Research

Battling depression

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Depression is a major public health problem, which is predicted to be second only to cardiovascular disease as the leading cause of disease-related disability worldwide by 2020.[1] It is already the leading cause of disease-related disability among women, and in most countries, the prevalence of depression among women from puberty to menopause is twice that among men of the same age.[1] In Canada, the 12-month prevalence of depression among people aged 18–65 is 4.8% (5.9% of women, 3.7% of men), with the sex-based disparity being even greater during the child-bearing years.[2] Certain subgroups of Canadians are at even higher risk. For example, Aboriginal people who live off-reserve are 1.5 times more likely than other Canadians to be depressed over a 12-month period. Depression rates are slightly higher in the United States and slightly lower in Europe but follow the same sex-based pattern. In addition to personal suffering, depression has a detrimental effect on general health, family well-being, work productivity and health care costs. It may also lead to self-injury and suicide.[2]

Unfortunately, depression is underrecognized and poorly treated by both primary care physicians and specialists. Numerous studies in developed countries report that only half of patients with depression in primary care or general hospital settings are identified and even fewer are adequately treated.[3] Most patients with depression in Canada and elsewhere are treated exclusively by primary care physicians. Various reasons have been proposed for the low rate of identification, including time pressure, competing comorbidities, stigma, physician preference for dealing with physical conditions, uncertainty about treatment efficacy and patient denial. Screening has been proposed as a method of increasing identification of depression in primary care and in perinatal, cardiovascular and diabetes mellitus clinics. But does screening alone help the detection, treatment and outcomes of depression?

In this issue of *CMAJ,* Gilbody and colleagues addressed this question in a rigorous Cochrane systematic review and meta-analyses of 16 randomized controlled trials in nonmental health settings.[4] The authors found that screening and case-finding instruments were associated with a modest increase in the recognition of depression by clinicians (relative risk [RR] 1.27, 95% confidence interval [CI] 1.02 to 1.59). When questionnaires were administered to all patients and the results given to the clinicians irrespective of the patient's baseline score, there was no impact on recognition of depression (RR 1.03, 95% CI 0.85 to 1.24). However, the authors reported that there was a borderline significant effect on the overall management of depression (RR 1.30, 95% CI 0.97 to 1.76) and that there was no evidence of an influence on the prescription of antidepressant medication (RR 1.20, 95% CI 0.87 to 1.66). Seven studies provided data on the impact of screening on depression outcomes, but there was no evidence of an effect (standardized mean difference −0.02, 95% CI −0.25 to 0.20). They concluded that recommendations to adopt depression screening strategies in isolation are not justified and successful care likely requires organizational enhancements.

Key points

- Screening alone does not improve recognition, treatment or outcomes of depression in primary care or general hospital settings.
- Evidence-based treatments for depression include both antidepressants and cognitive behavioural psychotherapy. Patients may respond differently to specific antidepressants or psychotherapy.
- Systemic, collaborative, multidisciplinary and coordinated programs are needed to improve depression outcomes.

So given that depression is a serious health problem, what might improve its identification, treatment and outcomes? Although the findings by Gilbody and colleagues may surprise some, their findings are consistent with the reports of the Canadian Task Force on Preventive Health Care and their American counterparts, which point out that depression screening needs to be accompanied by accurate diagnosis, effective treatment and follow-up.[5] This suggests that systemic

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changes are needed to improve depression outcomes, but exactly what would this entail? As a start, we should look at what has worked in research settings and other jurisdictions.

A systemic review of the effectiveness of educational and organizational strategies to improve the management of depression in primary care found that effectiveness was usually associated with complex interventions that incorporated clinician education, case management by nurses and greater integration between primary and specialist mental health care.[6] Telephone medication counselling by practice nurses or trained counselors was also found to be effective. However, simple guideline implementation or educational strategies were generally ineffective.[6]

A randomized controlled trial in primary care settings in the United Kingdom recently tested these findings by allocating patients to usual care or to collaborative care with a case manager, coordinated medication support, brief psychological treatment and enhanced specialist and general practitioner communication.[7] The researchers concluded that "collaborative care is a potentially powerful organizational intervention for improving depression treatment in United Kingdom primary care, the effect of which is probably partly mediated through the organizational aspects of the intervention".[7]

An early US study showed that collaborative care models in primary care involving psychologists (to provide short-term psychotherapy to increase adaptive coping) and psychiatrists (to consult on medication) improved treatment adherence, satisfaction with care and clinical outcomes for patients with major, but not minor, depression.[8]

A small US randomized controlled trial that compared usual care and telephone-managed care found that those in the telephone-care group improved significantly more than those in the usual care group.[9] This study also reported that the improvements in depression among those in the telephone-care group was related to improved clinician adherence to treatment algorithms but that it was not related to improved patient adherence to clinician recommendations.[9]

Arguably the most successful trial to date was the large, intensive trial of quality improvements for depression care called "Partners in Care." This trial compared primary care clinics to usual care (mailing of practice guidelines) or to a quality-improvement program. The quality-improvement program was based on obtaining institutional commitment, training local experts to provide clinician and patient education and providing either nurses for patient follow-up about medication or access to trained psychotherapists to provide individual and group cognitive behavioural therapy as outlined in a manual. This program also screened all primary care patients, included educational materials and talks for clinicians and patients, and provided ongoing feedback to clinicians based on record audits. At 6 and 12 months, more patients in the quality-improvement program than in the usual care program had received counselling, used antidepressants at an appropriate dose, had a medical visit for a mental health problem and had seen a mental health specialist. However, the number of overall medical visits did not increase. More importantly, compared with patients in the usual-care group, patients in the quality-improvement group had better outcomes for depression improvement after 6 and 12 months of follow-up and, at 12 months, they were more likely to be working.[10]

We can safely conclude that screening for depression alone in primary care and hospital settings will not improve outcomes. Complex interventions are needed that incorporate systemic interventions that may include depression screening as one component. We need to involve mental health nurses, psychologists, social workers and case managers as well as family physicians and psychiatrists in "shared care" for treatment of depression. Antidepressant drugs are effective treatments for about half of all patients with depression, and cognitive behavioural treatment is also an effective treatment for cases of mild to moderate depression and for reducing its recurrence. Patients with depression may respond differently to specific drugs or psychotherapy, so we need tailored approaches. As depression is a chronic recurring disorder, we also need longer-term strategies to manage it and to prevent recurrences. There is clearly no quick fix, but the sooner we develop interventions that are coordinated, systemic, collaborative, multidisciplinary and evidence-based, instead of our current predominantly sole practitioner model of pill prescription, the sooner we will see improved outcomes with better quality of life and productivity for patients with this prevalent disorder.

Competing interests: Donna E. Stewart is on the advisory boards of Eli Lilly and Wyeth.

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