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Subsyndromal Depression and Services Delivery: At a Crossroad?

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The articles in this month's journal provide empirical evidence of the clinical relevance of subsyndromal and nondiagnostic measures of depression.^{1–5} The authors' thoughtful discussion sections led me to consider the implications of their findings for services delivery, and I wondered whether this important body of research is on a collision course with other research aimed at improving depression assessment and care in nonmental health settings. One way to think about this question is through the lens of history, and because this year is the 30th anniversary of the first wave of data collection for the Epidemiologic Catchment Area (ECA) Study,^{6,7} the ECA offers as useful starting point.

One of the most controversial findings from the ECA Study was the low prevalence rate of major depression in older adults. Based on structured interviews using Diagnostic and Statistical Manual of Mental Disorders-III diagnostic criteria⁸ of 2,210 adults aged 65 years and older from the first three community samples, the study reported prevalence rates of major depression ranging from 0.1% to 0.5% for men and 1.0% to 1.6% for women.⁷ These rates were significantly lower than younger adults in the ECA samples. These data were controversial because they were not consistent with either clinical observations about the burden of depression in late life or with community-based studies that had measured depression using symptoms scales such as the Centers for Epidemiologic Studies Depression.⁹ These latter studies reported higher rates of depression than the ECA and found that the prevalence of depression increased, rather than decreased, with age.^{10,11}

Two subsequent lines of research are relevant to a discussion of subsyndromal depression. One focused on the limitations of the ECA data for understanding the burden of depression in older adults, whereas the other focused on better case finding and targeting care.

The ECA findings prompted numerous discussions on the limitations of psychiatric epidemiology for making inferences on public health burden of depression in older adults.¹² Most focused on the methodological challenges in both sampling and measurement. For example, representative sampling of community-dwelling older adults may have deflated prevalence rates of major depression because of selected mortality, institutionalization, or differential refusal. Similarly, the use of structured assessments of psychiatric disorders may have deflated prevalence rates for older adults because of the complex question structure, memory bias, misattribution of depressive symptom to physical problems, or stigma.

A more fundamental criticism of the ECA objected to the conceptualization of depression as a diagnosis as opposed to a continuum of symptoms. This debate was crystallized in a 1989 issue of the *Journal of Health and Social Behavior* and Gerald Klerman's invited response to the article of John Mirowsky and Catherine Ross entitled "Psychiatric Diagnosis as Reified

Measurement.” Mirowsky and Ross argued that the ECAs attempt to measure psychiatric diagnoses was fundamentally flawed as categorizing symptom severity into diagnostic entities loses information, and moreover, diagnoses defined by algorithms based on phenomenology were not real. Klerman countered this criticism with a scholarly (and well worth reading) synopsis of the history, purpose, and future of psychiatric research in the United States. He explained how the Diagnostic and Statistical Manual of Mental Disorders-III, with its introduction of diagnostic criteria and algorithms that were atheoretical with respect to causality, allowed psychiatric research to develop and empirically test hypotheses about etiology, treatment, and prevention and to plan for the mental health services needs of the nation. Dan Tweed and Linda George added to the debate with “A More Balanced Perspective,” arguing that although categorization of severity indices may lose relevant information, measuring psychopathology solely on a continuum does not take advantage of clinically relevant patterns of symptoms.^{13–15}

The articles in this month’s journal share this ongoing concern that the diagnosis of major depression may not capture the full range of depressive phenomena that have clinical significance in late life. These current articles used advanced methodology and unique samples that add specificity and clinical relevance to earlier evidence that subclinical forms of major depression (i.e., minor, subthreshold categories, and continuum cutoffs) have clinical significance^{16,17} in terms of their being associated with the risk of outcomes such as leads to depression and outcomes including functional^{18–20} and cognitive²¹ outcomes. A common theme is the importance of identifying patients with subsyndromal depression and developing interventions to reduce symptoms and associated risk of negative outcomes. This recommendation leads me to the other line of inquiry.

A second line of research followed logically, although perhaps not explicitly, from the ECA studies. These investigators did not necessarily challenge the accuracy of the ECAs community-based estimates of major depression. Rather, the low prevalence rates indicated that the community was less useful for addressing the problem of depression in late life than subpopulations where depression was a more common. Evidence from community studies identifying medical burden and physical disability as both correlates^{22–25} and risk factors for depression in old age^{26,27} pointed to the relevance of settings that serve seniors with these conditions. Thus, depression was studied in primary care²⁸ and other settings that provide care for sick or disabled older adults such as medical inpatients,²⁹ home health care patients,³⁰ and nursing home residents.³¹

Focusing on these settings was useful from a service delivery perspective as, unlike the community at large, they offered a platform for meeting that need. However, to integrate depression identification and treatment into these settings, real-world clinicians needed efficient and effective strategies for screening and case identification.³² This need led to the development of brief two-item depression screens^{33–35} that identify individuals who need further assessment (by either the same clinician or someone with more clinical skills). However, from a service delivery perspective, the ideal depression screen will not only be highly sensitive (i.e., percentage of depressed people who are screened positive) but will also have a high positive predictive value (i.e., the percentage of screened positives that turn out to be depressed) to reduce the cost and burden of excess care to “false positives.”

Here is where the two lines of research may collide. “False positives”—patients who report depressive symptoms but do not make criteria for a depressive diagnosis—are the same older adults classified as having subsyndromal depression, the subject of articles in this month’s journal. Thus, the challenge is not how to identify patients with subsyndromal depression but what to do with the information. The question is nontrivial because these screeners easily capture 25% or more of older adults.³⁶

One aspect of this challenge is that patients labeled with subsyndromal depression are a heterogeneous group. As seen from the articles in this issue, they have increased risk for an array of poor outcomes (e.g., depression, cognitive, behavioral, attitudes, disability, weight gain, and hospitalizations). We do not yet know enough to predict who will have any specific outcome or, as is probably most common, no outcome at all. We also do not yet know whether or when the symptoms that classify someone as having subsyndromal symptoms are, for examples, prodromal expressions of an underlying condition, a shared outcome of an unmeasured risk factor, or a risk factor for one or more other outcomes. The need for this kind of specificity is less relevant if the response to these symptoms is to monitor patients more closely but highly relevant when planning interventions to reduce the symptoms, prevent the progression of depression, treat the underlying condition, or preempt other negative outcomes.

The other aspect of the challenge is deciding what message to give to primary care and other settings that care for older adults. Given the difficulties in integrating interventions for more serious forms of depression into primary care, we need to think carefully about what we expect primary care and other service settings to do with the people who screen positive but do not meet some threshold criteria. Given the heterogeneity of this group, it is not even clear that labeling them with the term “subsyndromal depression” is useful in this context as it does not necessarily convey the importance of this condition to nonmental health clinicians and may be viewed as yet another competing but nonspecific demand.³⁷

No doubt, future research will resolve many of these questions, perhaps further specify these subsyndromal symptoms and hopefully develop targeted interventions to reduce suffering and the risk of poor outcomes. Meanwhile, the question of what do with “false negatives” remains. There is no doubt about the vulnerability of this group of older adults, but how to label and, more important, respond to them is worth further thought and debate.

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