

Minor depression in primary care

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Minor depression is defined as a mood disturbance of at least 2 weeks' duration, with between two and five symptoms of depression, including depressed mood, diminished interest, weight change, sleep disturbance, psychomotor changes, fatigue, feelings of worthlessness, poor concentration, and recurrent thoughts of death. Patients with this condition may have fewer vegetative symptoms (appetite, diurnal mood variation) and more subjective symptoms (self-blame, worry, irritability, lethargy). Minor depressive disorder is more prevalent in primary care than major depressive disorder. Failure to adequately treat this condition may have far-reaching impact on the health, functional status, quality of life, and cost of care for patients who have it. The notion that minor depression requires minor treatment is misleading. Cognitive-behavioral modes of therapy and selective serotonin reuptake inhibitor antidepressants have demonstrated efficacy for primary care patients who have minor depression.

(Key words: minor depression, primary care)

Mrs. Smith, a recently divorced middle-aged housewife, visits her primary care physician three times in 2 months with mild but persistent complaints of depressed mood, low energy, and poor self-esteem. The primary care physician acknowledges her life change and encourages her to keep busy. The minor depressive symptoms this patient has may require more aggressive psychologic or pharmacologic treatment to prevent future disability.

Minor depressive disorder is sometimes seen as a reaction to situational, environmental, or medical stressors. For example, a post-myocardial infarction patient with a complaint of partial but persistent depressive symptoms might be viewed by his or her physician as adjusting to new physical limitations and losses. Primary care physicians frequently

treat mildly depressed patients with life stresses such as illness, divorce, or job stress. Attributing persistent mood symptoms to these stresses and assuming that they will automatically remit over time may result in undertreatment of depression.

When faced with large patient volumes, complex medical conditions, and economic pressures, minor depression may take low priority on the physician's differential diagnosis problem list. Thus, the primary care physician's management of depression frequently fails to meet recommended standards for intensity of treatment and follow-up.¹ Failure to adequately treat minor depression may have far-reaching impact on the health, functional status, quality of life, and cost of care for patients who have it.

Minor depression defined

Minor depressive disorder is described in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) as a condition requiring further research to determine both diagnostic utility and criteria refinement.² Minor depression is defined as a mood disturbance of at least 2

weeks' duration, with between two and five symptoms of depression, including depressed mood, diminished interest, weight change, sleep disturbance, psychomotor changes, fatigue, feelings of worthlessness, poor concentration, and recurring thoughts of death. *Figure 1* lists all of the criteria for DSM-IV minor depressive disorder.² DSM-IV also cautions clinicians to distinguish minor depression from other conditions with similar symptoms. These include adjustment disorder with depressed mood, depressive disorder not otherwise specified, bereavement, and mood disorder due to a general medical condition.

In DSM-IV, major depression and minor depression differ on two points: the number of diagnostic criteria and the exclusion of a depression history. Major depressive disorder requires five of nine symptoms of depression, while minor depressive disorder requires two to five depression symptoms. Symptom intensity is not altered, and a full complement of neurovegetative symptoms is included in both criteria. DSM-IV criteria require that patients with minor depressive disorder have no previous history of major depressive disorder.² A careful history of previous depression symptoms should be taken, as the patient may have had a previous episode of major depression that went untreated, and the primary care physician should inquire about a history of previous postpartum depression or depression associated with comorbid medical illness that may have gone untreated.

Others have offered alternate definitions of minor depression. Spitzer and colleagues³ developed a set of research diagnostic criteria (RDC) for minor depressive disorder to facilitate scholarly investigation. *Figure 2* lists the RDC criteria for minor depression. Unlike DSM-IV criteria, RDC criteria for minor depressive disorder includes subjective and attitudinal items on energy, poor self-esteem, and irritability/worry. Two symptoms are required from the RDC list to meet diagnostic criteria. These criteria have been used extensively in research settings to describe minor depressive disorders.⁴

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Judd and colleagues⁵ identified a cohort of patients who meet some of the criteria for depressive disorder but do not have a depressed mood. In a secondary analysis of the National Institute of Mental Health (NIMH) Epidemiologic Catchment Area (ECA) program database, those authors studied patients who presented with depression-like symptoms that did not meet criteria for major depression.⁵ They coined this population “subsyndromal symptomatic depression” (SDD) and concluded that two types of depressed patients comprised the SDD category: SDD patients with mood disturbance (minor depression) and SDD patients without mood disturbance. Patients with SDD may present without depressed or sad mood, instead reporting symptoms such as insomnia (44.7%), fatigue (42.1%), recurring thoughts of death (31%), trouble concentrating (22.7%), significant weight gain (18.5%), slowed thinking (15%), and hypersomnia (15.1%). Two thirds of SDD patients were women, and SDD was found to have an 8.4% 1-year prevalence in the general population.

Clearly, minor depression is conceptualized in different ways, creating variation in diagnostic criteria. Despite these differences, at least two common themes emerge that primary care physicians should consider. First, patients with this condition may have fewer vegetative symptoms (appetite, diurnal mood variation) and more subjective symptoms (self-blame, worry, irritability, lethargy). Second, subsyndromal depression should be considered in the physician’s differential diagnosis list, even if the patient does not voice depressed, sad, or blue mood complaints.

One disorder or two?

Most epidemiologic, genetic, and radiologic studies suggest that minor depression and major depression are the continuum of one illness. Examining the genetic database of a pool of index cases diagnosed as having either single depression, recurrent depression, minor depression, or double depression, Remick and coworkers⁶ found no significant differences in morbidity risk calculations

■ A mood disturbance with at least two but less than five of the following symptoms present for at least 2 weeks:

- ☐ Depressed mood most of the day, nearly every day
- ☐ Diminished interest/pleasure in all daily activities
- ☐ Significant weight loss or change in appetite
- ☐ Sleep disturbance
- ☐ Psychomotor agitation or retardation
- ☐ Fatigue
- ☐ Feelings of worthlessness or excessive guilt
- ☐ Poor concentration
- ☐ Recurrent thoughts of death
- ☐ Symptoms cause social, occupational or functional dysfunction
- ☐ Symptoms not due to a substance or medical condition
- ☐ Symptoms not from bereavement
- ☐ There has never been a major depressive or manic episode
- ☐ Condition does not occur during a psychotic disorder such as schizophrenia

Figure 1. DSM-IV diagnostic criteria for minor depressive disorder.

among the first-degree relatives of these patients, suggesting that these conditions were genetically indistinguishable.

In support of the continuity notion, Kessler and others⁷ used the National Comorbidity Survey to study the lifetime prevalence, correlates, course, and impairments associated with both conditions. They concluded that there was continuity between major and minor depression, disputing the notion that these are two separate disorders. Sherbourne and colleagues⁸ studied 1767 mental health and primary care outpatients with and without depression, finding that percentage of patients with family histories of depression was similar between patients with minor and major

depression. They concluded that sub-threshold depression appeared to be a variant of major depression.

Neural imaging studies have found neuroanatomic changes that may link major and minor depression. In patients with major depression, magnetic resonance imaging studies found significantly smaller temporal and frontal lobe volumes, as well as larger ventricles. Similarly, Kumar and colleagues⁹ found significantly smaller prefrontal lobe volumes for individuals with minor depression when compared with normal controls.

How common is minor depression?

Minor depressive disorder is a common condition in primary care settings.^{7,10,11} Using data from the National Comorbidity Survey, Kessler and others⁷ noted that the lifetime prevalence of minor depressive disorder is 10%. Sociodemographic correlates of minor depressive disorder included female gender, non-Hispanic/white race, homemaker, and unemployed/disabled work status. The researchers found a significant increase in the lifetime prevalence of minor depressive disorder in cohorts born after World War II.

Similarly, Judd and colleagues⁵ analyzed a subsample of the NIMH ECA database and found that 19.6% of the general population reported one or more depressive symptoms in the past month. One-year prevalence for two or more symptoms was 11.8%. In an analysis of respondents from one NIMH data collection site, Broadhead and colleagues¹⁰ found the 6-month prevalence of minor depressive disorder with mood disturbance to be 5.9%. The 6-month prevalence for individuals with minor depressive disorder that did not include mood disturbance was 23.4%.

Minor depressive disorder is not uncommon in the primary care setting. Olfson and others¹¹ found that minor depressive disorder was more prevalent in primary care than major depressive disorder (9.1% and 7.3%, respectively). Approximately one third also met criteria for another mental disorder, most often drug abuse or dependency. In contrast to earlier studies, primary care minor

depressive disorder patients in this study were more likely to be male, with annual family incomes of at least \$40,000. Taken together, these figures suggest that one in ten patients seen in primary care has symptoms of minor depressive disorder.

Exploring clinical outcomes

A number of studies suggest that minor depression may be a herald or early warning sign for major depression. Left untreated, patients with minor depressive disorder are at increased risk to have major depressive disorder.^{8,10,12-14} Thus, early recognition and appropriate treatment of minor depression symptoms could affect clinical outcome.

Minor depression also appears to affect patients' perception of their health and functional status. Community-dwelling individuals with subsyndromal depression perceive their health and functional status to be poorer than normal populations. In an analysis of NIMH ECA data of 2393 subjects, those patients with subsyndromal depressive disorders reported impairment in eight of ten functional domains assessed.¹⁵ These limitations included physical or job functioning due to physical illness, restricted activity days due to physical illness in the past 2 weeks, and increased number of days in bed due to physical illness in the previous 2 weeks.

Similar results in an elderly community-dwelling population have been reported. Beekman and others¹⁶ found that individuals with minor depressive symptoms had greater disability, including general functioning (days in bed, limited activities due to health), specific activities (housework, walks, cycling, meetings, recreation, restaurant visits), sexual life (viewed sex as unimportant or unpleasant), and diminished sense of well-being.

In primary care patients studied by Reifler and coworkers,¹⁷ patients who screened positively for at least one mental disorder (including subthreshold depression) reported greater impairment in physical functioning, role functioning, mental health, vitality, and general health. Similarly, in another study, patients with

■ Two of sixteen must be present to meet diagnostic criteria:

- ☐ Worry too much
- ☐ Critical of others
- ☐ Loss of sexual interest
- ☐ Poor concentration
- ☐ Appetite changes
- ☐ Feelings of inferiority
- ☐ Lack of interest in things
- ☐ Suicidal thoughts
- ☐ Worthlessness
- ☐ Self-blame
- ☐ Energy changes
- ☐ Everything is an effort
- ☐ Irritable, argumentative
- ☐ Sleep disturbance
- ☐ Cry easily
- ☐ Hopelessness

Figure 2. RDC diagnostic criteria for minor depressive disorder.

depressive symptoms had greater loss of work, marital distress, and mental health visits than did patients without psychiatric symptoms.¹¹

Although major financial loss and high financial strain are more characteristic of patients with major depression, Judd and colleagues¹⁵ found significant differences in self-perceived high financial strain between patients with subsyndromal depressive disorder and patients without depressive symptoms. Linking economics and work disability, Broadhead and colleagues¹⁰ studied a cohort of participants in the ECA and noted that those participants with minor depression had 515 more disability days in the community than individuals with depression. In light of this fact, those authors suggested that the threshold for identifying clinically significant depression be reevaluated to prevent the economic morbidity associated with minor depression.

Higher service utilization needs may be associated with minor depression. Controlling for predisposing and enabling variables, Beekman and others¹⁶

found that minor depression was associated with a higher likelihood of consultations with general practitioners. Using bivariate analysis, they found that both major and minor depression were associated with considerable risk of excess non-mental health care service utilization.

Treatment considerations in primary care

Primary care physicians should be aware of effective treatments for minor depression, as this population often seeks mental health care from the generalist. Although the symptoms associated with minor depression may be subtle or less clinically noteworthy, treatment should be considered in an effort to avoid the excess morbidity, mortality, and cost associated with this condition. The notion that minor depression requires minor treatment may be misleading, as this condition appears to respond to nonpharmacologic as well as pharmacologic modes of therapy.

Nonpharmacologic modes of therapy

Cognitive-behavioral modes of therapy have been shown effective for primary care patients with minor depression.¹⁸ Cognitive-behavioral therapy is based on the assumption that negative thoughts and behaviors are at the central core of depression.¹⁹ Negative thoughts include beliefs that the patient is inadequate; thoughts that the world is a negative, demanding place; and the expectation that continued hardship will follow the patient. The goal of cognitive therapy is to identify and test negative beliefs, develop alternative and more flexible thoughts, and rehearse the new thoughts and behavioral responses.²⁰

Cognitive-behavioral interventions for minor depression in primary care settings have consisted of telephone counseling, educational intervention, and individual counseling. In a study of patients in a family practice residency practice, six problem-solving therapy sessions were conducted over the phone by graduate student therapists.²¹ By use of a five-step, problem-solving model, therapists

worked with patients to demonstrate the connection between depressed mood and problems.²² This process helped patients to brainstorm solutions for life problems and subsequently test those solutions. The telephone format helped patients creatively solve problems and link improved mood to their problem-solving efforts. Postintervention Hamilton Depression rating Scale²³ and Beck Depression Scale²⁴ scores improved, and higher scores for social health, mental health, and self-esteem were seen on the Duke Health Profile.²⁵

Miranda and Munoz²⁶ used an 8-week, 2-hour educational course for patients with minor depression. The course followed a cognitive-behavioral protocol emphasizing self-assessment of mood, analysis of how thoughts and activities affect mood, and strategies to change depressive thoughts. Relaxation training was offered, and patients were encouraged to do future life planning to diminish the possibility of further depression. Both depressive symptomatology and somatization decreased for the depressed patients in the intervention group. Also, the number of missed medical appointments declined in the intervention cohort.

Not all cognitive-behavioral therapy has been found cost-effective for minor depression. Von Korff and colleagues²⁷ used a "collaborative care" intervention for primary care patients with depression. Collaborative care is defined as brief cognitive-behavioral therapy and enhanced patient education through the use of videos, booklets, and alternating primary care/psychiatric visits. Although collaborative care was found cost-effective for patients with major depression, patients who had minor depression actually incurred more healthcare costs than those patients who were not depressed. These costs included outpatient visits, laboratory and diagnostic testing, and emergency room visits.

Pharmacologic modes of therapy

Pharmacologic treatment has consisted of case series and double-blind, placebo-controlled antidepressant drug trials. Initial tricyclic trials have consistently

demonstrated minimal efficacy in treating minor depression. These clinical trials, however, had high dropout rates due to medication intolerance, such as anticholinergic side effects.^{28,29} Older patients and the frail medically ill may be at additional risk for anticholinergic side effects from tricyclics. Because of these problems, tricyclics are not suggested for the treatment of minor depression.

The advent of selective serotonin reuptake inhibitor (SSRI) antidepressants has minimized the side effect profile list for many patients, eliminating anticholinergic and alpha-adrenergic adverse sequelae. Although SSRIs may demonstrate clinical effectiveness in the treatment of minor depression, not all SSRIs have been involved in clinical trials research for the treatment of minor depression. Several SSRIs (fluvoxamine, paroxetine hydrochloride) have demonstrated clinical efficacy in the treatment of minor depression using strict clinical trials methodology. In a clinical trial of fluvoxamine (Luvox), Rapaport and others^{30,31} compared Hamilton Depression Rating Scale and Beck Depression Inventory scores in a group of patients with minor and subsyndromal depressive disorder. Hamilton scores dropped for both groups using a mean of 50 mg of fluvoxamine over 8 weeks, and general health status using the Medical Outcome Study Short Form (SF-36) improved for both groups as well. Minimal side effects were noted, and those side effects that were reported resolved over time. Rapaport and colleagues concluded that although minor depression symptoms are primarily psychological, symptoms were not transient and did respond to both low-dose SSRI treatment and psychotherapy.

Other antidepressant clinical trials have demonstrated similar efficacy in terms of Hamilton Depression Rating Scale improvements. In a randomized, double-blind comparative study of paroxetine hydrochloride (Paxil) and maprotiline hydrochloride (Ludiomil), patients who met RDC criteria for minor depression were actively treated for 6 weeks.³² Maximum dosages for paroxetine were 40 mg/d, and for maprotiline

were 150 mg/d. Although both groups responded to antidepressant therapy, patients with minor depression who were treated with paroxetine and assessed using multiple criteria had high response rates (82% to 90%) when compared to those treated with maprotiline (71% to 84%). The authors emphasize that minor depression is an antidepressant-responsive disorder.

Comments

Minor depression deserves the focus of primary care physicians. We have clear evidence that minor depression is responsive to cognitive-behavioral therapy and SSRI (that is, fluvoxamine, paroxetine hydrochloride) modes of therapy. Both treatment modalities have been demonstrated effective in primary care populations and should be considered for patients who present with minor depressive symptoms.

Of critical importance is the fact that some patients with minor depression develop major depressive disorder if left untreated. Detection of minor and subsyndromal depressive disorders is vital to prevent further functional, quality of life impairment, and increased healthcare utilization. Although depression screening instruments such as the Beck Depression Scale, Hamilton Depression Scale, and Geriatric Depression Scale do not detect minor depression specifically, reviewing DSM-IV or RDC criteria (*Figures 1 and 2*) during the clinical examination may help increase clinician awareness of the disorder.

What emerges from this literature review is the clear need for additional research in the area of minor and subsyndromal depression. Additional study of the symptom profile will help clinicians clarify the diagnosis and facilitate recognition. Further antidepressant clinical trials are needed to identify a broad spectrum of antidepressants that may offer improvement for minor depression symptoms. In lieu of a carefully selected subject sample often seen in drug clinical trials, minor depression drug trials should focus on the heterogeneous patient population seen in the primary care setting.

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