EDITORIALS

Failure to Recognize Depression in Primary Care: Issues and Challenges

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Depression is highly prevalent in the United States, affecting approximately 18.8 million adults, or about 9.5% of the U.S. population aged 18 years and older in a given year.[1] Depression is particularly prevalent in primary care patients with prevalence rates of 10% or greater.[2] Depression is a leading cause of disability, workplace absenteeism, diminished or lost productivity, and increased use of health care resources.[3,4] Depression is associated with decreased quality of life[5] and increased health care cost.[6] There is also fairly consistent evidence that depression is associated with increased mortality across all age groups[7–9] and that both major and minor depression are associated with increased mortality.[10] Thus, depression has major public health implications.

Several studies have shown that recognition and treatment of depression in primary care is less than optimal. Studies conducted in primary care settings suggest that only about 50% of depressed patients are recognized.[11–14] Even when primary care physicians are alerted to the diagnosis of depression, it does not appear to change treatment patterns[15–17] and most primary care physicians do not escalate antidepressant medication doses as needed to achieve complete remission.[18–20] Data show that a large proportion of patients discontinue prescribed medications within the first 3 months,[21,22] and even with treatment less than 50% of subjects with major depression go into remission over a 9- to 12-month period.[23,24] Therefore, recognition and treatment of depression in primary care is less than ideal because of physician and patient factors.

A study published in this issue of the *Journal of General Internal Medicine* assessed the recognition of depression in older (age ≥65 years) medical inpatients using four indicators of recognition and found that less than 50% of depressed patients were recognized by attending physicians.[25] In this study, 264 older-aged medical inpatients were administered the Diagnostic Interview Schedule (DIS) for depression by a trained clinical assistant at two time points during the hospitalization: at admission to the medical service and during the hospitalization or shortly after discharge. Trained research assistants abstracted data from medical charts, hospital administrative databases, and prescription databases. Recognized depression was defined according to four indicators (recognition by diagnosis, symptom, treatment, and referral) based on medical chart and administrative records review. These four indicators of recognition were compared to a gold standard (diagnosis of depression at both time points on the DIS). The indicator with the highest sensitivity was recognition by treatment (27.8%), whereas the indicator with the highest sensitivity was recognition by diagnosis (96.6%).

The term *recognition* of depression has been used in the literature to indicate whether a primary care physician made a clinical diagnosis of depression in a patient known to be depressed based on validated measures of depression or a diagnostic interview. The primary care physician's clinical diagnosis of depression is usually ascertained by reviewing the medical records looking for documentation of a diagnosis of depression or depressive symptoms, referral to a psychiatrist, or prescription of antidepressants. Other methods for ascertaining recognition of depression have included review of billing records for ICD-9 codes for depression,[26] physician surveys in which physicians are asked to rate the patient's psychological caseness and then check off a diagnosis,[13] and a combination of medical records review and physician surveys.[27] Whereas the gold standard has been consistent in most studies, the different methods used to ascertain recognition of depression in primary care have not been consistent. The inconsistencies in methodology create challenges in comparing the results of different studies and drawing meaningful inferences.

As shown in the study by Cepoiu et al.[25] in this issue, sensitivities for the four indicators of recognition ranged from 11.3% (diagnosis or symptoms) to 27.8% (treatment). A global measure of recognition that included the four indicators increased recognition to 42.6%. This suggests that estimates of recognition vary by the indicator of recognition. The current study is one of the few studies that have attempted to compare sensitivity and specificity of multiple indicators of recognition, and their results reinforce the importance of assessing the diagnostic accuracy of different methods for ascertaining recognition of depression in primary care. This becomes particularly important in the era of pay for performance. If recognition of depression in primary care becomes a performance measure, then it will be critical to establish the accuracy of the measures used to ascertain physicians' recognition of depression.

Although considerable effort and resources have been directed toward improving recognition of depression in primary care, there are important questions that have not been answered satisfactorily. These include (1) does recognition improve patient outcomes? (2) Is recognition based on a single visit

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appropriate? (3) What is a reasonable timeframe to determine failure of recognition? Regarding the first question, there is conflicting evidence as to whether recognition of depression improves patient outcomes. Two studies involving Dutch general practitioners[28] and U.S. primary care physicians[29] found that recognition was not associated with improved outcomes. Four other studies involving Italian primary care physicians,[30] Dutch general practitioners,[12] U.S. family physicians,[11] and U.S. health maintenance organization physicians[14] found that average rate of improvement were similar in recognized and unrecognized patients. In one of these studies,[14] 64% of depressed patients were recognized; however, the unrecognized group was less symptomatic at baseline but showed similar rates of improvements as the recognized group at 12 months. The authors concluded that unrecognized patients appear to have milder and more self-limited depression, and a narrow focus on increased recognition may not improve overall outcomes.

Data from a recent international 15-site study of depression in primary care found that recognition improved outcomes at 3 months, but there were no significant differences between recognized and unrecognized patients at 12 months.[13] Other studies have examined whether communicating results of depression screening to primary care physicians improves outcomes. These studies have yielded conflicting results as well. Two early studies[31,32] found that feedback of depression scores led to improved patient outcomes. In contrast, more recent studies[15–17,33,34] did not show any benefit.

The next question that has not been adequately addressed is whether it is appropriate to define recognition based on a single visit and what is a reasonable time frame to determine failure of recognition. Most studies on recognition of depression in primary care,[13,30] including the study in this issue,[25] have used a single time point to assess recognition. This is problematic because there is evidence that recognition and treatment may occur at a subsequent visit. In one study,[14] approximately half of those with unrecognized depression at baseline had some evidence of recognition at 3 months as indicated by an antidepressant prescription or a mental health referral. In light of these findings, recognition of depression alone may not lead to improve patient outcomes; therefore, resources need to be redirected toward interventions that not only improve recognition, but also lead to improved patient outcomes.

In spite of the issues and challenges with research on recognition of depression in primary care, there is strong evidence that treating depression improves outcomes and is cost-effective.[35–39] Thus, there is a need to focus more effort and resources on coordinated, multilevel interventions that improve recognition and treatment of depression and relapse prevention in primary care. Coordinated interventions that incorporate the following three elements are likely to be most effective. First, there needs to be consistent implementation of depression screening strategies in primary care settings. The use of brief screening instruments to screen for depression in primary care patients is supported by the U.S. Preventive Services Task Force.[40] However, screening alone is not sufficient. Clinical sites should have systems in place to screen, confirm, and offer guideline concordant treatment for depression.

Second, the Chronic Care Model,[41] which identifies the essential elements of health care systems that encourages high-quality chronic disease management, needs to be more widely adopted. The use of multidisciplinary health care teams, incorporation of evidence-based guidelines into routine clinical practice, and the use of clinical information systems to provide reminder and feedback to health care providers[42] are critical to improve the recognition and treatment of depression. Third, there is need to integrate evidence-based performance measures for depression into current pay for performance initiatives. Clinicians and health care systems need to be held more accountable for outcomes of depression. Similarly clinicians and systems that provide quality care for depression need to be rewarded. The need for coordinated, multifaceted interventions to improve the management of depression in primary care is supported by evidence from the literature. A systematic review of educational and organizational interventions to improve the management of depression in primary care found that effective strategies were those with complex interventions that incorporated clinician education, case management by nurses, and greater collaboration between primary care providers and mental health specialists.[43]

In conclusion, depression is prevalent in primary care and associated with poor health outcomes. Recognition of depression in primary care is suboptimal; however, more rigorous research is needed to test validity and reliability of the different methods to assess recognition of depression, establish optimal timeframe for recognition, and confirm that recognition improves outcomes. Finally, coordinated, multifaceted interventions to improve recognition and treatment of depression in primary care need to be widely implemented.

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