"Subthreshold" Depression: Is the Distinction Between Depressive Disorder Not Otherwise Specified and Adjustment Disorder Valid?

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ABSTRACT

Objective: Patients with clinically significant symptoms of depression who do not meet the criteria for major depressive disorder or dysthymic disorder are considered to have subthreshold depression. According to *DSM-IV*, such patients should be diagnosed with depressive disorder not otherwise specified (NOS) if the development of the symptoms is not attributable to a stressful event or with adjustment disorder if the symptoms follow a stressor. Research on the treatment of subthreshold depression rarely addresses the distinction between depressive disorder NOS and adjustment disorder. In the present report from the Rhode Island Methods to Improve Diagnostic Assessment and Services (MIDAS) project, we examined the validity of this distinction.

Method: From December 1995 to June 2011, 3,400 psychiatric patients presenting to the Rhode Island Hospital outpatient practice were evaluated with semistructured diagnostic interviews for *DSM-IV* Axis I and Axis II disorders and measures of psychosocial morbidity.

Results: Slightly less than 10% (n = 300) of the 3,400 patients were diagnosed with depressive disorder NOS or adjustment disorder with depressed mood. The patients with depressive disorder NOS were significantly more often diagnosed with social phobia ($P < .05$) and a personality disorder ($P < .01$). The patients with depressive disorder NOS reported more anhedonia, increased appetite, increased sleep, and indecisiveness, whereas the patients with adjustment disorder reported more weight loss, reduced appetite, and insomnia. There was no significant difference between the groups in overall level of severity of depression or impaired functioning. The patients with depressive disorder NOS had a nonsignificantly elevated morbid risk of depression in their first-degree relatives.

Discussion: Clinically significant subthreshold depression was common in psychiatric outpatients, and the present results support the validity of distinguishing between depressive disorder NOS and adjustment disorder with depressed mood. Future studies of the treatment of subthreshold depression should account for this diagnostic distinction.

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In the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (*DSM-IV*), the diagnosis of major depressive disorder (MDD) requires the presence of at least 5 of 9 symptom criteria, one of which is depressed mood or loss of interest, for at least 2 weeks. All symptoms must be present nearly every day, except suicidal ideation or thoughts of death, which need only be recurrent. The presence or absence of a precipitating stressful life event is not considered when diagnosing MDD unless the symptoms are a normal bereavement reaction, in which case the diagnosis is not made. In contrast, in patients with clinically significant depressive symptoms that do not meet the MDD symptom threshold and who thus have "subthreshold" depression, the presence of a precipitating stressor has diagnostic implications.

Different terms, such as *minor*, *subthreshold*, or *subsyndromal* depression, have been used to describe clinically significant depressive symptoms not meeting diagnostic criteria for MDD (or dysthymic disorder).[1,2] In *DSM-IV*, to account for clinically significant presentations that do not meet the inclusion criteria for a specific disorder, every diagnostic class allows for a not otherwise specified (NOS) diagnosis. In the mood disorders category, patients with fewer than 5 depressive symptoms would be diagnosed with depressive disorder NOS if the development of the symptoms was not attributable to a stressful event.

Like NOS diagnoses, adjustment disorder represents a residual diagnosis that is made when the psychiatric symptoms that follow a psychosocial stressor do not meet the criteria for a specific disorder. Patients with depressive symptoms following a stressful event are diagnosed with a major depressive episode if the symptom threshold is met and with adjustment disorder if the major depression criteria are not met. Thus, the diagnosis of a specific disorder supersedes the diagnosis of adjustment disorder, and the diagnosis of adjustment disorder supersedes the diagnosis of an NOS condition. Adjustment disorders are diagnosed when the person's distress in response to the event is in excess of a normative reaction to the stressor or the symptoms cause significant impairment in functioning. As with MDD, adjustment disorder is not diagnosed if the symptoms represent a bereavement reaction. The adjustment disorders are subtyped according to the predominant symptom picture (depressed mood, anxiety, mixed anxiety and depression, disturbance of conduct, mixed disturbance of emotions and conduct, and unspecified), and this is reflected in their diagnostic code.

Neither adjustment disorder with depressed mood nor depressive disorder NOS requires a minimum number of symptoms from a specified list. Rather, some symptoms of depression must be present, and these symptoms must result in clinically significant distress or functional impairment. Adjustment disorder is diagnosed if the symptoms begin within 3 months of a stressor and resolve within 6

Clinical Points

- In patients with subthreshold depression, the correct diagnosis is depressive disorder not otherwise specified (NOS) if the development of the symptoms is not attributable to a stressful event and adjustment disorder if the symptoms are attributable to a stressful event.
- We found that clinically significant subthreshold depression was common in psychiatric outpatients, and the validity of distinguishing between depressive disorder NOS and adjustment disorder with depressed mood was supported by finding differences in comorbidity, personality profiles, and symptoms of depression.
- Studies of the treatment of subthreshold depression should account for the distinction between depressive disorder NOS and adjustment disorder.

months of the removal of the stressor or its consequences. If the symptoms are not linked to a stressful event or persist for longer than 6 months after the resolution of the stressor then depressive disorder NOS is diagnosed.

Research on subthreshold depression rarely addresses the distinction between depressive disorder NOS and adjustment disorder. For example, 2 recent meta-analyses of placebo-controlled studies of the efficacy of antidepressants in subthreshold/minor depression found that antidepressants were not more effective than placebo.[3,4] In discussing possible methodological reasons for the lack of antidepressant efficacy, neither group of authors suggested that the failure to exclude patients with adjustment disorder might have accounted for high placebo response rates and thus resulted in the lack of efficacy of medication. We reviewed the 8 studies included in these reviews and found that none of them indicated that adjustment disorder was ruled out and none indicated that the potential inclusion of patients with adjustment disorder could have accounted for the negative findings.[5–12]

We are not aware of any studies examining the validity of the distinction between adjustment disorder with depressed mood and depressive disorder NOS. In the present report from the Rhode Island Methods to Improve Diagnostic Assessment and Services (MIDAS) project, we compared the demographic and clinical profiles of patients with these variants of "subthreshold" depression to determine whether there was empirical evidence supporting the retention of both diagnoses in future versions of the *DSM*. If there are meaningful differences between the 2 groups, then this finding suggests that future research on subthreshold depression should distinguish these 2 disorders. We hypothesized that, compared to patients with adjustment disorder, the patients with depressive disorder NOS would have a higher prevalence of past MDD, an increased morbid risk of depression in first-degree relatives, and higher rates of other psychiatric disorders. Because adjustment disorder is usually an acute disorder, we also predicted that patients with depressive disorder NOS would experience greater psychosocial morbidity, because they would have chronic symptoms more often.

METHOD

The Rhode Island MIDAS project represents an integration of research methodology into a community-based outpatient practice affiliated with an academic medical center.[13–15] A comprehensive diagnostic evaluation is conducted on presentation for treatment. This private practice group predominantly treats individuals with medical insurance (including Medicare but not Medicaid) on a fee-for-service basis, and it is distinct from the hospital's outpatient residency training clinic, which predominantly serves lower income, uninsured, and medical assistance patients. Data on referral source were recorded for the last 1,600 patients enrolled in the study. Patients were most frequently referred from primary care physicians (29.9%), psychotherapists (16.1%), and family members or friends (18.8%). The Rhode Island Hospital institutional review committee approved the research protocol, and all patients provided informed written consent.

The sample examined in the present report is derived from the 3,400 psychiatric outpatients evaluated with semistructured diagnostic interviews. Some patients met the symptom criteria for MDD but were diagnosed with depressive disorder NOS because they also experienced psychotic symptoms outside the episode of depression. The psychotic symptoms did not meet criterion A for schizophrenia; therefore a diagnosis of schizoaffective disorder was not appropriate. Such cases were diagnosed with depressive disorder NOS and psychotic disorder NOS. These patients were excluded from the analyses.

Patients were interviewed by a diagnostic rater who administered a modified version of the Structured Clinical Interview for *DSM-IV* Axis I disorders, Patient Version (SCID-I/P).[16] During the course of the MIDAS project, the assessment battery has been changed at times. The assessment of all *DSM-IV* personality disorders was not introduced until the study was well underway and the procedural details of incorporating research interviews into our clinical practice had been well established. Only 2,150 of the 3,400 patients were administered the full Structured Interview for *DSM-IV* Personality.[17]

Because we were interested in the psychometric performance of the *DSM-IV* symptom criteria for major depression, we modified the SCID-I/P and eliminated the skip-out that curtails the depression module for patients who reported neither depressed mood nor loss of interest or pleasure. Thus, we inquired about all of the symptoms of depression for all patients. For compound criteria that encompass more than 1 symptom (eg, indecisiveness or impaired concentration; increased sleep or insomnia), we made separate ratings of each component of the diagnostic criterion. Thus, the 9 *DSM-IV* symptom criteria were broken down into 17 separate items. The Clinical Global Impressions-Severity of Illness scale[18] was rated on all patients. The SCID-I/P was supplemented with questions from the Schedule for Affective Disorders and Schizophrenia[19] on best level of social functioning during the past 5 years and the amount

of time unemployed during the past 5 years. The interview also ascertained lifetime history of psychiatric hospitalizations and suicide attempts.

Family history diagnoses were based on information provided by the patient. The interviewer followed the guide provided in the Family History Research Diagnostic Criteria[20] and assessed the presence or absence of depression for all first-degree family members. Morbid risk of depression was calculated using an age-corrected denominator or *Bezugsziffer* based on Weinberg's shorter method.[21] Thus, relatives over the age of risk for depression were given a value of 1; those within the age for risk were given a value of 0.5, and those below it were given a value of 0. The age of risk was based on the distribution of ages at onset in our probands.[22] The morbid risks for depression were compared using the χ^2 statistic.

The diagnostic raters were highly trained and monitored throughout the project to minimize rater drift. The training of the diagnostic raters has been described in other reports from the MIDAS project.[13] Throughout the MIDAS project, ongoing supervision of the raters consisted of weekly diagnostic case conferences involving all members of the team. Written reports of all cases were reviewed by M.Z., who also reviewed the item ratings of every case.

Reliability was examined in 65 patients. A joint-interview design was used in which one rater observed another conducting the interview and both raters independently made their ratings. Of relevance to the present report, the reliability for diagnosing MDD (k = 0.90) was good. Too few patients were diagnosed with depressive disorder NOS or adjustment disorder to calculate κ for these diagnoses.

Table 1. Demographic Characteristics of Psychiatric Outpatients With Adjustment Disorder (n = 76) or Depressive Disorder Not Otherwise Specified (NOS) (n = 119)[a]

	Adjustment Disorder		Depressive Disorder NOS			
Variable	n	%	n	%	χ^2	*P* Value
Sex						
Male	34	44.7	51	42.9	0.07	NS
Female	42	55.3	68	57.1		
Education						
No high school diploma	4	5.3	9	7.6	0.50	NS
High school diploma	43	56.6	63	52.9		
Undergraduate or higher degree	29	38.2	47	39.5		
Marital status						
Married	35	46.1	54	45.4	0.92	NS
Living with someone	5	6.6	6	5.0		
Widowed	0	0.0	1	0.8		
Separated	2	2.6	4	3.4		
Divorced	12	15.8	19	16.0		
Single	22	28.9	35	29.4		
Race						
White	72	94.7	114	95.8	3.16	NS
Black	3	3.9	3	2.5		
Hispanic	0	0.0	2	1.7		
Other	1	1.3	0	0.0		
	Mean	SD	Mean	SD	*t*	*P* Value
Age, y	41.4	14.4	39.2	14.0	−1.08	NS

[a]Some percentages do not sum to 100 due to rounding.
Abbreviation: NS = not significant.

Statistical Analysis

We compared the demographic, family history, and clinical characteristics of patients with *DSM-IV* adjustment disorder with depressed mood and depressive disorder NOS. *t* Tests were used to compare the groups on continuously distributed variables. Categorical variables were compared by the χ^2 statistic or by Fisher exact test if the expected value in any cell of a 2×2 table was less than 5.

RESULTS

Slightly less than 10% (n = 300) of the 3,400 patients were diagnosed with depressive disorder NOS (n = 211) or adjustment disorder with depressed mood (n = 89). More patients with adjustment disorder than depressive disorder NOS received it as their principal diagnosis (85.4% vs 56.4%, $\chi^2 = 23.1$, $P < .001$). The most common principal diagnoses in patients with depressive disorder NOS were generalized anxiety disorder, social anxiety disorder, panic disorder, and attention-deficit disorder. Because patients with another principal diagnosis with comorbid depressive disorder NOS are clinically different than patients with a principal diagnosis of depressive disorder NOS, subsequent comparisons of the depressive disorder NOS and adjustment disorder groups were limited to patients given these diagnoses as their principal diagnosis (adjustment disorder [n = 76]; depressive disorder NOS [n = 119]).

The data in Table 1 show that there were no demographic differences between the 2 groups. Compared to the patients with adjustment disorder, the patients with depressive disorder NOS were significantly more likely to be diagnosed with social phobia (20.2% vs 9.2%, $\chi^2 = 4.17$, $P < .05$; Table 2). The patients diagnosed with depressive disorder NOS were also significantly more often diagnosed with a personality disorder (16.3% vs 5.3%, $\chi^2 = 5.73$, $P < .01$). Too few patients were diagnosed with individual disorders to compare the groups on each of the 10 *DSM-IV* personality disorders. Because of the low frequency of individual disorders, we examined dimensional scores. For each personality disorder, the dimensional score represented the number of criteria that was met. The patients diagnosed with depressive disorder NOS had significantly higher dimensional scores for paranoid, borderline, narcissistic, and obsessive-compulsive personality disorders (Table 3).

The patients with depressive disorder NOS reported more loss of interest or pleasure, increased appetite, hypersomnia, and indecisiveness than patients with adjustment disorder, whereas the patients with adjustment disorder reported more weight loss, decreased appetite, and insomnia than patients with depressive disorder NOS (Table 4). There was no significant difference between the groups in overall level of severity of depression (Table 5). The groups also did not differ significantly in their ratings on the Global Assessment of Functioning scale, level of suicidal ideation at the time of

Table 2. Frequency of Current *DSM-IV* Diagnoses in Psychiatric Outpatients With Adjustment Disorder (n = 76) or Depressive Disorder Not Otherwise Specified (NOS) (n = 119)[a]

	Adjustment Disorder		Depressive Disorder NOS			
Diagnosis	n	%	n	%	χ^2	*P* Value
Anxiety disorders						
Panic disorder	2	2.6	4	3.4	Fisher	NS
Social phobia	7	9.2	24	20.2	4.17	< .05
Specific phobia	3	3.9	9	7.6	Fisher	NS
Posttraumatic stress disorder	1	1.3	4	3.4	Fisher	NS
Generalized anxiety disorder	4	5.3	15	12.6	2.84	NS
Obsessive-compulsive disorder	2	2.6	0	0.0	Fisher	NS
Any anxiety disorder	16	21.1	42	35.3	4.50	< .05
Substance use disorders						
Alcohol abuse/dependence	7	9.2	10	8.4	0.04	NS
Drug abuse/dependence	4	5.3	4	3.4	Fisher	NS
Any substance use disorder	11	14.5	12	10.1	0.86	NS
Any eating disorder	2	2.6	7	5.9	Fisher	NS
Any somatoform disorder	0	0.0	3	2.5	Fisher	NS
Any impulse control disorder	0	0.0	2	1.7	Fisher	NS
Any additional Axis I disorder	26	34.2	56	47.1	3.14	NS
2 or more additional Axis I disorders	7	9.2	22	18.5	3.15	NS

[a]Some percentages do not sum to 100 due to rounding.
Abbreviations: *DSM-IV* = *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition; NS = not significant.

Table 3. *DSM-IV* Axis II Personality Disorders Dimensional Scores in Psychiatric Outpatients With Adjustment Disorder (n = 56) or Depressive Disorder Not Otherwise Specified (NOS) (n = 85)

	Adjustment Disorder		Depressive Disorder NOS			
Personality Disorder	Mean	SD	Mean	SD	*t*	*P* Value
Paranoid	0.2	0.5	0.5	0.7	2.36	< .05
Schizoid	0.2	0.6	0.2	0.4	−0.27	NS
Schizotypal	0.1	0.4	0.2	0.5	0.82	NS
Antisocial	0.1	0.4	0.2	0.5	0.66	NS
Borderline	0.7	1.1	1.1	1.4	2.23	< .05
Histrionic	0.4	0.9	0.3	0.8	−0.50	NS
Narcissistic	0.3	0.5	0.7	1.3	2.75	< .01
Avoidant	0.4	1.0	0.7	1.5	1.55	NS
Dependent	0.4	0.8	0.6	0.9	1.06	NS
Obsessive-compulsive	0.6	0.7	1.1	1.1	2.78	< .01

Abbreviations: *DSM-IV* = *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition; NS = not significant; SD = standard deviation.

the evaluation, current social functioning, or number of days unemployed due to psychiatric reasons in the last 5 years (Table 5). The groups did not differ significantly in a lifetime history of suicide attempts or psychiatric hospitalizations (Table 5). The patients with depressive disorder NOS were not significantly more likely to have a history of MDD than patients with adjustment disorder (37.0% vs 28.9%, $\chi^2 = 1.3$, NS). The patients with depressive disorder NOS had a nonsignificantly elevated morbid risk of depression in their first-degree relatives compared to patients with adjustment disorder (19.4% vs 14.3%, $\chi^2 = 2.9$, $P < .10$).

DISCUSSION

Nearly 1 in 10 patients presenting to our outpatient psychiatric practice had clinically significant symptoms of depression that did not meet criteria for a major depressive episode. While the frequency and public health significance of subthreshold depression have been previously identified,[1,23] little research has examined whether the distinction in *DSM-IV* between the adjustment disorder and subthreshold mood disorder diagnoses is valid. If multiple studies find that there are few differences between these groups, then this would argue for eliminating one of the diagnostic groups and simplifying the nosology. We are aware of only one other study that compared psychiatric patients with adjustment disorder and mood disorders. Jones et al[24] compared 5 groups of psychiatric outpatients (MDD single episode, MDD recurrent, dysthymia, depressive disorder NOS, and adjustment disorder with depressed mood or depressed and anxious mood) on the 36-item Short-Form Health Survey.[25] They found that the patients with MDD scored significantly lower (indicating greater morbidity) than the other groups combined and the patients with adjustment disorder scored significantly higher than the other groups combined. Jones et al[24] did not directly compare the depressive disorder NOS and adjustment disorder groups, and they did not distinguish adjustment disorder with depressed mood from adjustment disorder with depressed and anxious mood.

In a general population study, Casey et al[26] compared 16 individuals with adjustment disorder to 8 individuals with a moderate depressive episode and 40 with mild depression on demographic variables, indices of social support, life events, personality pathology, and individual items of the Beck Depression Inventory. There was little difference between the groups, although the small sample sizes limited the power to detect significant differences.

The results of the present study support the validity of distinguishing between adjustment disorder and depressive disorder NOS. Compared to patients with adjustment disorder with depressed mood, the patients diagnosed with depressive disorder NOS experienced more social phobia, more personality pathology, a different profile of depressive symptoms, and a trend toward an increased morbid risk of depression in first-degree relatives. Both groups were characterized by impaired psychosocial functioning, but there was no significant difference between the groups in the level of impairment.

As noted in the introduction, it is uncertain how many patients in treatment studies of subthreshold depression have adjustment disorder. By definition, adjustment disorder has a more benign course and outcome than depressive disorder NOS, insofar as the symptoms resolve within 6 months of the stressor. We would hypothesize that the placebo response rate would be higher in patients diagnosed with adjustment disorder with depressed mood than depressive disorder NOS. If true, then the inclusion of patients with adjustment disorder in placebo-controlled treatment studies

Table 4. Frequency of Depressive Symptoms in Psychiatric Outpatients With Adjustment Disorder (n = 76) or Depressive Disorder Not Otherwise Specified (NOS) (n = 119)

	Adjustment Disorder		Depressive Disorder NOS			
Symptom	n	%	n	%	χ^2	*P* Value
Depressed mood	72	94.7	113	95.0	Fisher	NS
Loss of interest or pleasure	27	35.5	77	64.7	15.87	<.001
Appetite/weight disturbance						
Decreased appetite	30	39.5	35	29.4	2.11	NS
Increased appetite	4	5.3	17	14.3	3.93	<.05
Decreased weight	22	28.9	17	14.3	6.23	<.01
Increased weight	12	15.8	17	14.3	0.08	NS
Sleep disturbance						
Insomnia	45	59.2	58	48.7	2.04	NS
Hypersomnia	8	10.5	28	23.5	5.21	<.05
Psychomotor change						
Psychomotor agitation	16	21.1	22	18.5	0.20	NS
Psychomotor retardation	9	11.8	17	14.3	0.24	NS
Loss of energy	58	76.3	95	79.8	0.34	NS
Worthlessness/excessive guilt						
Worthlessness	38	50.0	68	57.1	0.95	NS
Excessive guilt	33	43.4	58	48.7	0.53	NS
Concentration/indecision						
Diminished concentration	33	43.4	54	45.4	0.07	NS
Indecisiveness	8	10.5	33	27.7	8.27	<.01
Death/suicidal thoughts						
Thoughts of death	26	34.2	47	39.5	0.55	NS
Suicidal ideas, plan, or attempt	10	13.2	11	9.2	0.74	NS

Abbreviation: NS = not significant.

Table 5. Psychosocial Morbidity in Psychiatric Outpatients With Adjustment Disorder (n = 76) or Depressive Disorder Not Otherwise Specified (NOS) (n = 119)

	Adjustment Disorder	Depressive Disorder NOS		
Morbidity Indicator	Mean (SD)	Mean (SD)	*t*	*P* Value
Global Assessment of Functioning	60.0 (8.6)	59.4 (6.7)	−0.54	NS
Clinical Global Impressions-Severity of Illness	1.8 (0.7)	1.9 (0.7)	1.65	NS
Psychiatric hospitalizations, no.	0.2 (0.5)	0.2 (0.7)	0.25	NS
Suicide attempts, no.	0.2 (0.6)	0.2 (0.6)	0.44	NS
Suicidal ideation[a]	0.6 (1.0)	0.7 (1.1)	0.58	NS
Current social functioning (past 5 years)[a]	2.6 (1.1)	2.7 (1.1)	0.57	NS
Adolescent social functioning (12–18 years)[a]	2.4 (1.0)	2.7 (1.0)	1.61	NS
Time unemployed in past 5 years[a,b]	1.6 (1.5)	1.8 (1.0)	0.74	NS
Days unemployed past month, no.	2.0 (5.7)	3.4 (7.2)	0.83	NS

[a]Ratings from Schedule for Affective Disorders and Schizophrenia.
[b]Patients who were not expected to work (eg, student, retired) were excluded, leaving a final sample of 65 with adjustment disorder and 106 with depressive disorder NOS.
Abbreviations: NS = not significant, SD = standard deviation.

of subthreshold depression would make it more difficult to demonstrate the efficacy of antidepressant medication. In the context of treatment studies of subthreshold depression, the differences in symptom profile between adjustment disorder and depressive disorder NOS might be significant. The patients with depressive disorder NOS more frequently experienced reverse vegetative symptoms of hyperphagia and hypersomnia, whereas the patients with adjustment disorder reported more insomnia and weight loss. Intermixing these groups could increase error variance in treatment studies, particularly if outcome measures do not assess atypical symptoms of depression.

In a retrospective chart review, Hameed et al[27] found that response and remission rates were 2 times higher in primary care patients with adjustment disorder with depressed mood than in patients with MDD. They concluded that the 70% sustained response rate "was quite remarkable and suggests that short-term antidepressant use in this population may be clinically useful and cost effective."[27(p81)] However, this high response rate might reflect a high rate of placebo response. The absence of a placebo control group makes it difficult to interpret the results of the study.

Recent reviews of the efficacy of antidepressants for subthreshold depression[4] and adjustment disorder[28] concluded that medication has limited efficacy. Yet, despite the lack of empirical evidence of therapeutic efficacy, antidepressant medication is often prescribed to patients with subthreshold depression.[3] An important question is why there is discordance between the empirical literature and clinical practice. Are clinicians validly recognizing therapeutic efficacy that has not been detected by researchers? Hegerl et al[4] suggested that methodological limitations of controlled studies of subthreshold depression might underlie the failure to demonstrate the superiority of antidepressant medication to placebo. This suggestion, if accurate, raises the possibility that clinicians might be appropriately treating patients with subthreshold depression with medication. Alternatively, are clinicians failing to appreciate that the positive response to medication in patients with subthreshold depression may be due to the nonspecific aspects of treatment (ie, the placebo response) and thus overprescribing medication? High response rates, as reported by Hameed et al,[27] are reinforcing to clinicians and encourage them to continue to prescribe antidepressants for subthreshold depression. Because so many individuals with subthreshold depression are prescribed antidepressants, particularly in primary care settings, it is important to determine whether the distinction between depressive disorder NOS and adjustment disorder with depressed mood has treatment validity.

The limitations of the study should be considered. The present study was conducted in a single outpatient practice in which the majority of patients were white, female, and had health insurance. Replication of the results in samples with different demographic characteristics is warranted. Although the study was limited to a single site, a strength of the recruitment procedure was that the sample was not selected for participation in a treatment study and exclusion and inclusion criteria did not reduce the representativeness of the patient groups.

Studies of "minor" depression have used varied definitions,[1,2] sometimes specifying a minimum number of

features and duration and sometimes not. The Appendix of *DSM-IV* includes research criteria for further study for minor depression, but we followed the *DSM-IV* approach for diagnosing depressive disorder NOS, which is not based on specific inclusion criteria. All of the patients diagnosed with depressive disorder NOS (and adjustment disorder) met the clinical significance criterion, depression was the primary reason the patients were seeking psychiatric treatment, and the symptom frequencies and history of major depressive disorder were comparable to other samples of patients with minor depression. Moreover, the diagnoses were made by highly trained interviewers. While the diagnostic procedures in the MIDAS project are rigorous, and the raters achieved high diagnostic reliability in general, we were unable to examine the reliability of the diagnoses of depressive disorder NOS and adjustment disorder because they were too infrequent in our examination of reliability.

Although *DSM-IV* does not provide specified criteria for depressive disorder NOS, it offers examples of cases that would fall under this rubric. Premenstrual dysphoric disorder and brief recurrent depression are considered types of depressive disorder NOS. We were uncertain as to whether patients with these types of depressive disorder NOS should be included in the depressive disorder NOS group. We excluded the patients diagnosed with both depressive disorder NOS and psychosis, because these patients met the symptom criteria for MDD. In contrast, the patients with premenstrual dysphoric disorder and brief recurrent depression did not meet the major depression symptom criteria; therefore, we retained them in the depressive disorder NOS group. Of note, only 3 patients received a principal diagnosis of premenstrual dysphoric disorder and 4 a principal diagnosis of brief recurrent depression.

We compared the patients with adjustment disorder and depressive disorder NOS on a number of validators and did not adjust the significance level to account for multiple statistical tests. Some researchers lower the α level to account for multiple statistical tests, whereas others frame their study as an exploratory study, thereby justifying not correcting for multiple tests. Although the current article offered hypothesized differences between the groups at the end of the Introduction, in our original submission we did not include such hypotheses. The hypotheses that are now listed at the end of the Introduction were added in response to a reviewer's suggestion and reflect our a posteriori consideration of what differences we might have expected between the groups. In fact, we undertook the current analyses after reading articles failing to demonstrate the efficacy of antidepressant medication in patients with subthreshold depression and noting that none of these articles considered the distinction between minor depression and adjustment disorder. We therefore wondered whether this diagnostic distinction was valid. Before analyzing our data, we were aware of the possibility that, if the 2 groups could not be distinguished, we would be writing an article that questioned whether the adjustment disorder category was necessary and that we might end up suggesting that adjustment disorder with depressed mood be subsumed under the depressive disorder NOS rubric. In light of these considerations, we chose to not lower the α level for statistical significance because we were more concerned about type II error (falsely concluding that the 2 groups were not different and therefore suggesting that the diagnostic manual should be changed) than type I error (incorrectly rejecting the null hypothesis).

Finally, although we examined multiple validators, we did not systematically record the treatment the patients received and the outcome of treatment. Future studies should compare the course of the 2 disorders.

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