

# Principal and Additional DSM-IV Disorders for Which Outpatients Seek Treatment

Mark Zimmerman, M.D.  
Jill I. Mattia, Ph.D.

**Objective:** Epidemiological studies indicate that most patients in the community do not get treatment for psychiatric disorders. It is unknown whether persons who present for outpatient psychiatric services seek treatment for all the disorders they have or only for the principal disorder for which they are seeking treatment. The goal of this study was to determine which axis I psychiatric disorders motivate patients to seek treatment. **Methods:** Four hundred outpatients at a hospital-affiliated, community-based, psychiatric clinical practice were interviewed with the Structured Clinical Interview for DSM-IV (SCID). For patients with more than one disorder, the diagnoses were assigned as principal or additional according to the DSM-IV convention of whether it was the patient's stated primary reason for presenting for treatment or was an additional disorder. For all current disorders, patients were asked whether the symptoms of each diagnosed disorder were a reason, or one of the reasons, for seeking treatment. **Results:** Nearly all patients with major depression wanted treatment for this disorder, and more than 85 percent of patients with panic disorder, posttraumatic stress disorder, and generalized anxiety disorder indicated that the symptoms of these disorders were a reason for seeking treatment. Half to two-thirds of patients with social phobia, obsessive-compulsive disorder, intermittent explosive disorder, body dysmorphic disorder, and substance use disorders reported that the symptoms of these disorders were a reason for seeking treatment. Only 30 percent of those with specific phobia indicated that their phobic fears were a reason for seeking treatment. **Conclusions:** Patients often seek treatment for symptoms of disorders that are diagnosed as comorbid, rather than principal, conditions. It is important for clinicians to conduct thorough diagnostic interviews in order to diagnose disorders that are not related to the patient's chief complaint, as patients often desire treatment for these additional diagnoses. (*Psychiatric Services* 51:1299-1304, 2000)

During the past 20 years a large body of literature has documented high rates of diagnostic comorbidity in both clinical and epidemiological samples. Detection of comorbidity may be clinically

important because it carries prognostic implications; patients with multiple disorders tend to have poorer long-term outcomes (1-4). Despite the relatively consistent finding that patients with multiple disorders have

poorer outcomes than patients with only one disorder, the methodology of follow-up studies may limit the generalizability of their findings to routine clinical practice.

Two of the largest follow-up studies are the Collaborative Depression Study (5,6) and the Harvard-Brown Anxiety Research Project (7,8). In these and other naturalistic follow-up studies, patients are interviewed periodically to determine the course of their disorder. Treatment is not controlled or influenced by the researchers; rather patients are treated by practitioners in the community and the researchers simply ascertain the type and amount of treatment the patients received.

On entry into these studies, patients are extensively evaluated with comprehensive research diagnostic interviews by trained diagnostic raters. The raters are members of the research project staff and do not have a formal relationship with the clinicians who are responsible for the patients' treatment, and the results of the diagnostic evaluations are not routinely conveyed to the patients' treating clinicians. Because unstructured clinical diagnostic interviews underdetect comorbidity in comparison to evaluations based on semi-structured diagnostic interviews (9), patients with multiple diagnoses in naturalistic follow-up studies might have had poorer outcomes because their treating clinicians were unaware of important information about diagnostic comorbidity.

The influence of comorbidity on treatment outcome has also been examined in controlled or standardized

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The authors are affiliated with the division of outpatient psychiatry at Rhode Island Hospital and the department of psychiatry and human behavior at Brown University School of Medicine in Providence, Rhode Island. Send correspondence to Dr. Zimmerman, Bayside Medical Building, 235 Plain Street, Providence, Rhode Island 02905 (e-mail, mzimmerman@lifespan.org).

treatment trials. However, a problem with interpreting the results pertaining to the prognostic significance of diagnostic comorbidity in such studies is that patients often are excluded from participation because they have diagnoses other than the disorder of interest. Such exclusions make it more difficult to demonstrate different outcomes between patients with and without comorbid disorders. We are not aware of any studies that have demonstrated that patients with comorbid disorders have superior outcomes, but several studies have reported poorer outcomes for patients with multiple diagnoses (10–18).

A second problem with generalizing the results of controlled trials to clinical practice is that treatment is directed to the disorder of interest, and comorbid conditions are not addressed. Treatment in clinical settings can be multifocused to address multiple disorders simultaneously. For example, a patient with major depression and panic disorder might receive an antidepressant and an anxiolytic medication simultaneously, or someone with major depression and posttraumatic stress disorder might begin an antidepressant and cognitive-behavioral therapy. It is this treatment perspective, the routine clinical setting approach, that is gaining increasing attention. The American Psychiatric Association Practice Research Network is a large-scale effort to examine the effectiveness of treatment in routine clinical practice and determine how the results compare with results from rigorously controlled studies of treatment efficacy (19).

Although information about diagnostic comorbidity can be valuable for prognosis, such information may not be immediately useful if patients are not interested in treatment of comorbid conditions that are not the primary reason for seeking treatment. In fact, few empirical data exist on the frequency of psychiatric diagnoses made with semistructured interviews in routine clinical practice. Little is known about which diagnoses are more often assigned as the principal and the additional or comorbid disorder, and whether patients are interested in treatment for their comorbid conditions.

The Rhode Island Methods to Improve Diagnosis Assessment and Services (MIDAS) project is an ongoing study of the frequency and correlates of psychiatric disorders in routine clinical practice (9,20,21). In this study from the MIDAS project we examined three issues related to psychiatric diagnosis and patients' seeking of treatment. First, we determined which *DSM-IV* disorders were most frequently diagnosed among patients presenting for treatment at a large, hospital-affiliated, community-based psychiatric clinical practice. Second, we ascertained whether there were differences in the relative frequency of disorders being assigned as principal or additional diagnoses. And third, we examined whether there were differences among the *DSM-IV* disorders in patients' desire for treatment when the disorder was diagnosed as a comorbid condition.

## Methods

Four hundred patients were evaluated in the Rhode Island Hospital department of psychiatry outpatient practice from December 1995 through February 1997. This private-practice group treats mainly persons with medical insurance (including Medicare but not Medicaid) on a fee-for-service basis. It is distinct from the hospital's outpatient residency training clinic, which predominantly serves lower-income, uninsured, medical-assistance patients.

Not all patients presenting to the practice consented to be interviewed with the comprehensive semistructured diagnostic interview. However, as we have previously reported, no differences in demographic characteristics were found between patients who participated in the study and those who received a routine clinical evaluation (9).

Six diagnostic raters administered the Structured Clinical Interview for *DSM-IV* (SCID) (22). Details on the raters' experience and training have been presented elsewhere (9,20,21). During the course of the study, joint-interview diagnostic reliability information was collected for 17 patients. For disorders diagnosed at least two times, the kappa coefficients were as follows: major depressive disorder, 1;

dysthymic disorder, 1; bipolar disorder, 1; depressive disorder not otherwise specified, .45; adjustment disorder, .45; panic disorder, 1; social phobia, .87; obsessive-compulsive disorder, 1; specific phobia, 1; generalized anxiety disorder, .64; posttraumatic stress disorder, 1; and anxiety disorder not otherwise specified, .19.

Ongoing supervision of the raters consisted of weekly diagnostic case conferences involving all members of the project. In addition, every case was presented to the first author on the day of the evaluation. Diagnostic uncertainties usually were clarified the same day, and, if necessary, patients were telephoned to obtain additional information needed to render a definitive diagnosis.

The prevalence of some disorders may have been influenced by some modifications of the SCID. First, after the first 100 patients were interviewed, modules were added for the impulse control disorders (intermittent explosive disorder, kleptomania, pathological gambling, trichotillomania, and pyromania). Second, the SCID screening question for social phobia was supplemented with questions about 12 specific social situations.

Regardless of how individuals responded to the SCID's screening probe about anxiety about public speaking or eating in front of others, they were also asked whether they felt more fearful, anxious, or nervous than most people when saying something in a group of people, business meetings, one-on-one conversations, and so on. Nine patients who answered no to the SCID's screening question were diagnosed with current social phobia.

Finally, questions about 13 different delusions (reference, persecution, grandiosity, somatic, religious, guilt, jealousy, erotomanic, control, thought insertion, thought withdrawal, thought broadcasting, and mind reading) and five types of hallucinations (auditory, visual, tactile, gustatory, and olfactory) were asked of every patient.

At the end of each SCID module, we added the following question about reason for seeking treatment: "Are [symptoms of current disorder]

a reason for coming for treatment now?" When asking this question, the interviewer reviewed the features of the disorder that had just been described so the patient understood what the question referred to.

The institutional review board approved the research protocol, and all patients provided written informed consent to participate in the project.

We followed the *DSM-IV* convention in distinguishing between principal and additional diagnoses. That is, the principal diagnosis referred to the disorder that the patient indicated was the main reason for seeking treatment; all other diagnoses were considered additional diagnoses.

## Results

The majority of the 400 patients were female (246 patients, or 61.5 percent), white (367 patients, or 91.7 percent), high school graduates (351 patients, or 87.7 percent), and married (177 patients, or 44.3 percent) or single (118 patients, or 29.5 percent). The patients' mean±SD age was 38.8±13.4 years.

Table 1 lists the *DSM-IV* axis I diagnoses made at the time of the initial evaluation. Disorders that were fully or partially remitted are not included. For the 400 patients, more than 900 diagnoses were made. The most frequent diagnosis was major depression, which was present in nearly half of the patients. Major depression was also the most common principal diagnosis, with more than three-quarters of the depressed patients having it as their principal diagnosis.

The second most common diagnosis was social phobia. In contrast to major depressive disorder—which, when present, was usually the principal diagnosis—very few patients with social phobia had it as their principal diagnosis. The other diagnoses that were present in at least 10 percent of the sample were posttraumatic stress disorder (PTSD), panic disorder with agoraphobia, specific phobia, and anxiety disorder not otherwise specified. Most disorders were more frequently diagnosed as additional disorders rather than as the principal disorder. Only the mood disorders and adjustment disorders were more frequently diagnosed as the principal dis-

**Table 1**

Prevalence of current *DSM-IV* axis I disorders among 400 psychiatric outpatients

Disorder	Total		Principal diagnosis <sup>1</sup>		Additional diagnosis	
	N	%	N	%	N	%
Mood disorders						
Major depression	188	47.0	147	36.8	41	10.3
Dysthymic disorder	28	7.0	4	1.0	24	6.0
Bipolar I disorder	8	2.0	7	1.8	1	0.3
Bipolar II disorder	15	3.8	13	3.3	2	0.5
Depressive disorder not otherwise specified (NOS)	36	9.0	23	5.8	13	3.3
Anxiety disorders						
Panic disorder	18	4.5	3	0.8	15	3.8
Panic disorder with agoraphobia	53	13.3	19	4.8	34	8.5
Agoraphobia without a history of panic	6	1.5	0	0	6	1.5
Social phobia	115	28.8	4	1.0	111	27.8
Specific phobia	40	10.0	2	0.5	38	9.5
Posttraumatic stress disorder	59	14.8	19	4.8	40	10.1
Generalized anxiety disorder	34	8.5	9	2.3	25	6.3
Obsessive-compulsive disorder	34	8.5	8	2.0	26	6.6
Anxiety disorder NOS	60	15.0	15	3.8	45	11.3
Substance use disorders						
Alcohol abuse or dependence	25	6.3	5	1.3	20	5.0
Drug abuse or dependence	17	4.3	2	0.5	15	3.8
Eating disorders						
Anorexia nervosa	0	0	0	0	0	0
Bulimia nervosa	2	0.5	0	0	2	0.5
Eating disorder NOS	21	5.3	1	0.3	20	5.0
Psychotic disorders						
Schizophrenia	2	0.5	2	0.5	0	0
Schizoaffective disorder	4	1.0	4	1.0	0	0
Delusional disorder	1	0.3	0	0	1	0.3
Psychotic disorder NOS	7	1.8	2	0.5	5	1.3
Somatoform disorders						
Somatization	2	0.5	0	0	2	0.5
Hypochondriasis	5	1.3	2	0.5	3	0.8
Undifferentiated somatoform disorder	6	1.6	1	0.3	5	1.3
Pain disorder	4	1.1	1	0.3	3	0.8
Body dysmorphic disorder	10	2.6	2	0.5	8	2.1
Somatoform disorder NOS	1	0.3	0	0	1	0.3
Impulse control disorders <sup>2</sup>						
Intermittent explosive disorder	14	4.5	2	0.6	12	3.9
Trichotillomania	0	0	0	0	0	0
Pathological gambling	3	0.9	1	0.3	2	0.6
Kleptomania	0	0	0	0	0	0
Impulse control disorder NOS	1	0.3	0	0	1	0.3
Adjustment disorders	20	5.0	19	4.8	1	0.3
Attention-deficit disorders	12	3.0	10	2.6	2	0.6

<sup>1</sup> The sum of all principal diagnoses does not amount to 400 because six patients received no current diagnoses, 20 patients received an axis I or axis II principal diagnosis not included in the table, 43 patients received an axis I principal diagnosis in partial remission, and four patients received a current axis I or axis II diagnosis but not a principal diagnosis because their reason for presenting for treatment was unrelated to a psychiatric diagnosis.

<sup>2</sup> Impulse control disorders were assessed in a subset of 311 persons from the total sample of 400.

order than as an additional disorder.

Table 2 shows the percentage of patients with each disorder who sought treatment for those symptoms. By definition, for the principal diagnosis 100 percent of the patients wanted

treatment for it. For additional diagnoses, there was some variability among the disorders in reasons for seeking treatment. Nearly all patients with a mood disorder indicated that it was a reason for coming for treat-

**Table 2**Percentages of 400 patients seeking treatment for principal and additional *DSM-IV* axis I disorders

Disorder	N with disorder	N seeking treatment	% seeking treatment	N seeking treatment for principal diagnosis <sup>1</sup>	Additional diagnosis		
					N with disorder <sup>2</sup>	N seeking treatment	% seeking treatment
Mood disorders							
Major depression	188	186	98.9	147	41	39	95.1
Dysthymic disorder	28	24	85.7	4	24	20	83.3
Bipolar I disorder	8	8	100	7	1	1	100
Bipolar II disorder	15	15	100	13	2	2	100
Depressive disorder not otherwise specified (NOS)	34	33	97.0	23	11	10	90.9
Anxiety disorders							
Panic disorder	18	16	88.9	3	15	13	86.7
Panic disorder with agoraphobia	53	41	77.4	19	34	22	64.7
Agoraphobia without a history of panic	6	2	33.3		6	2	33.3
Social phobia	114	61	53.5	4	110	57	51.8
Specific phobia	40	12	30.0	2	38	10	26.3
Posttraumatic stress disorder	59	50	84.7	19	40	31	77.5
Generalized anxiety disorder	34	30	88.2	9	25	21	84.0
Obsessive-compulsive disorder	34	17	50.0	8	26	9	34.6
Anxiety disorder NOS	58	32	55.2	15	43	17	39.5
Substance use disorders							
Alcohol abuse or dependence	25	16	64.0	5	20	11	55.0
Drug abuse or dependence	17	11	64.7	2	15	9	60.0
Eating disorders							
Bulimia nervosa	2	2	100		2	2	100
Eating disorder NOS	12	6	50.0	1	11	5	45.5
Psychotic disorders							
Schizophrenia	2	2	100	2			
Schizoaffective disorder	4	4	100	4			
Psychotic disorder NOS	4	4	100	2	2	2	100
Somatoform disorders							
Somatization	2	0	0		2	0	—
Hypochondriasis	5	4	80.0	2	3	2	66.7
Undifferentiated somatoform disorder	6	4	66.7	1	5	3	60.0
Pain disorder	4	4	100	1	3	3	100
Body dysmorphic disorder	10	7	70.0	2	8	5	62.5
Somatoform disorder NOS	1	1	100		1	1	100
Impulse control disorders <sup>3</sup>							
Intermittent explosive disorder	14	9	64.3	2	12	7	58.3
Pathological gambling	3	3	100	1	2	2	100
Impulse control disorder NOS	1	0	—		1	0	—
Adjustment disorders	20	20	100	19	1	1	100
Attention-deficit disorders	11	11	100	10	1	1	100

<sup>1</sup> Because by definition all patients were seeking treatment for the principal diagnosis, percentage is 100 percent for each disorder.<sup>2</sup> Desire for treatment was not recorded for two patients with depressive disorder NOS, one with social phobia, two with anxiety disorder NOS, nine with eating disorder NOS, one with delusional disorder, three with psychotic disorder NOS, and one with attention-deficit disorder.<sup>3</sup> Impulse control disorders were assessed in a subset of 311 persons from the total sample of 400.

ment. Of the anxiety disorders, patients most often came for treatment of panic disorder, generalized anxiety disorder, and PTSD. Half to two-thirds of patients sought treatment of social phobia and panic disorder with agoraphobia, and a minority of patients came for treatment of specific phobia and obsessive-compulsive disorder. Approximately half the patients with drug and alcohol problems wanted treatment to address them, and about two-thirds of the patients with

somatoform disorders and intermittent explosive disorder sought treatment for these disorders when they were not the principal diagnosis.

### Discussion

Psychiatric outpatients seek treatment for symptoms of comorbid disorders as well as for the symptoms of their principal diagnosis. Across the entire sample of 400 patients, more than 900 diagnoses were made. Of more than 500 diagnoses that were

not the principal reason for seeking treatment, patients still indicated that 60 percent of these additional disorders were one of the reasons they had sought treatment.

Moreover, considerable differences in the desire for treatment were found among the classes of disorders. Mood disorders constituted the most frequent reason for seeking treatment, and even when a mood disorder was diagnosed as an additional disorder, most patients wanted their

treatment to address their mood problem. In contrast, only a minority of patients with specific phobia and obsessive-compulsive disorder indicated that these symptoms were a reason for coming for treatment.

One limitation of the study is that the sample was drawn from a single general adult outpatient private-practice setting in which the most common presenting problems were mood and anxiety disorders. Rhode Island has a strong community mental health center network that treats most chronically mentally ill patients, which accounts in part for the low prevalence of psychotic disorders in our sample. Because the practice does not have a specialist in the treatment of substance use disorders, patients with a primary substance use problem are encountered infrequently. It will be important to determine whether our findings are generalizable to other settings with patients who have different demographic and diagnostic characteristics.

It is possible that the wording of the question about treatment seeking influenced the results. Rather than asking whether the disorder was a reason for seeking treatment, we could have inquired whether it was "one of the main (or primary) reasons for seeking treatment." We would predict that this rewording of the question would lower the percentage of patients who desired treatment for an additional disorder. Alternatively, we could have asked the patients whether they would "like treatment to address these problems," and the percentage of patients who desired treatment may have been higher for some disorders.

It is of interest to consider the results from this study in the context of the health services utilization data from the Epidemiologic Catchment Area (ECA) study (23,24) and the National Comorbidity Study (NCS) (25). In the ECA study 28.5 percent of persons with a *DSM-III* disorder had received mental health treatment in the previous year (24). This low rate is consistent with other epidemiological studies, such as the NCS, that found that most individuals in the community with psychiatric disorders are not treated for them (25). In both the

NCS and ECA studies there was considerable variability among the disorders in service utilization, and the relative ranking of service utilization rates for the classes of disorders corresponds to the rankings for desire for treatment we report here. That is, in the ECA study, persons with mood disorders were treated more frequently than persons with anxiety disorders, who were treated more frequently than persons with substance use disorders (45.7 percent versus 32.7 percent versus 23.6 percent). Similar results were found in the NCS (36.4 percent versus 26.5 percent versus 22.7 percent).

In the ECA study, within the anxiety disorder group, patients with panic disorder received treatment for mental health problems more frequently than persons with obsessive-compulsive disorder, who received treatment more frequently than those with a phobic disorder (58.8 percent versus 45.1 percent versus 31.1 percent). In the NCS, PTSD, but not obsessive-compulsive disorder, was assessed, and persons with panic disorder (46.4 percent) received treatment for mental health problems more frequently than persons with PTSD (38.3 percent) or generalized anxiety disorder (38.7 percent), who received treatment more frequently than persons with simple and social phobia (25.7 percent and 23 percent, respectively).

In these two epidemiological studies service utilization was not linked to the presence of any specific disorder. Rather, service utilization was assessed for any psychiatric or substance use problem, and these general utilization rates were compared among persons with different disorders. Nevertheless, despite the differences in methods between these epidemiological studies and the study reported here, the relative rankings of the disorders for which our outpatients desired treatment was similar to the relative rankings of the disorders for which the other studies' community respondents received care.

There may be several possible reasons for patients not to seek treatment for all disorders they have at a given time. They might consider the comorbid disorder trivial compared

with other problems. For example, many patients with specific phobia indicated that their phobic fear was the least of their concerns, and they were not interested in treatment for it.

Another possible reason is that patients might have accepted the pathology as part of their normal self. This, too, is probably a partial explanation of patients' low level of interest in treatment for specific phobia. It might also account for why patients with panic disorder who had agoraphobia were less interested in seeking treatment than patients with panic disorder who did not have agoraphobia. Agoraphobia is a coping response, albeit a maladaptive one, and persons who have "coped" with their panic attacks in this manner may be less inclined to seek treatment for panic disorder than those who have not developed an agoraphobic response.

A third possible reason for not seeking treatment for additional disorders is lack of insight about the significance of symptoms. The prototypical example is substance abusers who minimize the negative impact of their substance use. We were able to examine the association between insight and desire for treatment for obsessive-compulsive disorder because every individual with this disorder was rated on a 5-point insight scale ranging from excellent insight to no insight. This rating was made before patients were asked whether they wanted treatment for the obsessive-compulsive disorder symptoms. No patient was rated as having no insight. Compared with patients who wanted treatment for their obsessive-compulsive disorder symptoms ( $N=9$ ), significantly more patients who did not desire treatment for them ( $N=17$ ) had fair or poor insight about their symptoms (52.9 percent vs. 11.1 percent, Fisher's exact test,  $p=.044$ ).

Finally, it should be acknowledged that seeking treatment is a dynamic process. Persons may seek treatment for one problem and in the course of receiving care decide that their primary concern is actually something entirely different. In other cases, as the primary symptoms improve, other problems assume greater importance. Hence the stage of treatment may be

important to consider in interpreting our findings.

Although the patients in this study were assessed on initial presentation to our practice, many had been treated for their presenting problems in the past. Some had already been treated by a primary care physician or by a therapist who was referring the patient for a medication evaluation. For nine specific disorders diagnosed as additional disorders in at least 20 patients—major depressive disorder, alcohol abuse or dependence, drug abuse or dependence, panic disorder with agoraphobia, social phobia, specific phobia, obsessive-compulsive disorder, PTSD, and generalized anxiety disorder—we examined whether desire for treatment was associated with a history of having received treatment for the disorder. For three disorders—obsessive-compulsive disorder, alcohol abuse or dependence, and specific phobia—patients who had previously been treated for it were significantly more likely to want treatment when they presented to our practice.

## Conclusions

The results of this study indicate that patients often seek treatment for symptoms of disorders that are diagnosed as comorbid rather than principal conditions. This finding highlights the importance of conducting thorough diagnostic interviews in order to diagnose disorders that are not related to the patient's chief complaint, as patients often desire treatment for these additional diagnoses.

During the past decade interest in the importance of diagnostic comorbidity (26,27) has grown. A review of the literature comparing comorbidity rates as determined through unstructured clinical interviews and semi-structured and fully structured research diagnostic interviews suggests that diagnostic comorbidity is under-detected in routine clinical practice (9). A research question for future inquiry is whether improvements in the recognition of comorbidity improve outcomes and satisfaction with care. Future work can also delineate in more detail the processes that bring people into treatment. For example, symptom severity, impairment, and

chronicity are some of the factors that might influence desire for treatment. Changes in severity and degree of impairment might influence the timing of help seeking. ♦

## Acknowledgment

This work was supported in part by grant MH-48732 to Dr. Zimmerman from the National Institute of Mental Health.

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