ORIGINAL ARTICLE

Treatment of anxiety disorders by psychiatrists from the American Psychiatric Practice Research Network

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Objective: Anxiety disorders are highly prevalent in the United States, and if untreated, result in a number of negative outcomes. This study aimed to investigate psychiatrists' current treatment practices for patients with anxiety disorders in the United States.

Methods: Psychiatrist-reported data from the 1997 and 1999 American Psychiatric Institute for Research and Education Practice Research Network (PRN) Study of Psychiatric Patients and Treatments (SPPT) were examined, focusing on patients diagnosed with anxiety disorders. Information related to diagnostic and clinical features and treatments provided were obtained.

Results: Anxiety disorders remain underdiagnosed and undertreated, since only 11.4% of the sample received a principal diagnosis of an anxiety disorder in a real world setting. Posttraumatic stress disorder was associated with particularly high comorbidity and disability, and social anxiety disorder was relatively rarely diagnosed and treated. Although combined pharmacotherapy and psychotherapy was commonly used to treat anxiety disorders, anxiolytics were more commonly prescribed than selective serotonin reuptake inhibitors (SSRIs).

Conclusions: These data provide a picture of diagnosis and practice patterns across a range of psychiatric settings and suggest that anxiety disorders, despite being among the most prevalent of psychiatric disorders remain underdiagnosed and undertreated particularly in respect of the use of psychotherapeutic interventions.

Keywords: Anxiety disorders; treatment setting; treatment characteristics

Introduction

Anxiety disorders are highly prevalent and significantly impact the lives of many Americans. According to the National Comorbidity Survey Replication, approximately 18% of the U.S. population will suffer from an anxiety disorder each year and nearly 29% will experience an anxiety disorder at some point in their lives. 1,2 Untreated anxiety disorders have the potential to substantially increase medical costs, to have a significant negative impact on employment and vocational functioning,3 and to lead to suicidal behaviour. Prior studies of patients with anxiety disorders have indicated that they have decrements in functioning and well-being and increases in disability when compared with respondents without an anxiety disorder.4,5 Yet, there is substantial evidence available on both drug and psychotherapeutic interventions for treating anxiety disorders. 6-8

Despite the effective treatments available for anxiety disorders, the quality of care remains suboptimal for

many patients. For example, data from physician office visits between 1985 and 1998 suggest that unrecognized cases of anxiety disorders are a continuing and serious public health problem in the United States, 9-11 particularly in the primary care sector. Population-based household surveys and surveys of mental health patient advocacy groups further reveal long help-seeking delay (9 to 23 vears)¹⁰ among these patients.¹² Furthermore, while there is low mental health service use among patients with anxiety disorders due to lack of disease recognition. it is common for those who do access treatment to have inadequate medical visits for assessment, treatment delivery, and monitoring. 10 However, there is a paucity of research available on how anxiety disorders are treated by psychiatrists in the United States. Although previous studies have investigated the treatment of either a single disorder^{13,14} or anxiety disorders in general, ^{15,16} there are presently no studies available comparing the diagnostic and treatment characteristics of patients with different anxiety disorders.

The present study was designed, in part, to address this question using data from the Psychiatric Research Network (PRN) of the American Psychiatric Institute for Research and Education (APIRE), a network of both volunteer and randomly selected psychiatrist members of

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the American Psychiatric Association (APA) who are actively practicing clinicians (>15 hours/week providing direct, face-to-face patient care). The PRN incorporates a randomly selected group of psychiatrist members to increase representation and to include clinicians across the full spectrum of public and private treatment settings. The purpose was to examine: i) the proportion of patients in psychiatric practice diagnosed with an anxiety disorder, ii) variations across sociodemographic, clinical, and treatment characteristics, and iii) predictors of treatment modalities.

Method

Data sources

Data from the 1997 and 1999 APIRE PRN Study of Psychiatric Patients and Treatments (SPPT) were used. These studies provided national data on demographic and clinical characteristics of patients treated by psychiatrists and the types and patterns of treatment. The study methods have been described previously¹⁷ and are briefly summarized here. In the present study, the 1997 and 1999 surveys were combined in order to obtain a larger database for deriving stable national estimates.

In both surveys, participant psychiatrists were randomly assigned a specific start time to complete an extensive data collection instrument for three patients who had been randomly pre-selected from a patient log. The psychiatristreported study instrument collected detailed patient-level information concerning patients': 1) demographic characteristics (age, gender, race/ethnicity, marital status, education, region of country); 2) diagnostic and clinical features (e.g., DSM-IV multiaxial diagnosis including data on principal and comorbid disorders [psychiatric and medicall, current global assessment of functioning [GAF] score); and 3) treatments provided by the PRN psychiatrists and other providers (e.g., medication/no psychotherapy; psychotherapy, no medication; medication and psychotherapy; neither). Each psychiatrist was randomly assigned to begin data collection at 1 to 14 start times spread over a week and to complete a patient log for the next 12 consecutive patients for whom he or she had provided face-to-face care. Psychiatrists were also asked to complete a more extensive questionnaire for 3 "study" patients who had been randomly pre-selected from the patient log.17 Follow-up studies that examined issues of data reliability and validity have shown psychiatrists' reporting of patient diagnoses, GAF scores, medication prescriptions, and histories of hospitalization to be reliable over time. 17

Data analysis

To generate national estimates, a 3-stage propensity score weighting scheme was used. ¹⁸ Weights were developed independently for each study year. This has been previously described. ¹⁷ Comparisons were made between patients with an anxiety disorder (panic disorder [PD], obsessive-compulsive disorder [OCD], posttraumatic stress disorder [PTSD], agoraphobia [AP], social

anxiety disorder, generalized anxiety disorder [GAD]) and patients with no anxiety disorder. Frequency distributions and standard errors were calculated for categorical variables and means and standard errors for continuous variables. Pearson's chi-square tests were conducted to compare the frequencies of demographic (e.g., gender, age categories, race/ethnicity, education, geographic location) and clinical (e.g., locus of care, practice setting, treatment, health status, and disability) variables.

Two logistic regression models were constructed to assess the magnitude of association between type of treatment and demographic and clinical factors. In the first regression model, the outcome (dependent variable) was the use of anxiolytics rather than antidepressants. Anyone who was prescribed both anxiolytics and antidepressants or neither was excluded from the analysis. In the second model, the outcome was combined treatment (the addition of psychotherapy to medication rather than medication alone). For this analysis, patients getting psychotherapy alone were excluded. Psychotherapy included all forms of individual, group, and couples/family therapy. Separate univariate logistic regressions were first run for each predictor variable (all demographic, diagnostic, and clinical variables). Variables where the pvalue for the Wald F test was less than 0.20 were then selected and included in multivariate regression analyses. All statistical analyses were carried out using SUDAAN to adjust for the complex design of the sample.

Results

Four hundred and seventeen psychiatrists in 1997 and 615 psychiatrists in 1999, all APIRE PRN members, completed the SPPT survey. The response rate was 78% for both years. In total, 754 psychiatrists provided clinically detailed data on 2,640 patients. A total of 278 PRN members participated in both surveys. A small methodological follow-up study indicated that 90% of the 40 psychiatrists sampled appeared to have followed the patient sampling protocol. The most common protocol violation was not having started data collection at the assigned date and time.

Demographic and clinical characteristics

Data from the APIRE's SPPT were available on 2,640 patients (Table 1). Participating psychiatrists reported a diagnosis of an anxiety disorder in 648 patients (24.5% of the sample). In 302 patients (11.4% of the sample and 46.6% of those with a diagnosis of an anxiety disorder), the principal diagnostic category was an anxiety disorder. The principal diagnosis was the condition judged by the responding psychiatrist to be the patient's focus of treatment. Seventy-four patients (11.4%) had a principal diagnosis of PTSD, 50 (7.7%) had a principal diagnosis of GAD, 45 (6.9%) had OCD, 44 (6.8%) had AP, 42 (6.5%) had PD, 13 (2.0%) had social anxiety disorder, and 34 (5.2%) had an anxiety disorder NOS (not otherwise specified). No patients had a primary diagnosis of specific phobia.

Table 1 Demographic characteristics of patients with and without an anxiety disorder (n=2,640), n (%)*

•	•	, ,	
	No anxiety disorder (n=2,338)	Principal anxiety diagnosis (n=302)	p-value [†]
-	(11–2,000)	(11–302)	p-value
Gender			
Male	954 (40.8)	134 (44.4)	
Female	1,319 (56.4)	160 (53.0)	ns
Marital status			
Married/living	924 (39.5)	158 (52.3)	
together	, ,	, ,	
Widowed	188 (8.0)	9 (3.0)	
Never married	514 (22.0)	44 (14.6)	
Divorced	712 (30.5)	91 (30.1)	< 0.0001
Age in years	, ,	, ,	
Young adult (18-	554 (23.7)	71 (23.5)	
34)			
Adults (35-64)	1,454 (62.2)	209 (69.2)	
Elderly (65 or	330 (14.1)	22 (7.3)	< 0.01
older)			
Education			
< 12 years school	346 (14.8)	27 (8.9)	
High school	658 (28.1)	88 (29.1)	
> high school	1,195 (51.1)	179 (58.9)	< 0.01
Race/ethnicity			
White	1,869 (79.9)	260 (86.1)	
African-American	232 (9.9)	17 (5.6)	
Hispanic	123 (5.3)	15 (5)	
Other	114 (4.9)	10 (3.3)	< 0.05

ns = non-significant.

Patients with principal anxiety diagnosis were significantly more likely to receive selective serotonin reuptake inhibitors (SSRIs) (chi-square = 4.42, p \leq 0.05) or anxiolytic medications (benzodiazepines) (chi-square = 72.64, p \leq 0.0001), whereas those without anxiety disorders were significantly more likely to receive other antidepressants (i.e., other than SSRIs, tricyclics, or monoamine oxidase inhibitors (MAOIs) (chi-square = 4.42, p \leq 0.05), atypical antipsychotics (chi-square = 40.84, p \leq 0.0001), typical antipsychotics (chi-square = 20.24, p \leq 0.0001), mood stabilizers (chi-square = 28.36, p \leq 0.0001), sedative hypnotics (chi-square = 3.90, p \leq 0.05), and stimulants (chi-square = 4.92, p \leq 0.05) (Table 2).

In patients with a principal diagnosis of an anxiety disorder (n=302), a number of differences were noted in demographic features across the various anxiety diagnoses (Table 3). Patients with panic disorder, agoraphobia, and anxiety disorder NOS were more likely to be female (71.4, 68.2, and 58.8%, respectively), patients with OCD and social anxiety disorder were more likely to be male (62.2 and 53.8%), and patients with GAD and PTSD, had a roughly even gender distribution. Patients with agoraphobia and GAD were more likely to be married (68.2 and 62%, respectively), while those with OCD and social anxiety disorder were more likely to be divorced (48.9 and 61.5%, respectively). Across all the anxiety disorders, patients were most likely to be 35-64 years of age. White, and with more than high school education.

Table 2 Treatment characteristics of patients with and without anxiety disorders, n (%)

	No anxiety (n=2,338)	Principal anxiety diagnosis (n=302)	p-value
SSRIs Tricyclics MAOIs Other antidepressants Atypical antipsychotics Antipsychotics Mood stabilizers Anxiolytics Sedative hypnotics Stimulants Other Meds, no	936 (40.0) 193 (8.3) 8 (0.3) 611 (26.1) 481 (20.6) 323 (13.8) 527 (22.5) 744 (31.8) 192 (8.2) 112 (4.8) 10 (0.4) 667 (28.5)	140 (46.4) 30 (9.9) 3 (1.0) 62 (20.5) 16 (5.3) 14 (4.6) 28 (9.3) 171 (56.6) 15 (5.0) 6 (2.0) 1 (0.3) 72 (23.8)	< 0.05 ns ns c 0.05 < 0.0001 < 0.0001 < 0.0001 < 0.0001 < 0.0001 < 0.005 ns ns ns
psychotherapy Psychotherapy, no meds	228 (9.8)	39 (12.9)	_*
Meds + psychotherapy	1,335 (57.1)	182 (60.3)	-
Neither	108 (4.6)	9 (3.0)	ns

MAOIs = monoamine oxidase inhibitors; ns = non-significant; SSRIs = selective serotonin reuptake inhibitors.

Treatment setting and treatment characteristics

Most patients with a principal diagnosis of an anxiety disorder were seen in a solo practice setting (54.9%). Treatment across the anxiety disorders differed significantly (Table 4). Combined medication and psychotherapy was used in 45.2-76.9% of patients, but was least commonly used in panic disorder and in patients with an anxiety NOS. Medication without psychotherapy was used most commonly in panic disorder (50.0%), although this comparison did not reach statistical significance. Psychotherapy without medication was provided relatively uncommonly, except in the case of an anxiety disorder NOS (35.3%) and in GAD (24.0%). Antipsychotics, mood stabilizers, and stimulants were rarely given to the patients with an anxiety disorder.

Rates of SSRI prescription differed markedly across disorders, being least common in GAD (26.0%) and most common in OCD (71.1%). Prescription of anxiolytics also differed significantly across disorders, being least common in OCD (37.8%) and most common in AP (75.0%) and PD (69.0%). Across the anxiety disorders, there were no significant differences in the type of health insurance that patients had.

Factors related to the use of anxiolytics or antidepressants

One hundred and twenty-five patients were prescribed a combination of antidepressants and anxiolytics (vs. 87 antidepressants only and 48 anxiolytics only). In univariate regression analyses, predictor variables that had p-values of < 0.20 for the Wald F test included age, marital status, race, region of practice, insurance status,

^{*} Percentages may not total 100% owing to missing values.

[†] Chi-square test.

^{*} Unable to conduct analysis due to insufficient sample size.

Table 3 Demographic characteristics of patients with a principal diagnosis of an anxiety disorder (n=302), n (%)

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	No Anxiety (n=2,338)	AP (n=44)	SAD (n=13)	GAD (n=50)	PTSD (n=74)	PD (n=42)	OCD (n=45)	ADNOS (n=34)
Gender*								
Male	954 (40.8)	12 (27.3)	7 (53.8)	25 (50)	36 (48.6)	12 (28.6)	28 (62.2)	14 (41.2)
Female	1,319 (56.4)	30 (68.2)	5 (38.5)	23 (46)	37 (50)	30 (71.4)	15 (33.3)	20 (58.8)
Marital status [†]								
Married/living together	924 (39.5)	30 (68.2)	3 (23.1)	31 (62)	37 (50)	21 (50)	18 (40)	18 (52.9)
Widowed	188 (8.0)	3 (6.8)	0 (0.0)	1 (2)	0 (0)	1 (24)	1 (2.2)	3 (8.8)
Never married	514 (22)	4 (9.1)	2 (15.4)	4 (8)	16 (21.6)	8 (19)	4 (8.9)	6 (17.6)
Divorced/ separated	712 (30.5)	7 (15.9)	8 (61.5)	14 (28)	21 (28.4)	12 (28.6)	22 (48.9)	7 (20.6)
Age in years*	, ,	, ,	, ,	, ,	, ,	, ,	, ,	, ,
18-34	554 (23.7)	8 (18.2)	5 (38.5)	5 (10)	19 (25.7)	12 (28.6)	17 (37.8)	5 (14.7)
35-64	1,454 (62.2)	33 (75)	8 (61.5)	40 (80)	50 (67.6)	27 (64.3)	25 (55.6)	26 (76.5)
65 or older	330 (14.1)	3 (6.8)	0 (0.0)	5 (10)	5 (6.8)	3 (7.1)	3 (6.7)	3 (8.8)
Education*	, ,	, ,	, ,	` ,	` ,	` ,	` ,	` ,
< 12 years	346 (14.8)	4 (9.1)	0 (0)	6 (12)	9 (12.2)	18 (42.9)	3 (6.7)	3 (8.8)
High school	658 (28.1)	13 (29.5)	0 (0)	10 (20)	26 (35.1)	2 (4.8)	9 (20)	12 (35.3)
> high school	1,195 (51.1)	24 (54.5)	13 (100)	32 (64)	37 (50.0)	22 (52.4)	32 (71.1)	18 (52.9)
Race/ethnicity								
White	1,869 (79.9)	38 (86.4)	13 (100)	47 (94)	52 (70.3)	38 (90.5)	40 (88.9)	32 (94.1)
Non-white	469 (20.1)	6 (13.6)	0 (0)	3 (6)	22 (29.8)	5 (9.6)	5 (11.1)	2 (5.9)

ADNOS = anxiety disorder not otherwise specified; AP = agoraphobia; GAD = generalized anxiety disorder; OCD = obsessive-compulsive disorder; PD = panic disorder; PTSD = posttraumatic stress disorder; SAD = social anxiety disorder. Chi-square tests: * p < 0.05, † p < 0.01.

Percentages may not total 100% owing to missing values.

The principal diagnosis was the condition judged by the responding psychiatrist to be the patient's focus of treatment.

Table 4 Treatment characteristics of patients with a principal diagnosis of an anxiety disorder (n=302), n (%)

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	No Anxiety (n=2,338)	AP (n=44)	SAD (n=13)	GAD (n=50)	PTSD (n=74)	PD (n=42)	OCD (n=45)	ADNOS (n=34)
SSRIs*	936 (40)	24 (54.5)	7 (53.8)	13 (26)	31 (41.9)	21 (50)	32 (71.1)	12 (35.3)
Tricyclics	193 (8.3)	7 (15.9)	0 (0)	1 (2)	7 (9.5)	8 (19)	5 (11.1)	2 (5.9)
Other [†] antidepressants	611 (26.1)	5 (11.4)	3 (23.1)	8 (16)	25 (33.8)	8 (19)	6 (13.3)	7 (20.6)
Anxiolytics [‡]	744 (31.8)	33 (75)	5 (38.5)	32 (64)	37 (50)	29 (69)	17 (37.8)	18 (52.9)
Sedative [‡] hypnotics	192 (8.2)	1 (2.3)	0 (0)	1 (2)	4 (5.4)	2 (4.8)	4 (8.9)	3 (8.8)
Meds, no psychotherapy	667 (28.5)	14 (31.8)	2 (15.4)	12 (24)	8 (10.8)	21 (50)	10 (22.2)	5 (14.7)
Psychotherapy, no meds	228 (9.8)	1 (2.3)	1 (7.7)	12 (24)	8 (10.8)	1 (2.4)	4 (8.9)	12 (35.3)
Meds [†] + psychotherapy	1,335 (57.1)	28 (63.6)	10 (76.9)	25 (50)	53 (71.6)	19 (45.2)	31 (68.9)	16 (47.1)
Neither	108 (4.6)	1 (2.3)	0 (0)	1 (2)	5 (6.8)	1 (2.4)	0 (0)	1 (2.9)

ADNOS = anxiety disorder not otherwise specified; AP = agoraphobia; GAD = generalized anxiety disorder; OCD = obsessive-compulsive disorder; PD = panic disorder; PTSD = posttraumatic stress disorder; SAD = social anxiety disorder; SSRIs = selective serotonin reuptake inhibitors

Chi-square tests: * p < 0.01, † p < 0.05, ‡ p < 0.001.

The principal diagnosis was the condition judged by the responding psychiatrist to be the patient's focus of treatment.

any diagnosis of depression, any diagnosis of alcohol disorder, problems with access to health care services, problems related to the environment, problems with the legal system/crime, and GAF scores. Multivariate analyses showed that easier access to health care services ($\beta=4.48,\ SE\beta=1.11,\ OR=88.5\ [95\%\ confidence\ interval\ \{95\%CI\}=2.30\text{-}6.67],\ p<0.0001)$ and the presence of problems with the legal system ($\beta=2.93,\ SE\beta=1.30,\ OR=18.7\ [95\%CI=0.38\text{-}5.47],\ p<0.02)$ were positive statistical predictors of anxiolytic medication prescription. Race other than White, Black or Hispanic ($\beta=-3.10,\ SE\beta=1.32,\ OR=0.04\ [95\%CI=-5.70\ to-0.51],\ p=0.02),\ and\ private\ insurance\ status\ (<math display="inline">\beta=-1.21,\ SE\beta=0.57,\ OR=0.30\ [95\%CI=-2.33\ to\ 0.09],\ p=0.04)$ negatively predicted the prescription of anxiolytics.

Factors related to treatment modality (medication only versus medication plus psychotherapy)

Predictor variables entered into a multivariate regression analyses included race, marital status, any medical conditions, problems related to the environment, problems with the primary support group, occupational problems, and GAF scores. Single marital status ($\beta=1.02,\ SE\beta=0.51,\ OR=2.8\ [95\%Cl=1.0-7.5],\ p=0.046),\ presence of a comorbid medical condition (<math display="inline">\beta=1.05,\ SE\beta=0.42,\ OR=2.9\ [95\%Cl=1.3-6.5],\ p<0.01),\ work-related problems (<math display="inline">\beta=0.84,\ SE\beta=0.39,\ OR=2.3\ [95\%Cl=1.1-4.9],\ p=0.03),\ and lower GAF scores (51-70) (<math display="inline">\beta=1.53,\ SE\beta=0.45,\ OR=4.6\ [95\%Cl=1.9-11.1],\ p=0.0001)$ were all positive statistical predictors of medication plus psychotherapy.

Race other than White/Black/Hispanic (β = -2.29; SE β = 1.10, OR = 0.1 [95%Cl = 0.01-0.88], p = 0.04) negatively predicted combination treatment.

Discussion

This study had a number of important findings. First, anxiety disorders likely remain underdiagnosed and undertreated. Second, pharmacotherapy and psychotherapy are commonly used to treat anxiety disorders. Third, anxiolytics are more commonly prescribed than antidepressants for people with a principal diagnosis of anxiety.

To begin with, in the present study, 11.4% of the sample received a principal diagnosis of an anxiety disorder from the psychiatrist. Although it is unclear what the true base rate of anxiety disorders is in this population, this is a substantially lower rate than that found in studies that have systematically evaluated patients seeking medical care at psychiatric as well as general medical settings. ^{19,20} It is possible that the psychiatrists in the present study viewed other non-anxiety comorbid disorders as being 'principal' and so focused their diagnosis and treatment primarily on those conditions. Nevertheless, the very low rates of diagnosis of anxiety disorders, which are the most prevalent of the common mental disorders in community surveys^{1,2} suggest underdiagnosis and possibly undertreatment.

Secondly, pharmacotherapy and psychotherapy are commonly used to treat anxiety disorders. In the present study, only poorer GAF scores predicted the practice of adding psychotherapy to medication among psychiatrists. However, there is some controversy about the extent to which combining pharmacotherapy and psychotherapy adds to the efficacy of either modality in the treatment of anxiety disorders. 21 Nevertheless, in clinical practice, it might be argued that many patients deserve elements of both pharmacotherapy and psychotherapy,²² and it is therefore reassuring to see relatively high rates of combined treatments for many of the anxiety disorders. It could be argued that psychiatrists are uniquely trained to provide such interventions. Data from the National Ambulatory Medical Care Surveys from 1985 to 1998 found that medication is being substituted for psychotherapy in visits to both psychiatrists and primary care physicians over time, 15 and PRN data also suggests that psychiatrists have shifted toward a more pharmacological orientation. 17 Further work to assess the optimal use of combined treatments in practice is needed.

Finally, recent research has emphasized the value of antidepressants, especially the SSRIs, benzodiazepines, and related sedative-hypnotic agents, in the treatment of anxiety disorders. Current guidelines for the treatment of anxiety highlight the SSRIs as a first-line intervention and suggest that they are preferable to benzodiazepines for most patients. For example, benzodiazepines are found to be ineffective for the treatment of PTSD. However, consistent with previous findings, the results of the present study indicate

that benzodiazepines are used more frequently than SSRIs in the treatment of most anxiety disorders. The reasons for this discrepancy between guideline-recommended care and the findings of naturalistic studies are unknown. Such discrepancy may reflect limited knowledge of the existing treatment recommendations, failure to respond to first-line treatments, or patient preference possibly due to differences in speed of onset of action and side effect profiles. It may also reflect that patients treated in clinical trials are not representative of patients in clinical practice, and do not respond to the same treatments.

The various anxiety disorders were associated with distinct demographic and clinical features, some consistent with previous epidemiological and clinical research. For example, community studies indicate that anxiety disorders are more common in females. Above, in the present study only 53% of anxiety disorder patients were women, suggesting that underrecognition of anxiety disorders may be particularly relevant to women. It has, however, been pointed out that in clinical samples no differences, or higher rates for men, have been reported. Similarly, there was a remarkably low rate of anxiety disorders in the elderly, further suggesting that there might be under-recognition in this group.

Several limitations of the present study must be considered when interpreting these findings. First, the data are based on physician report (including the diagnosis); therefore, the likelihood of reporting bias and variability in the thoroughness of patient assessments and in reporting cannot be underestimated. That said, participating psychiatrists were encouraged to refer to medical records and notes to supplement their report, and were contacted prior to and during survey implementation to clarify procedures and to answer any questions. Second, the data reported in the present study was collected in 1997 and 1999. It is possible that the use of antidepressants has increased since. Third, although this was a randomly selected cohort of PRN members, it cannot be assumed that these findings are representative of either American psychiatrists or the general population of psychiatric patients in the United States. Fourth, although the value of this large dataset lies in allowing a complex regression with multiple variables, the findings of multivariate logistic regression analyses need to be interpreted with caution in view of the small number of patients and the resulting instability of estimates and loss of statistical power.

These findings serve to highlight the extent to which anxiety disorders likely remain underdiagnosed and undertreated in psychiatric settings. They also highlight the extent to which benzodiazepines continue to be preferred in the pharmacotherapeutic management of these conditions, despite a shift to the use of antidepressants in clinical guidelines. Given the prevalence and associated disability of the anxiety disorders, and given the existence of effective and cost-efficient treatments, further work to ensure optimal management seems necessary.

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Disclosure

The authors report no conflicts of interest.

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