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Investigating the contribution of community pharmacists in identifying, understanding and meeting the needs of patients with diabetes, in collaboration with other health care professionals

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Focal points

- Community pharmacists and pharmacy staff utilised patient-completed questionnaires to identify, understand and address patients' diabetes needs, in collaboration with other health care professionals
- Community pharmacists significantly improved patients' satisfaction with information received about their medicines for diabetes
- All patient problems identified by the community pharmacists were appropriately managed in the pharmacy
- All pharmacist to GP patient-referrals were appropriate
- Community pharmacists, in partnership with other health care professionals, have a valuable contribution to make in identifying, understanding and meeting the need of patients with diabetes, within the community pharmacy

Introduction

Previous studies have identified the importance of patient education in the management of diabetes and how specific interventions aimed at improving patient knowledge can improve diabetes control and decrease the incidence of diabetic complications.[1] Of patients with diabetes, 93 per cent do not adhere to all aspects of their treatment[2] and up to 43 per cent are non-compliant with glucose monitoring.[2]

Few published studies have investigated how interventions made by community pharmacists in collaboration with other health care professionals can meet the needs of patients with diabetes.

Method

The service was supported by the Hillingdon Primary Care Trust (PCT) modernisation fund, and developed by the service co-ordinators in partnership with the PCT pharmaceutical adviser/diabetic lead.

Four community pharmacists and their staff attended a one-day training workshop, focusing on the delivery of the service.

Participants were each required to recruit — and follow-up on five further occasions over a 12-month period — 50 adult patients entering the pharmacy and taking medication for diabetes, using two patient-completed validated questionnaires[3,4] as a tool to identify and address patients' needs.

Based upon standards published in the National Service Framework for Diabetes[5], and the PCT diabetes management guidelines, the service standards were that at least 80 per cent of patients should have their needs identified and receive appropriate advice and support on diabetes, healthy lifestyle factors, medication for diabetes and self-monitoring and be referred to their GP if these standards were not met.

A service protocol for participating pharmacies and primary care health care professionals provided a systematic patient-centred approach. It incorporated a two-way referral process utilising referral forms permitting patient referral between pharmacists, GPs and other health care professionals for monitoring, support and advice. Statistical analysis was using the Wilcoxon signed rank test with $P<0.05$ considered significant.

Results

For 83 recruited patients, 143 patient consultations were made and 265 problems identified by community pharmacists: "poor understanding of medicines" (23 per cent, n=62), "poor understanding of diabetes" (17 per cent, n=46), and "lifestyle modification needed" (17 per cent, n=44) were the most frequent problems encountered. Sixty-six per cent of problems (n=174) were identified at recruitment, and 27 per cent (n=71) and 8 per cent (n=20) at 1 and 3-months post-recruitment respectively. Patients' satisfaction with information received about their medicines[3] improved significantly as a result of pharmacists' interventions from a mean score of 9.4 (n=26) pre-intervention to 3.0 post-intervention. Patients' concerns or misbeliefs about their medicines[4] reduced significantly as a result of pharmacists' interventions from a mean score of 4.4 (n=26) pre-intervention to 2.6 post intervention.

Pharmacists made 24 referrals to GPs in line with the PCT referral criteria. Of these, 63 per cent (n=15) were for a further review of the patient's monitoring parameters (blood glucose, HbA1c, cholesterol, and blood pressure). Other health care professionals referred 8 per cent (n=7) of recruited patients to pharmacists for support and advice.

Discussion

Six months into the service, all service standards have been met, demonstrating that community pharmacists, in partnership with other health care professionals, have a valuable contribution to make in identifying, understanding and addressing the needs of patients with diabetes. Due to the success of the service, the PCT has endorsed an extension of this service through three additional community pharmacies in late 2003.

Since the launch of the service, ongoing and future developments include obtaining sponsorship in the last two months for monitoring equipment (blood lipid, HbA1c, blood glucose, and blood pressure) to provide a full in-pharmacy diabetes monitoring service. Results will be analysed upon service completion. Feedback from all involved has been utilised to improve the service model and service attainment has been raised for the next rollout of the service.

References

1 McClean MT, McElnay JC, Andrews J. The importance of patient education and patient involvement in the treatment of diabetes. Pharm J 2000;265:R20.
2 Nichols-English G, Poirier S. Optimising adherence to pharmaceutical care plans. J Am Pharm Assoc 2000;40:475–85.
3 Horne R, Hankins M, Jenkins R. The satisfaction with information about medicines scale (SIMS): a new assessment tool for audit and research. Qual Health Care 2001;10:135–40.
4 Horne R, Weinman J, Hankins M. The beliefs about medicines questionnaire: the development and evaluation of a new method for assessing the cognitive representation of medication. Psychology and Health 1999;14:1–14.
5 Department of Health. National service framework for diabetes. Standard 2: London: The Stationery Office; 2001.