34 years to 36,4/100 000/year for adults over 65 years of age. In 2014, the Belgian Superior Health Council defined the primo-vaccination scheme against pneumococcal disease for adults as PCV-13 followed by the administration of PPSV-23 at least 8 weeks later. Depending on the subgroup, a booster of PPSV-23 after 5 years is recommended/can be considered. The target group for this vaccination is divided into following subgroups: 1) adults (19-85 years old) with high risk (immune compromised patients, patients suffering from cerebrospinal fluid leaks or having cochlear implant(s)), 2) adults (50-85 years old) with comorbidity, 3) healthy adults 65-85 years old.

Purpose This trial aims 1) to assess how many patients did receive both vaccines; 2) to assess if special attention is needed for the subgroup of adults between 50 and 64 years old with comorbidity?

Method This study was a cross-sectional analysis of data extracted from the electronic pharmaceutical record (EPHR) system from pharmacies using Officinall (a pharmacy dispensing software). Data were retrospectively collected through EPHR review. Included patients were 18 years or older. Overall, 56 pharmacies agreed to participate.

Findings 1) Data from 5010 patients were analysed. Between 1/1/2014 to 31/12/2017 they received 6788 vaccines. From the 2160 patients who received a PCV-13, 883 (40,9 %) received a PPSV-23 within 32 weeks, but 7 patients received the second vaccination 32 to 52 weeks after the first one. 2) To analyse the role of comorbidity, the completeness of the EPHR per patient was important. Only 4696 patients had all information in the records, of which 868 patients were between 50 and 64 years old. Diseases are not formally registered in Belgian pharmacy software. But from what can be concluded from the EPHR, there were 646 (72,4%) patients with chronic cardiovascular disease, 191 (22,0%) patients with chronic pulmonary disease, 128 (14,8%) chronic kidney patients and one (0,12%) patient with a chronic liver disease. In view of the prevalence of these diseases in the Flemish population, it can be assumed that especially chronic lung patients, but also chronic kidney and liver patients are not sufficiently vaccinated.

Conclusion In view of their risk of invasive pneumococcal disease, chronic lung-, liver- and kidney-patients should be encouraged more to seek vaccination. In addition, the adherence to the optimal vaccination scheme should also be monitored, and pharmacists have a role in this. The fact that these vaccines are not reimbursed, can be a barrier.