Drug-Related Problems Among Elderly Comprehensive Medication Review Patients

Objective: To describe the DRPs reported to physicians by Finnish pharmacists during collaborative Comprehensive Medication Review (CMR) among elderly outpatients, and the challenges met when using the PCNE DRP Classification in the coding.

Method: Community pharmacists (n=26) attending a 1.5 year training to qualify in CMR conducted CMRs as a part of the training. Two researchers coded the pharmacists' findings and the interventions resulting of the reviews from written patient case reports (n=126) by using the PCNE Classification for DRPs version 5.01.

Results: The pharmacists reported altogether 785 DRPs, on the average 6.5 per patient. A majority of the DRPs (75%) and their causes (78%) were related to drug choice and dosing. Inappropriate drug choices (17% of the all DRPs) and indications with no treatment (16%) were the most common individual problems. In 51% of DRPs (n=403) the CMRs resulted in drug-level interventions, most often stopping a drug (32%). The researchers could not code problems related to economical issues. They also had to add new problem, cause and intervention classes to the original PCNE classification. E.g. problems related to inappropriate dosing intervals or dosing times (nitrates without a washout period, statins taken in the morning) couldn't be coded. Causes-section lacked especially patient-related causes. A new problem code presented in PCNE Classification V6.0 to address problems concerning inappropriate drug effect would be useful in CMR. However, the problem code “Drug dose too high” should not be removed (based e.g. on the drug dose-related recommendations in the Beers criteria) without adding another suitable code (e.g. P2.4. Dose-related risk for ADR).