A Review of Potentially Inappropriate Prescribing in Over 65’s in Livinghealth Clinic

Abstract:

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Polypharmacy and potentially inappropriate prescribing (PIP) are areas of growing importance and concern. Optimising drug prescribing in older people is challenging and complex at the individual GP level. At a national level it is an important public health issue for the care and management of the ageing Irish population. The aim of this study was to estimate the prevalence of PIP in Livinghealth Clinic using the STOPP (Screening Tool for Older Persons’ Prescribing) criteria and to identify areas of PIP. LHC audits demonstrated PIP levels of between 16% and 20% in patients aged 65 years and over. Findings were similar to other studies in that proton pump inhibitors (PPIs) at maximum therapeutic dosage for >8 weeks, and long acting benzodiazepines prescribed for >1 month, continue to be significant areas of PIP. However, not all identified PIP may be inappropriate. The STOPP criteria are a useful screening tool for older persons prescribing, but are best used together with clinical assessment and discretion.

Introduction

More than 1 in every 5 elderly patients attending primary care services in Ireland is being prescribed an inappropriate medication¹. Polypharmacy is loosely defined as being prescribed > 6 medications on a recurring basis. PIP is defined as taking a medication for the wrong indication, without indication, at the wrong dose or for the wrong length of time. PIP has been formally defined by the Biers Criteria, the IPET criteria², and the STOPP/START criteria. PIP in the over 65s has been associated with increased levels of morbidity and mortality³, poor compliance⁴, and to be financially wasteful⁵.

Methods

For the baseline audit, through random sampling, 56 patients over 65 years were identified who were on a regular prescription and 65 STOPP indicators were applied to this group. For the review and post-implementation audits the full STOPP criteria was applied to 118 patients, all of whom were over 65 years GMS patients on regular prescriptions. Each patients medical history and prescriptions were checked.

Results

In the baseline audit, 30 patients were taking > 6 medications on a regular basis. 3 patients (10%) were in breach of the STOPP criteria. The age distribution of inappropriate prescribing was 22% 65-69 years, 39% 70-74 years, and 39% 75+ years. (55% = M, 45% = F). Age and gender distribution were similar in subsequent audits. In the review audit, 33 patients were identified in breach of the STOPP criteria with 42 breach incidences. After implementation of the STOPP criteria another audit identified 34 patients to be in breach of the STOPP criteria, with 43 breach incidences. The top 4 PIP breaches were: patients prescribed aspirin without a history of coronary, cerebral or peripheral arterial symptoms or occlusive event. Patients prescribed a PPI at full therapeutic dosage for > 8 weeks. Patients prescribed long acting benzodiazepines for > 1 month, and patients prescribed any regular duplicate drug class.

Discussion

The national level for PIP in primary care is between 21.4% - 35%⁶. This latter figure is based on an Irish study in which 30 STOPP indicators were applied to prescription claims data in patients 70 years and over. LHC initial audit finding (16%) was below the national level however in subsequent audits PIP was higher (29%). Not all the identified PIP may be inappropriate, the STOPP criteria are a useful screening tool for older persons prescribing in primary care, but are best used together with GP assessment and judgement. The small sample size is a limitation of this study. Moreover a longer period of time post-implementation may have yielded improved PIP results. The data for the PIP national level is over 5 years old so may not reflect current national levels.

The total number of prescriptions issued in LHC during August & November 2014 was 17,231 and 17,551 respectively. This confirms GP prescribing workload and the significance of selecting the appropriate medications. Subsequent to these audits a laminated copy of the STOPP criteria is in each consulting room. When GPs are reviewing prescriptions they document in the patients notes if they made the appropriate change, or that they didn’t make the change but had a definite reason, or that a change would be done at the next review. EK Walsh et al.³ discussed how a 10 minute dedicated medication review reduces polypharmacy in elderly patients and how this may reduce patients risks of PIP associated morbidity and mortality as well as wasteful practices. The STOPP criteria is a useful tool to help identify PIP in elderly patients, many of whom have complex medical comorbidities and demanding pharmacological needs and we would encourage GPs to use it. In our small study we found
polypharmacy to be one of the main determinants of PIP and that the potential for PIP increases with increasing age. National targeted interventions are required to improve the quality of prescribing in these patient groups. In conclusion, through our structured re-audit programme follow-up audit will be conducted to assist improving processes of care and patient safety.

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References

Comments: