

CONFERENCE ABSTRACT

Multidisciplinary medication review in an ambulatory primary care setting using the GheOP(3)S-tool for community-dwelling older patients

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Introduction

The Ghent Older People's Prescriptions community Pharmacy Screening (GheOP3S)-tool was developed as an explicit screening tool to detect drug-related problems (DRPs) and to help in performing medication reviews (MRs). Aim of the study (1) to describe the detected DRPs and the pharmacists' recommendations with their acceptance and implementation rate; and (2) to assess the potential impact of the intervention.

Methods

Prospective observational study in community-dwelling patients (≥ 70 years, ≥ 5 medications). Community pharmacists performed MRs resulting in the documentation of DRPs with recommendations. Acceptance was recorded during face-to-face pharmacist-general practitioner (GP) meetings. Implementation was assessed after 3-month follow-up. The potential impact on the number of medications, the number of DRPs, the anticholinergic and sedative burden, and medication costs was assessed by a pre-post comparison of the patients' medication lists.

Results

Twenty-one pharmacists detected 470 DRPs with a median (IQR) of 6 (4-8) per patient in 75 patients. Most prevalent recommendations were stopping (22.9%) and substituting (18.9%) medication. Overall acceptance was 66.9%. At follow-up, 42.9% of all recommendations were implemented. The number of GheOP3S-criteria ($p < 0.001$) and the DBI scores ($p = 0.033$) significantly differed from baseline. This was not the case for the number of chronic medications and medication costs.

Discussions

Pharmacists detected a high number of DRPs, which highlights the relevance of performing MRs in this population. Most prevalent DRPs comprised the overuse/misuse of potentially inappropriate medications and underuse. Acceptance and implementation could be improved by prioritizing actions, by better informing patients and GPs about the potential inappropriateness of medications, by improving collaboration between pharmacist and GP and by performing extra follow-up moments. The potential positive

impact on the number of DRPs and the anticholinergic and sedative burden (DBI scores) could have clinical implications for the patient.

Conclusions

This study demonstrates a relatively high acceptance of pharmacists' recommendations, although implementation could be improved. Pharmacist-led MRs with multidisciplinary meetings using the GheOP3S-tool can have a potential impact on the number of DRPs and the anticholinergic and sedative burden of patients.

Lessons learned

The use of an explicit screening tool such as the GheOP3S-tool should be supplemented with a patient interview to detect additional DRPs, as 26% of all detected DRPs could only have been detected by interviewing the patient. This underlines the necessity of patient involvement in the MR process. In addition, MR is a time-consuming process that must be reserved for high-risk patients.

Limitations

There was a potential participating bias (for pharmacists and GPs) as they were probably more motivated to participate. They also specifically selected patients whom they thought could benefit from a MR (potential selection bias). The observational design could only detect a 'potential' impact of the intervention on different outcomes. There was no assessment of medication appropriateness or clinical relevance of pharmacists' recommendations due to incomplete data.

Suggestions for future research

Future larger sampled (longer-term) studies should determine the impact of this MR process on patient-centred outcomes. A full cost-effectiveness analysis should also be performed in the future.