



Title	Clinical Medication Review by a Pharmacist of Patients on Repeat Prescriptions in General Practice: A Randomized Controlled Trial
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Aim

To determine whether a suitably trained clinical pharmacist can effectively review the repeat clinical medications of elderly patients in general practice, and to: 1) assess whether clinical medication review by a pharmacist is a cost effective way to improve the extent, cost, and quality of clinical control of repeat prescribing compared with normal procedures; 2) evaluate the effect of medication review clinics on the number of practice consultations, outpatient consultations, hospital admissions, and deaths; 3) identify the types of interventions.

Conclusions and results

The mean numbers of individual medication changes per patient were 2.2 in the intervention group and 1.9 in the control group. The numbers of repeat medication items rose in both groups, but the rise was significantly less in the intervention group. Medication costs rose in both groups, but the rise was significantly less in the intervention group. The cost saving on medication in the intervention group compared with the control group was £4.75 per 28-day month. Extrapolated for 1 year, the saving is £61.75 per patient. No difference was found between the groups in the numbers of outpatient consultations, hospital admissions, or practice consultations over the 12-month period. The intervention group had fewer deaths than the control group, but the difference was not statistically significant. Over the 12 months, 97% of the intervention group had medication reviews vs 44% in the control group. A recommendation was made in 258 of the 591 (44%) patient consultations. Only 28 patients (5%) needed referral to a GP, and 25 patients (4%) needed referral for a test. The pharmacist handled all other medication-related problems. A recommendation was made for 603 of the 2927 repeat medications (21%). Recommendations were 'stop the medicine' (118 medicines, 4% of all medicines) and 'technical', eg, a generic switch or removal of a 'redundant item' from repeat list (177, 6%). Of the 603 medication interventions, 395 (65%) were handled by the pharmacist alone without a GP. Recommendations and permission were sought from a GP for 208 interventions (34%). The pharmacist's advice was accepted and acted upon in 179 instances (86%).

Recommendations

A suitably trained pharmacist can consult with elderly patients to review them, their medications, and conditions for which drugs were prescribed. This resulted in more medication review and intervention than if the pharmacist was not involved. Pharmacist intervention led to fewer drugs used in the intervention group than in the control group, and thus to major net financial savings. There was no evidence on adverse effects on use of health services.

Methods

RCT of clinical medication review in elderly patients on repeat medication in general practice. The control group received normal GP care. Patients in the intervention group were invited to consult with the pharmacist at the surgery. The pharmacist assessed the patient, the illnesses, and the medication regimen, and made recommendations.

Further research/reviews required

The study demonstrates the potential of an extended role for pharmacists, but its reproducibility as a service modality needs further testing. Only one, very experienced, pharmacist was involved, working in 4 selected Leeds practices. It is important to reproduce the results with more pharmacists in large numbers of practices over a wider geographical and socioeconomic area before fundamentally changing services and the role of the pharmacist.

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