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Collaborative care

The role of practice nurses

Background
Comorbid depression can occur with diabetes and heart disease. This article reports on a feasibility study focusing on additional roles for practice nurses in detecting and monitoring depression with other chronic diseases.

Method
A convenience sample of six practices in southeast Australia was identified. Practice nurses received training via a workshop, which included training in the use of the Patient Health Questionnaire, to detect depression.

Results
The 332 patients who participated in the project each received a comprehensive health summary to assist with self management. Depression was identified in 34% of patients in this convenience sample. After 18 months implementation, practice nurses were strongly in favour of continuing the model of care. General practitioners gave highly favourable ratings for effectiveness and willingness to continue this model of care.

Discussion
Practice nurses can include depression monitoring alongside systematic care of diabetes and heart disease. A randomised trial is currently underway to compare the clinical outcomes of this model with usual care.

In patients with either type 2 diabetes mellitus or coronary heart disease the presence of depression leads to increased morbidity and mortality.[1,2] This comorbid depression is often missed in routine general practice.[3] To address these problems we describe the implementation of collaborative care based on new roles for practice nurses (PNs), information technology solutions, and a shift of focus toward self care. A similar model of collaborative care has been shown overseas to be an effective way to improve the management of depression in primary care.[4]

Method

A feasibility study focusing on additional roles for PNs. Six practices in southeast Australia were selected by invitation on the basis of having PNs available to participate in the study. Patients were selected by the general practitioner from a disease registry or opportunistically invited to attend the PN before review by the usual doctor. Regular follow up checks by the PN/doctor team were organised at 3–6 month intervals according to clinical need. The GP Management Plan template allowed de-identified collection and feedback of data, as well as prompting review appointments. Structured interviews were conducted with all PNs and GPs in the study to evaluate the usefulness of the collaborative model.

Ethics approval was obtained from the Flinders University Social and Behavioural Research Ethics Committee.

The workshops

Nurse training workshops prepared PNs for new roles including:

- use of the Patient Health Questionnaire (PHQ-9)[5] to detect and monitor depression and to assist the GP in clinical treatment of depression
- physical checks and pathology results checklist generated from National Heart Foundation and Diabetes Australia guidelines
- coordinating and ensuring follow up and appropriate allied health referrals
- helping patients understand and set goals related to depression, lifestyle changes, and targets for physical and chemical measures
- drafting a GP Management Plan

- automated collection and feedback of results
- ensuring completion of Medicare requirements for chronic disease item numbers.

Results

For patients

The 332 patients who participated in the project each received a comprehensive health summary to assist with self management. Patients experienced PN led, systematic, protocol driven care. Depression was identified in 34% of patients in this convenience sample. In this model, mental health was being addressed as part of comprehensive care.

For practice nurses

Evaluation of the training workshops showed significant improvement in knowledge and confidence in the identification and assessment of depression and significant improvement in undertaking case management tasks. After 18 months implementation, nurses were strongly in favour of continuing the model of care. A supportive GP and protected time of at least 30 minutes to consult were the main enablers.

For GPs

General practitioners had to be willing to accept scrutiny of patient care by PNs using 'best practice' guidelines to highlight gaps. Despite this barrier, GPs gave highly favourable ratings for effectiveness and willingness to continue this model of care. Practices were able to claim Medicare rebates for GP Management Plans, Team Care Arrangements and completion of Diabetes Annual Cycles of Care.

Discussion

The business case did suggest that, by completing GP Management Plans or Team Care Arrangements where applicable, and Diabetes Annual Cycle of Care Medicare item numbers, practices could more than recoup the additional costs of the PN's time. It was both feasible and acceptable for collaborative care to be implemented for the management of patients with diabetes or coronary heart disease. Our training package and computer templates can equip PNs to successfully take on the role of screening for, and monitoring of, comorbid depression. A randomised trial is currently underway in three regions of Australia (urban, regional and rural) to compare the clinical outcomes of this model with usual care.[6]

Implications for general practice

- Depression in patients with type 2 diabetes or coronary heart disease is a risk factor for poor outcome, but it is underdiagnosed.
- Practice nurses can include depression monitoring alongside systematic care of diabetes and heart disease.
- Nurse led chronic disease clinics for diabetes and heart disease are feasible, acceptable and affordable.

Conflict of interest: none declared.

References

1. Lin EH, Katon W, Von Korff M, et al. Relationship of depression and diabetes self-care, medication adherence, and preventive care. Diabetes Care 2004;27:2154–60.
2. Bunker SJ, Colquhoun DM, Esler MD, et al. 'Stress' and coronary heart disease: Psychosocial risk factors. Med J Aust 2003;178:272–6.
3. Harris MF, Zwar NA. Care of patients with chronic disease: The challenge for general practice. Med J Aust 2007;187:104–7.
4. Hunkeler EM, Katon W, Tang L, et al. Long term outcomes from the IMPACT randomised trial for depressed elderly patients in primary care. BMJ 2006;332:259–63.
5. Kroenke K, Spitzer RL, Williams JBW. The PHQ-9: Validity of a brief depression severity measure. J Gen Intern Med 2001;16:606–13.
6. Morgan M, Dunbar J, Reddy P, Coates M, Leahy R. The TrueBlue study: Is practice nurse-led collaborative care effective in the management of depression for patients with heart disease or diabetes? BMC Fam Pract 2009;10:46.

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