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Pharmacy
Department, Lothian
Primary Care Trust,
Edinburgh
F. Reid
P. Murray

Lothian Pharmacy
Academic Practice
Unit, Newbyres
Medical Group,
Gorebridge,
Midlothian
M. Storrie

Implementation of a clinic for pharmacist review of hypertensive patients in primary care

F. Reid, P. Murray and M. Storrie

Focal points

- A pharmacist-led hypertension clinic was set up in one general medical practice as a means of implementing the British Hypertension Society guidelines
- Attendance at the clinic resulted in significant improvements in achievement of target level and audit standard blood pressure levels in existing hypertensive patients and newly diagnosed patients
- Attendance at the clinic resulted in significant improvements in prescription of aspirin and statins for primary prevention of coronary heart disease and secondary prevention of atherosclerotic vascular disease
- A pharmacist-led hypertension clinic, working in partnership with the primary care team, can significantly improve control of blood pressure and prescription of medicines to reduce incidence of atherosclerosis

Introduction

The prevalence of hypertension is increasing in the United Kingdom.^{1,2} Guidelines have been published for management of hypertensive patients recommending that strategies be implemented within primary care.^{3,4} The guidelines specify a target level blood pressure (BP) and an audit standard BP, which is the minimum BP to be achieved in the clinic setting. In addition they identify patients requiring therapy with aspirin, statins or both for prevention of coronary heart disease (CHD).^{3,4}

This study investigated the clinical impact of a pharmacist-led clinic on BP control and the prescription of medicines for primary prevention of CHD and secondary prevention of atherosclerotic vascular disease.

Method

This was a prospective intervention study in one general medical practice over a 10-month period. All patients with hypertension were identified from the practice computer system and the diagnosis was confirmed by interrogation of the medical notes. A total of 352 patients with hypertension was invited to attend the clinic, of whom 160 (45.5 per cent) did attend. Eighty-two patients were direct referrals from general practitioners of which 36 were newly diagnosed patients. Of the total of 242 patients, 111 (46 per cent) were male, 54 (22 per cent) were secondary prevention candidates and 188 (78 per cent) were assessed for primary prevention of CHD.

A semi-structured questionnaire was devised to assess patient opinion of the service. Community pharmacists were trained to measure blood pressure and deliver pharmaceutical care to patients via a repeat dispensing scheme. Statistical analysis was using a Chi-square test.

Results

BP control For existing patients (n=206), pre-clinically 113 patients (55 per cent) met the audit standard compared with 195 (95 per cent) post-study, P<0.001. Seventy-two patients (35 per cent) were at target level BP on entry compared with 173 (84 per cent) post-study, P<0.001.

For new patients (n=34), two patients did not require medication for hypertension. Twelve patients (35 per cent) met the audit standard pre-clinic compared with 32 (94 per cent) after attending the clinic, P<0.001. Seven patients (21 per cent) were at target level pre-clinically in comparison with 30 (88 per cent) post-study, P<0.001.

CHD risk management For primary prevention candidates (n=188), on assessment 126 patients met criteria for treatment with an antiplatelet agent and 37 for a statin. On entry 17 patients (13 per cent) received treatment with an antiplatelet agent which increased to 101 (80 per cent) post-study, P<0.001. Four patients (11 per cent) appropriately received a statin pre-study in comparison with 34 (92 per cent) post-study, P<0.001.

For secondary prevention candidates (n=54), 54 patients merited treatment with an antiplatelet agent and 36 with a statin. Pre-study, 40 patients (74 per cent) received an antiplatelet agent which increased to 52 (96 per cent) post study, P<0.01. Twenty-three patients (64 per cent) received a statin pre-study in comparison with 35 (97 per cent) post-study, P<0.01.

Patient questionnaire A total of 110 patients (75 per cent) of 147 returned the questionnaire. Some 97 per cent of respondents specified that they wanted the clinic to continue, 76 per cent indicated understanding of hypertension increased through attending the clinic and 81 per cent were in favour of pharmacist prescribing.

Repeat dispensing system Thirty-seven patients were offered referral to the community pharmacist and 12 (32 per cent) accepted.

Discussion

This study has shown that a pharmacist-led hypertension clinic, working in partnership with the primary care team, can contribute towards improved control of blood pressure and prescription of medicines to reduce incidence of atherosclerotic vascular disease.

References

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