Polypharmacy Optimizing Method (POM): Effect on appropriate prescribing



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Background

In order to assist general practitioners (GP's) to optimize polypharmacy, we have developed a method, based on 6 questions with checklists:

- 1) Is undertreatment present?
- 2) Does the patient adhere to the medication?
- 3) Which drug(s) is (are) not indicated?
- 4) Which adverse effects are present?
- 5) Which relevant interactions are to be expected?
- 6) Should the dosage, the dosefrequency, and/or form of the drug be adjusted?

The aim of this study is to evaluate the usefulness of POM to improve appropriate prescribing of complex polypharmacy.

Methods

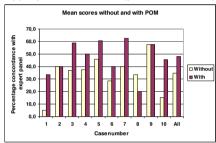
45 GP's received at random 2 out of 10 cases of geriatric patients, with a mean of 7,9±1,2 problems treated with 8,7±3,1 drugs. The first case was optimized without knowledge of POM. After a short instruction the second case was optimized with POM.

The outcomes were compared to appropriate answers, composed by consensus of an expert panel of 4 geriatricians/clinical pharmacologists. Data were analyzed with a linear mixed effect model.

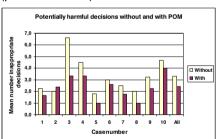
Results

Use of POM showed a significant improvement of optimization. The percentage right decisions increased from 34,7% to 48,1% with POM (p=0,0037). The number of potentially harmful decisions decreased from 3,3 to 2,4 with POM (p=0,0046).

Appropriate decisions (per case and all)



Potentially harmful decisions (per case and all)



Conclusion

The Polypharmacy Optimizing Method improves appropriate prescribing of complex polypharmacy.

