

Disability from depression: The public health challenge to primary care

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Epidemiologists have identified that depression will soon be the leading cause of disability throughout the world. To inform public health campaigns to reduce this problem, this paper summarizes current scientific knowledge about optimizing the potential of primary care settings to reduce disability by providing effective treatment for depression. To meet this challenge, primary care practices need to be re-engineered: 1) to conduct systematic screening programs to identify depressed patients, 2) to provide depressed patients initial evidence-based treatment, and 3) to monitor treatment adherence and symptom response in treated patients over 2 years. While additional research is needed in developing countries, preliminary evidence indicates that primary care practices re-engineered to improve depression management can make a substantial contribution to reducing depression-associated disability.

• *Depression, Disability, Primary care.*

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Epidemiologists have identified that depression will soon be the leading cause of disability in developed and developing countries throughout the world (1). Far from being the “worried well”, depressed patients report serious impairment across physical and emotional domains at levels comparable with or greater than the impairment associated with eight major chronic physical conditions (2). To inform public health campaigns to reduce this problem, this paper summarizes current scientific knowledge about optimizing the potential of primary care settings to reduce impairment by providing effective treatment for depression.

Why primary care?

National surveys document that 72% of community residents with current major depression in developed countries can be reached in primary care visits they make during the year of their episode (3). Major depression is one of the most common presenting conditions in primary care practices, with published prevalence ranging between 4.8% and 11.9% (4, 5), a range including the 7.0% estimate in Finnish primary care practices (6). Primary care’s increasing focus on the improved chronic disease management makes depression programs of interest to many primary care clinics given depression’s high recurrence rates (7).

What has the field learned about how to improve depression management in primary care? Multiple studies show that primary care practices need to be re-engineered: 1) to conduct systematic screening programs to identify depressed patients, 2) to provide depressed patients initial evidence-based treatment, and 3) to monitor treatment adherence and symptom response in treated patients over 2 years.

Conducting systematic screening

While most depressed individuals do not need encouragement to visit a primary care doctor, the majority of depressed patients are reticent to ask the primary care doctor directly for help with the problem. Instead, an estimated 66% of depressed primary care patients present exclusively with physical problems (8). Most primary care practices rely on primary care clinicians to question patients about depressed mood and/or lack of interest when they suspect depression; however, given the competing demands these clinicians face, 64% of depressed patients go unrecognized (9). Progressive health-care systems have initiated programs to systematically screen primary care patients for depression using a patient-administered 10-item screener known as the Patient Health Questionnaire-9 (PHQ-9) (10). Translated into over 25 languages including Swedish, Finnish, Danish and Norwegian, the PHQ-9 has a sensitivity of

86%, a specificity of 84% and a kappa of 0.55 against ICD-10 criteria for depressive episode, performing better than the HADS or the WHI-5 (11).

Many primary care practices screen patients immediately before their visit, hand-score the screener, and note screening results in the medical record so that primary care clinicians can confirm the diagnosis during the visit. Primary care clinicians confirm the diagnosis by querying patients about positive criteria and ruling out other competing explanations (medical and other psychiatric conditions, medications, and bereavement). Primary care clinicians who utilize the PHQ-9 can use patient responses to differentiate major depression (five plus symptoms) from minor depression (two to four symptoms with no lifetime history), an important consideration in guiding treatment selection. Because the final item in the PHQ-9 asks patients about suicidality, patients who report thoughts of being “better off dead” are carefully assessed for active suicidal ideation (12), with high risk patients referred immediately to mental health specialists. This suicidality question considerably improves primary care assessment of lethality; without systematic screening, only 24% of depressed primary care patients receive any suicidal assessment (13).

Provide initial evidence-based treatment to depressed patients

Primary care clinicians are increasingly recognizing the effectiveness of antidepressant medication and short-term psychotherapy for patients with major depression. However, fewer primary care clinicians recognize that short-term psychotherapy is an effective treatment for minor depression, where antidepressant medication effectiveness is not well established (14).

After confirming that the patient meets criteria for major depression, clinicians initiate a discussion to assess patient knowledge and attitudes about the two evidence-based treatment options: antidepressant medication and short-term psychotherapy. Primary care patients have considerable misinformation about both types of treatment, believing in addictive antidepressant medication and/or infinite psychoanalytic sessions. Most primary care patients who prefer antidepressant medication need additional education on medication, including support for managing any side-effects in the 2–4 weeks before the clinical improvement is observed. Patients who prefer psychotherapy often require help from the primary care team to identify a cognitive behavioral psychotherapist who accepts the patient's insurance. Because primary care patients often do not complete recommended referrals (15), the primary care team needs to check with the depressed patient to make sure they actually completed the referral. Both patient groups need encouragement to undertake concurrent self-care

activities including exercise and social activities with friends (www.depression-primarycare.org).

A small proportion of primary care patients will be skeptical about both antidepressant medication and psychotherapy (16). Rather than prescribe a treatment, skilled primary care clinicians employ motivational interviewing to explore and resolve the patient's ambivalence about whether or which treatment to start (17). Recognizing that these individuals often require time to make new treatment decisions, clinicians continue to revisit depression treatment options with the patient until patients are ready. This approach holds substantially greater promise than encouraging patients who find antidepressant treatment unacceptable to start medication, as these patients will start medication but not benefit (18).

Monitor initially treated patients over time

Monitoring treatment adherence and symptom response is most readily accomplished in 10-min telephone calls. This monitoring serves three purposes: 1) identification of patients who have discontinued recommended treatment, 2) identification of patients who require treatment adjustment, and 3) identification of patients whose depression is recurring.

Identification of patients who have discontinued recommended treatment

Many patients find that the side-effects they experience before the antidepressant medication has a clinical effect difficult. Studies show that up to 46% of depressed primary care patients stop the medication before any chance of response (13). Patients who continue to take medication long enough to “feel better” often discontinue it well before the recommended 4–9 months following symptom improvement, increasing their chance of relapse. Depressed patients who start psychotherapy often fail to complete the recommended course. Monitoring both treatment adherence and symptom response provides the primary care team a systematic, pro-active method of identifying both groups of patients for further education and/or treatment re-initiation.

Identification of patients who require treatment adjustment

An estimated 50% of adherent patients will fail to improve in response to their initial medication (19). Unfortunately, only 62% of these non-responders actually have their treatment adjusted (19). To know whether treatment adjustments are necessary, primary care teams often re-administer the PHQ-9 at monthly intervals to determine progress towards the 50% symptom reduction expected by 12 weeks. Change on the PHQ-9 greater than 3 points is considered clinically significant (10).

Treatment adjustment for initially non-responsive patients who are taking a low dose of the medication with no side-effects generally involves increasing medication dose of the first medication. Treatment adjustment for initially non-responsive patients who are taking an adequate dose or a low dose with intolerable side-effects is to switch to a different class of antidepressants for a second trial (20).

Primary care clinicians are encouraged to consult experienced psychiatrists for patients who fail to improve after treatment adjustment. An experienced psychiatrist can guide the primary care clinician's choice to increase, change or supplement the medication regimen. Just as importantly, the psychiatrist can alert the primary care clinician to assess hidden psychiatric comorbidities, which may be contributing to treatment resistance. Psychiatrists consult directly with the primary care clinician or with a member of the team who systematically monitors the patients and conveys the psychiatrist recommendations to the primary care clinician (21).

Identification of patients whose depression recurs

Because 50% of patients who recover from an initial episode will relapse within 24 months and 75% of patients who recover from a repeated episode will relapse within 24 months (7), the primary care team needs to monitor treatment adherence and symptom response is recommended quarterly between 6–24 months. Monitoring provides primary care professionals the opportunity to identify patients heading into relapse early in the episode and to train patients on actions to take if and when sentinel symptoms recur between contacts. Monitoring over 12 months stimulates initial functional improvement which dissipates over time (22), while monitoring over 24 months stimulates continued functional improvement (Fig. 1) (23).

What is the evidence base for re-engineering primary care depression management?

Many primary care clinicians reading this article will question how to re-engineer primary care systems to deliver the care outlined above in already burdened clinics. These clinicians are referred to an excellent description of the Three Component Model for Depression, which describes the implementation of a depression care management program which delivered these components of care to patients with major depression in 60 health practices across five different U.S. healthcare organizations (24).

Other primary care clinicians reading this article will question the outcomes that such re-engineering achieves. Meta-analysis of 37 randomized studies including 12,355 primary care patients with depression demonstrates that these systems improve depression symptoms with an average effect size of 0.25 over 6 months (25), with effect

sizes in selected trials considerably higher. No meta-analysis to our knowledge has examined whether this re-engineering improves impairment, arguably the outcome of greatest interest given depression's contribution to worldwide disability. Using quality-adjusted life years, researchers consistently show that re-engineering primary care practices to improve depression management is more cost-effective than many of the treatments primary care provides, with cost-effective ratios as low as \$9,592 per quality-adjusted life year (26). Individual studies also demonstrate substantial improvements in social (27–31) and work-specific functioning (32–34). As Fig. 1 shows, re-engineering primary care practices to provide 24-month monitoring increases emotional functioning by 24 months to within 90% of population norms. Physical functioning increases to within 75% of population norms (23). These increases in generic functioning translate to improved work outcomes, including reduced turnover (33–35), reduced absenteeism (32) (Fig. 2), and improved productivity at work (32) (Fig. 3). Policy analysts have developed calculators to identify employers who can realize an economic return on investment by paying first dollar costs of these programs (www.caremanagementfordepression.com).

In summary, additional research is clearly needed to arrive at more precise and generalizable estimates of how re-engineering primary care clinics to improve depression management can impact depression-associated disability, particularly in developing countries where evidence is sparse. Preliminary evidence however supports the promise of public health challenges to primary care to make a substantial contribution to reducing depression-associated disability.

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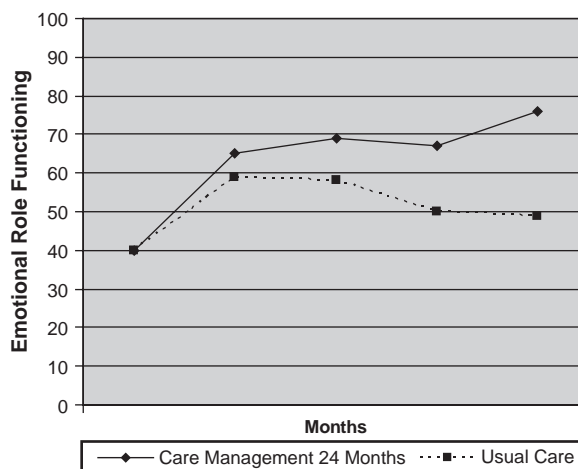


Fig. 1. Emotional role functioning over 24 months.

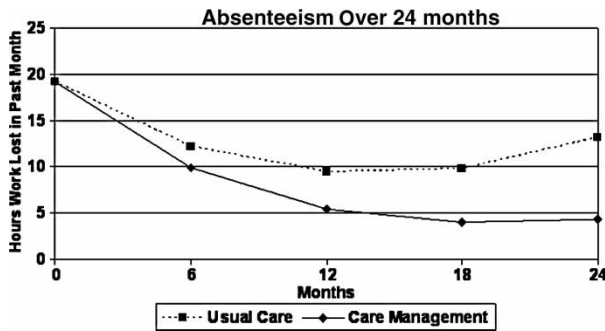


Fig. 2. Absenteeism: . . .■. . ., usual care; —◆—, care management.

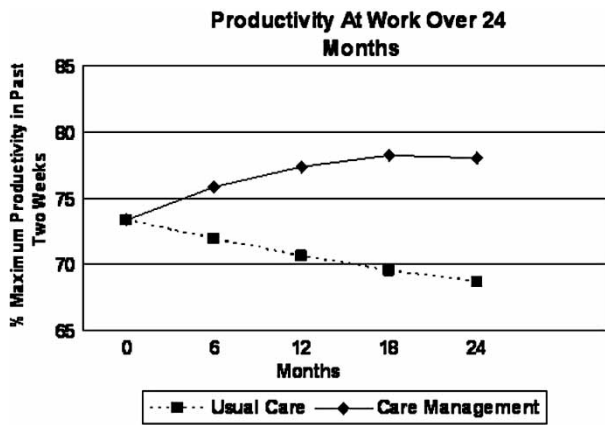


Fig. 3. Productivity at work over 24 months: . . .■. . ., usual care; —◆—, care management.

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