

What Is Generalized Anxiety Disorder?

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Generalized, persistent, and free-floating anxiety was first described by Freud in 1894, although the diagnostic term *generalized anxiety disorder* (GAD) was not included in classification systems until 1980 (*Diagnostic and Statistical Manual for Mental Disorders*, Third Edition [DSM-III]). Initially considered a residual category to be used when no other diagnosis could be made, it is now widely accepted that GAD represents a distinct diagnostic category. Since 1980, revisions to the diagnostic criteria for GAD in the DSM-III-R and DSM-IV classifications have markedly redefined this disorder, increasing the duration criterion to 6 months and increasing the emphasis on worry and psychic symptoms. This article reviews the development of the diagnostic criteria for defining GAD from Freud to DSM-IV and compares the DSM-IV criteria with the criteria set forth in the tenth revision of the *International Classification of Diseases*. The impact of the changes in diagnostic criteria on research into GAD, and on diagnosis, differential diagnosis, and treatment of GAD, will be discussed. (*J Clin Psychiatry* 2001;62[suppl 11]:4–12)

DEVELOPMENT OF THE DSM-I CLASSIFICATION SYSTEM

The development of a uniform nomenclature of medical diseases in the United States started in 1918,¹ but moved toward a nationally accepted standard nomenclature that resulted in the publication of the *Standard Classified Nomenclature of Diseases* only in 1933.^{2,3} In the Standard's fourth revision, the section entitled "Diseases of the Psychobiologic Unit" constituted the first edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-I).⁴

The changes in psychiatric thinking during and after World War II provided the main impetus for developing DSM-I. Some 90% of all cases handled by psychiatrists in the army did not fit into the nomenclature of the time, which focused almost exclusively on hospitalized patients,^{2,3} and the armed forces and Veterans Administration had to develop an improved and far broader psychiatric classification system. During the war, a psychoneurotic diagnostic label was applied to men reacting briefly with

various symptoms to considerable wartime stress. After the war, the improved nomenclature adopted by the armed forces and the Veterans Administration, as well as psychoanalysis, psychodynamics, and social activism, contributed significantly to the development of DSM-I. While psychoanalytic concepts were well known at the time, it was the World War II experience of many soldiers with traumatic neurosis that finally led to the acceptance of psychoanalysis into American psychiatry. Psychoanalysis emphasized the need to focus on nonpsychotic but presumably troubled individuals. Psychoanalytic theory emphasized the psychological mechanisms that mediated between instinctual biological drives and pressures of the external environment.

ANXIETY AS A SYMPTOM, SYNDROME, AND DIAGNOSIS: FROM FREUD TO DSM-II

Sigmund Freud provided the first comprehensive descriptive approach to the typology of anxiety disorders more than 100 years ago when he described a distinct syndrome, "anxiety neurosis,"⁵ which he separated from "neurasthenia." This work laid the foundation for the classification of anxiety disorders in a fashion that parallels Kraepelin's role in the classification of schizophrenia and mood disorders.⁶

Anxiety neurosis, according to Freud, consists of 4 major clinical syndromes: general irritability, chronic apprehension/anxious expectation, anxiety attacks, and secondary phobic avoidance.⁵ Freud believed that anxious expectation represented the "nuclear" symptom of anxiety neurosis and involved nervousness, apprehension, and free-floating anxiety. He gave 2 examples of anxious ex-

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pectation: (1) a woman who imagines that her husband will die each time he gives her a phone call and (2) a woman who comes to her house and, seeing 2 people standing in front of it, automatically imagines that something has happened to her children. Clearly, Freud provided the first description of “excessive worry” under the more correct term *anxious expectation*: the worry, although frequent, is not constant, occurring only under certain circumstances. Apprehension, according to Freud, may be present chronically or “come into consciousness suddenly, causing anxiety attacks” (now called panic attacks). These attacks can occur alone or may be associated with thoughts of sudden death.

Freud described anxiety symptoms as primarily somatic symptoms that may occur either in a “free-floating anxiety” or “apprehension” state or in a “sudden anxiety attack.” He identified the symptoms most likely to occur in both anxiety states and anxiety attacks as trepidation, arrhythmia, dyspnea, sweating, nausea, heavy feeling in stomach, tremor, increased urination, increased appetite, diarrhea, vertigo-giddiness, paresthesias, pavor nocturnus, increased sensitivity to pain, decrease of sexual interest, low self-esteem, and marked affective mobility. Freud also described 2 types of secondary phobic avoidance symptoms. He believed that chronic apprehension may lead primarily to simple phobias while vertigo and anxiety attacks may lead to agoraphobia.

Freud recognized that anxiety neurosis frequently occurs in conjunction with other neuroses, which he called “mixed neurosis.” He observed that anxiety symptoms frequently occur in combination with those of neurasthenia, hysteria, and obsessions. Freud did not separate free-floating anxiety and chronic apprehension from anxiety attacks, but noted the existence of comorbid subthreshold anxiety conditions.

Both the DSM-I, introduced in 1952,⁴ and the DSM-II,⁷ introduced in 1968, employed the concept of “neurosis” as a major organizing principle in structuring the anxiety disorders. The predominant American psychiatric theory was that all psychopathology was secondary to anxiety, which in turn was caused by intrapsychic conflict. Psychosis was considered the result of such an excess of anxiety that the ego crumbled and regressed, and neurosis, the result of a partially successful defense against anxiety that led to symptom formation.⁸ In 1964, Rickels⁹ described anxiety as follows:

Anxiety is the subjective feeling of heightened tension and diffused uneasiness, defined as the conscious and reportable experience of intense dread and foreboding, conceptualized as internally derived and unrelated to external threat. It is not merely fear because it lacks a specific object. It is a painful dread of situations, which symbolize unconscious conflicts and impulses. Anxiety can be partly bound by such mechanisms as phobias, obsessions and compulsions or it can be diverted into the soma, leading to somatization.^(p111)

In the 1960s, psychiatrists realized that anxiety states were frequently comorbid with one another, at least at sub-threshold levels, and that they frequently produced severe impairment. We quote from a 1968 publication¹⁰:

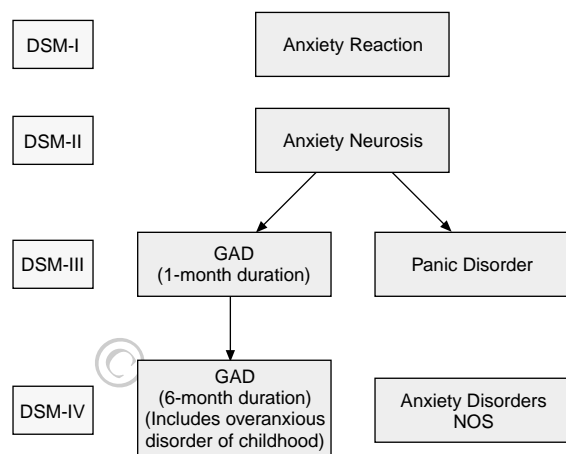
An abundance of tensions, fears, worries and anxieties confront mankind today and, in fact, anxiety is seen in the majority of patients visiting the physician’s office. Pure anxiety states are relatively rare because such syndromes as depression, hysteria, hypochondriasis, somatization, phobias, and obsessional thinking are often concomitantly present. And no matter what cause can be cited and what manifestations are present, neurotic symptoms are frequently very disturbing to the patient and therefore warrant therapeutic intervention.^(p20)

ANXIETY DISORDERS: FROM DSM-I TO DSM-IV

One of the major changes that occurred when the psychiatric classification shifted from DSM-I to DSM-II was the elimination of the term *reactions* applied to almost all diagnoses, including schizophrenia.¹¹ Both DSM-I and DSM-II were greatly influenced by psychoanalytic theory and practice.

During the late 1960s and early 1970s, psychiatrists, and particularly those involved in clinical research, became more and more disillusioned with the diagnostic system provided in DSM-I and DSM-II. Also, the feeling grew among many psychiatrists that they should move away from making a diagnosis based on unproven mechanisms such as “neurosis” and define psychiatric disorders more clearly in terms of age at onset, duration of illness, symptom patterns, and severity, irrespective of possible etiology. The Washington University group in St. Louis, Mo., probably contributed most to this development with their seminal article in 1972 entitled “Diagnostic Criteria for Use in Psychiatric Research.”¹² The authors defined 14 psychiatric disorders, including anxiety neurosis, obsessive-compulsive neurosis, phobic neurosis, and hysteria. Free-floating anxiety and anxiety attacks were still grouped under one diagnosis, namely, anxiety neurosis.

Soon after, the Research Diagnostic Criteria (RDC)¹³ were developed, which were based on the Washington criteria.¹³ In 1980, the American Psychiatric Association published the third edition of its statistical manual (DSM-III)^{14,15} after a broad debate between 2 opposing groups of American psychiatrists. On the one side were those committed to the position that the profession’s advance required a classification system that was atheoretical with regard to what they believed were unproven etiologic assumptions. This group pressed for a criteria-based classification that would be reliable and could provide the basis for testable hypotheses. Their intellectual roots were in St. Louis, not Vienna, and their intellectual inspiration was derived from Kraepelin, not Freud.¹⁶ Opposing them were

Figure 1. Generalized Anxiety: From DSM-I to DSM-IV^a

^aAbbreviations: GAD = generalized anxiety disorder, NOS = not otherwise specified.

those who argued that decades of experience with the clinically complex issues involved in psychotherapeutic work with patients had established the validity of the psychodynamic perspective.¹⁷

While anxiety disorders in DSM-I were recorded under psychoneurotic disorders (reactions) and in DSM-II under “neuroses,” with the advent of DSM-III, neurosis became only a secondary qualifier to placate those psychiatrists who felt ill at ease with the new diagnostic processes. Thus, in DSM-III, anxiety disorders still had the notation “or anxiety neurosis” in parentheses. Even in DSM-III-R,¹⁸ published in 1987, the anxiety disorders had “or anxiety and phobic neurosis” in parentheses. It was only in DSM-IV¹⁹ that these notations regarding neurosis finally disappeared.

Another major change in moving from DSM-II to DSM-III was the removal of hysterical, neurasthenic, and depressive neuroses from the anxiety neuroses (now called disorders) and their relocation into somatization, dissociative, and depressive disorders, quite separate from the anxiety disorders.¹⁵ For children, a diagnosis of separation anxiety was also offered. In DSM-III, obsessive-compulsive neurosis became obsessive-compulsive disorder and post-traumatic stress disorder (PTSD) and atypical anxiety disorder appeared as additional anxiety diagnoses for the first time. (Atypical anxiety disorder became anxiety not otherwise specified [NOS] in DSM-III-R and DSM-IV.)

GENERALIZED ANXIETY DISORDER

Although generalized, persistent, and free-floating anxiety had been described by Freud in 1894,⁵ the diagnostic term *generalized anxiety disorder* (GAD) first appeared in the DSM-III classification. In DSM-II, anxiety neurosis included generalized symptoms of anxiety and

panic symptoms. In DSM-III, it was divided into 2 separate groups: panic disorder, defined by a specified number of panic attacks (a rather artificial separation), and GAD, with a 1-month duration criterion, which included anxious patients with no, or only a few, panic attacks (Figure 1). Patients who were categorized in DSM-II under “phobic neurosis” were subdivided in DSM-III into agoraphobia with panic attacks, agoraphobia without panic attacks, social phobia, and simple phobia. It should be remembered that patients with phobic disorder were considered as separate from those with anxiety neurosis in classifications before DSM-III.

Quite erroneously, many psychiatrists felt that GAD represented a “residual category” in DSM-III. In fact, GAD included all nonphobic anxiety patients with the exception of those with frequent anxiety attacks (panic disorder patients), provided they were not agoraphobic. As an illustration of the extreme bias against a GAD diagnosis at that time, the first phase of the Epidemiologic Catchment Area (ECA) national survey omitted GAD as a possible diagnosis in the research diagnostic interview.²⁰

The belief that GAD is quite separate from panic disorder probably stems from Klein and Fink,²¹ who reported in 1962 that antidepressants such as imipramine were effective in panic disorder but not in generalized or anticipatory anxiety. This observation was eventually disproved when nonpanic patients suffering from generalized anxiety were shown to improve with antidepressants such as imipramine.^{22–24} Clearly, GAD was not a diagnosis left over when everything else was diagnosed, since, for example, phobic and obsessive-compulsive neuroses were already separate from anxiety neurosis in DSM-II.

While Freud believed that free-floating anxiety may lead to anxiety attacks in some patients, and thus panic attacks always follow periods of free-floating anxiety, most psychiatrists (American more than European) now believe that panic attacks may (but do not have to) occur without “preceding episodes of generalized anxiety.”²⁵ In addition, epidemiologic research has confirmed what every family physician knows, namely, that there are far fewer patients in family practice suffering from panic disorder than from GAD.

In DSM-IV, separation anxiety is the only childhood anxiety disorder still recognized, while social anxiety and generalized anxiety, including overanxious disorder of childhood, are now subsumed under the adult diagnostic categories.²⁶ Thus, when rank ordering anxiety disorders in DSM-IV, or placing them into subcategories, one would do well not to follow the outline presently given in that classification. Rather, one might follow the DSM-II division into phobic disorders (including agoraphobia, social phobia, and simple phobia) and nonphobic anxiety disorders (including panic disorder without agoraphobia, GAD, and anxiety disorder NOS). A third subcategory would include PTSD, acute stress disorder, and obsessive-compulsive

Table 1. DSM-IV Classification of Anxiety Disorders and Corresponding ICD-10 Codes^a

DSM-IV ¹⁹	ICD-10 ²⁷	Anxiety Disorder
300.02	F41.1	Generalized anxiety disorder (including overanxious disorder of childhood)
300.01	F41.0	Panic disorder without agoraphobia
300.21	F40.01	Panic disorder with agoraphobia
300.00	F41.9	Anxiety disorder NOS
300.22	F40.00	Agoraphobia without history of panic disorder
300.23	F40.1	Social phobia (social anxiety disorder, including avoidant disorder of childhood) <i>Specify if:</i> generalized
300.29	F40.2	Specific phobia <i>Specify type:</i> animal type, natural environment type, blood-injection-injury type, situational type, other type
300.3	F42.8	Obsessive-compulsive disorder <i>Specify if:</i> with poor insight
308.3	F43.0	Acute stress disorder
309.81	F43.1	Posttraumatic stress disorder <i>Specify if:</i> acute/chronic <i>Specify if:</i> with delayed onset
293.89	F06.4	Anxiety disorder due to [indicate the general medical condition] and substance-induced anxiety disorder

^aAbbreviation: NOS = not otherwise specified. Descriptions of anxiety disorders based on DSM-IV.¹⁹

disorder. Table 1 gives the DSM-IV classification of anxiety disorders together with codes from the tenth revision of the International Classification of Diseases (ICD-10).²⁷

The distinction between GAD and panic disorder seems to be clearer for patients with spontaneous panic attacks than for patients with situational or anticipatory anxiety attacks, which merge into GAD with heightened anxiety in certain situations. Social, generalized phobic disorders can be easily separated from GAD or the anxiety neuroses of DSM-II if they are clearly accompanied by phobic avoidance behavior. On the other hand, if phobic avoidance behavior is not present, generalized social phobia might be hard to separate from GAD and might best be diagnosed as GAD (without anxiety attacks) or panic disorder (with anxiety attacks).

DIAGNOSTIC CRITERIA FOR GAD

In DSM-I, anxiety is described as diffuse and not restricted to definite situations or objects. It is characterized by anxious expectation and frequently associated with somatic symptomatology. In DSM-II, anxiety is defined as anxious overconcern extending to panic, frequently associated with somatic symptoms, which must be distinguished from normal apprehension or fear. In DSM-III, these definitions of anxiety were changed to “generalized, persistent anxiety of at least 1 month’s duration.”

Table 2 summarizes the criteria used to diagnose GAD in the different DSM classifications and ICD-10.²⁷ Of the 2 main diagnostic systems in use today, DSM-IV requires that anxiety and worry be present “more days than not for

at least 6 months,” while ICD-10 requires that anxiety be present “most days for at least several weeks at a time and usually for several months.” DSM-IV also requires fewer physical symptoms than ICD-10. The increased focus placed by DSM-III-R and DSM-IV on psychic versus somatic or autonomic symptomatology in GAD may be considered a benefit to both cognitive psychotherapy and treatment with serotonergic agents such as buspirone or serotonergic antidepressants, but not for benzodiazepine treatment, which favors somatic symptomatology.

Anxiety changes from “persistent anxiety” in DSM-III to “unrealistic/excessive anxiety and worry about 2 or more life circumstances” in DSM-III-R and to “excessive (but not unrealistic) anxiety and worry about more than 1 life circumstance” in DSM-IV, to which the phrase “difficult to control the worry” is added. Apprehension is part of 4 equally important categories in DSM-III, but not in DSM-III-R and DSM-IV. In DSM-III-R, “apprehensive expectation” or “worry” is elevated to a cardinal or stem symptom: the diagnosis cannot be made without it, irrespective of how many other anxiety symptoms are present. The criterion for duration of illness changed from 1 month in DSM-III to 6 or more months in DSM-III-R and DSM-IV.

“Ancillary symptoms” in DSM-III included an unspecified number of symptoms from 3 of 4 categories, namely, apprehensive expectation, motor tension, autonomic, and vigilance. In DSM-III-R, these ancillary symptoms changed to 6 of 18 specified symptoms, eliminating the category of apprehensive expectations, since it had become a primary criterion for the diagnosis, now defined as “worry.” In DSM-IV, the ancillary symptoms involve at least 3 of 6 symptoms selected from the motor tension and vigilance categories, while the autonomic category has been deleted. In children, however, only 1 symptom is needed, which is problematic. Clearly, there has been a shift from somatic to more psychic concern and symptoms over the years, the consequences of which still need to be determined.

Yet, in family practice, many anxious patients primarily present with somatic rather than psychic symptomatology. For example, in an epidemiologic study,²⁸ family practice patients described as “somatizers” (patients focusing on somatic symptoms and who endorse symptoms justifying a psychiatric DSM-III diagnosis only after extensive questioning) were compared with patients described as “psychologizers” (patients presenting with psychological symptoms). A predominance of somatizers in family practice meant that psychologizers had to be oversampled (N = 47 and N = 55, respectively). Both groups were compared with patients with bona fide somatic complaints (N = 91). Both somatizers and psychologizers were significantly more anxious than the somatizing control group. Interestingly, 55% of somatizers but only 33% of psychologizers were given a GAD

Table 2. Shift in Criteria to Diagnose Generalized Anxiety Disorder (GAD)

Criterion	DSM-III ¹⁴	DSM-III-R ¹⁸	DSM-IV ¹⁹	ICD-10 ²⁷
Anxiety	Persistent anxiety	Unrealistic/excessive anxiety and worry (apprehensive expectation) about 2 or more life circumstances	Excessive anxiety and worry (apprehensive expectation) about a number of events or activities; difficult to control (includes overanxious disorder of childhood)	Anxiety is generalized and persistent; free-floating dominant symptoms are highly variable; a variety of worries or foreboding are frequently experienced
Duration	1 month	6 months	6 months	Several months
Ancillary symptoms	Unspecified number of symptoms from 3 of 4 categories	≥ 6 of 18 specified symptoms	≥ 3 of 6 specified symptoms	Unspecified number of symptoms
Symptoms/symptom categories	Apprehensive expectation; motor tension; autonomic; vigilance	Motor tension (4 symptoms); autonomic (9 symptoms); vigilance (5 symptoms)	Restlessness/mental tension; fatigue; poor concentration; irritability; muscle tension; sleep disturbance	Apprehension (worry about future, feeling "on edge," difficulty concentrating; motor tension (restless, fidgeting, tension headaches, trembling, inability to relax); autonomic overactivity (light-headedness, sweating, tachycardia, epigastric discomfort, dizziness, dry mouth, etc)
Associated features	Mild depressive symptoms	Mild depressive symptoms	Muscle tension; somatic symptoms; depressive symptoms; exaggerated startle response	...
Impairment in social and occupational functioning	Rarely more than mild	Rarely more than mild	Significant distress or impairment	...
Exclusions	Not due to another mental disorder such as depression or schizophrenia	Anxiety/worry unrelated to another disorder (eg, panic); does not occur during mood disorder or psychotic disorder; not organic (eg, hyperthyroidism, caffeine intoxication); not substance abuse related	Anxiety/worry unrelated to another disorder; does not occur exclusively during mood disorder or psychotic disorder; not organic (eg, hyperthyroidism); not substance abuse related	Must not meet full criteria for depressive episode, phobic disorder, panic disorder, obsessive-compulsive disorder

diagnosis, while the reverse was true for depression, primarily major depressive disorder (38% vs. 68%). Thus, more than 50% of GAD patients in family practice presented themselves to the physician with somatic symptoms alone.

A listing of "associative features" states that "mild depressive symptoms are common" in DSM-III and DSM-III-R. In DSM-IV, in addition to depressive symptoms, the indicators of severity not specified, symptoms of muscle tension, and somatic symptoms are added, probably because somatic symptoms were deleted from the ancillary symptoms in this classification.

Finally, "impairment" is considered "only mild" in DSM-III and DSM-III-R, but as "producing significant distress or impairment" in DSM-IV. Interestingly, the description in DSM-IV is quite similar to Freud's earlier description of anxiety neurosis.

The emphasis in DSM-III-R and DSM-IV classifications is placed on worry, which is secondarily defined as "apprehensive expectation." The authors believe that *apprehensive expectation*, which is not necessarily synonymous with worry, is a more relevant and better term to use. All classifications share "exclusion criteria" that the focus of anxiety or worry is not on symptoms of another

disorder, such as panic or social phobia, not part of a mood disorder or psychotic disorder, not related to substance abuse, and not related to organic causes (e.g., hyperthyroidism, caffeine intoxication).

In the ICD-10 classification, preferred by many Europeans, the prominent feature of the diagnostic criteria for GAD is anxiety that is generalized and persistent and not restricted to particular or environmental circumstances, that is, free-floating anxiety. The criterion for duration is "several months." The dominant symptoms are described as highly variable, but complaints of continuous nervousness, trembling, muscle tension, light-headedness, sweating, palpitation, dizziness, and epigastric discomfort are common and fears, worries, or foreboding are often experienced.

Research diagnostic criteria have also been developed for ICD-10 (DCR-10).²⁹ These have increased the duration criterion from "several months" to "at least 6 months" and demand that at least 4 of 22 specific symptoms are present. Symptoms are divided into autonomic symptoms (N = 4), symptoms of chest/abdomen (N = 4), symptoms involving mental state (N = 4), general symptoms (N = 6), and nonspecific symptoms (N = 4).

Since the ICD-10 classification has slightly more relaxed diagnostic criteria than the DSM-IV classification, it

Table 3. Criteria for Generalized Anxiety Disorder^a

- I. Diagnostic Criteria
- A. Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance)
 - B. The person finds it difficult to control the worry.
 - C. The anxiety and worry are associated with 3 (or more) of the following 6 symptoms (with at least some symptoms present for more days than not for the past 6 months): restlessness or feeling keyed up or on edge; being easily fatigued; difficulty concentrating or mind going blank; irritability; muscle tension; sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep)
 - D. The focus of the anxiety and worry is not confined to features of an Axis I disorder, eg, the anxiety or worry is not about having a panic attack (as in panic disorder), being embarrassed in public (as in social phobia), or being contaminated (as in obsessive-compulsive disorder)
 - E. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning
 - F. The disturbance is not due to the direct physiologic effects of a substance (eg, a drug of abuse, a medication) or a general medical condition (eg, hyperthyroidism) and does not occur exclusively during a mood disorder, a psychotic disorder, or a pervasive developmental disorder
- II. Associated Features
- Muscle tension (trembling, twitching, feeling shaky, muscle aches)
 - Somatic symptoms (cold, clammy hands; dry mouth; sweating; nausea; diarrhea; frequent urination; "lump in throat")
 - Exaggerated startle response
 - Depressive symptoms
- III. Course
- Often chronic but fluctuating and often worsens during times of stress
- IV. Differential Diagnosis
- Anxiety disorder due to a general medical condition, substance-induced anxiety disorder, panic disorder, social phobia, obsessive-compulsive disorder, anorexia nervosa, hypochondriasis, somatization disorder, separation anxiety disorder, obsessional thoughts, posttraumatic stress disorder, adjustment disorder, mood disorders, psychotic disorders, nonpathologic anxiety

^aAdapted from DSM-IV,¹⁹ with permission.

is probably clinically more realistic and meaningful. Its definition of anxiety as generalized, persistent, and free-floating lacks the American excessive focus on worry while retaining "apprehension" as one of the key symptoms of anxiety. It also has a less rigid duration criterion. The diagnostic criteria for GAD according to the DSM-IV classification are given in Table 3.

DSM-IV: WORRY FOCUS, DURATION, SEVERITY

Based on the 40-year-long experience of the senior author (K.R.) in diagnosing and treating GAD patients, often in family practice, we believe that severity of anxious symptomatology rather than a focus on worry or duration is one of the most important criteria in making a GAD diagnosis. A similar finding was recently reported by Bienvenu et al.³⁰

Using Diagnostic Interview Schedule data from the 1993 follow-up study of the Baltimore cohort of the ECA program, these investigators³⁰ divided subjects into 5 mutually exclusive categories: (1) DSM-III-R GAD; (2) 6 months of worry or anxiety with 6 associative symptoms not fulfilling excessive worry criteria; (3) 1 month of anxiety duration with 6 associated symptoms; (4) 1 month of anxiety with less than 6 associated symptoms; and (5) no anxiety. They found that the first 3 groups of subjects were homogeneous with regard to demographics and comorbidity profiles but that their profiles differed significantly from those of the other 2 groups (those with fewer than 6 symptoms and those with no anxiety).

These data call into question the utility of the DSM-III-R and DSM-IV diagnostic construct. The most important differentiation between "ill" and "not ill" groups was the presence of at least 6 associated symptoms, rather than worry or a longer duration. In our view, any future DSM revision should seriously consider the role that symptom severity, largely disregarded in DSM-IV and quite different from "significant impairment," has for appropriate diagnosis and should revisit the criteria on the nature of worry and duration since they appear to be of questionable utility.

Five other relevant publications should also be mentioned here. Rogers et al.³¹ classified GAD as primary or secondary. They observed that subjects with primary GAD were more likely to be in an anxious episode at intake and less likely to have a secondary diagnosis of agoraphobia, social phobias, simple phobia, PTSD, alcohol and drug abuse, or major depressive disorder. Yet, both GAD groups were similar in terms of prevalence and treatment outcome, an observation relevant for treatment.

Olfson et al.³² observed more subthreshold generalized anxiety patients (6.6%) in primary care than full threshold GAD patients (3.7%). This may possibly support the need to reassess present diagnostic GAD criteria. This is particularly true considering that subthreshold does not necessarily mean "less ill," but only that "some" GAD criteria, such as "duration" or "excessive" worry, were not fulfilled. In fact, subthreshold patients were still significantly more socially impaired than controls. Marcus et al.³³ arrived at similar conclusions using data from the National Medical Expenditures Survey.

DeBeurs et al.³⁴ reported on the vulnerability factors for becoming anxious, (i.e., experiencing state anxiety) in an elderly population. However, being anxious was assessed with the Hospital Anxiety and Depression Scale-anxiety subscale and not according to DSM-IV criteria. The authors found neuroticism (trait anxiety) and female sex to be the most consistent predictors of chronic anxiety symptoms with significant life events a third predictor of acute anxiety symptoms. Thus, high neuroticism (trait anxiety), very similar to Akiskal's "anxious temperament,"³⁵ may well be considered as a vulnerability factor of acute and chronic, but not necessarily with GAD-diagnosed, anxiety episodes.

Table 4. Features Distinguishing Generalized Anxiety Disorder From Other Disorders^a

Disorder	Features
Generalized anxiety disorder	Excessive anxiety and apprehensive expectation; free-floating anxiety; many somatic complaints; no phobic avoidance behavior; no severe depressed mood or anhedonia; no frequent panic attacks
Panic disorder	Spontaneous recurrent anxiety attacks occur at any time and in any setting
Social phobia	Avoidance, not only fear, of social or performance situations in a public setting
Agoraphobia	Fear of being trapped in a situation (which can be nonsocial) from which escape is difficult or embarrassing; clearly avoidant phobic behavior
Separation anxiety (children)	Fear of being separated from a parent or guardian, yet socially "comfortable" at home
Avoidant personality disorder (cluster C)	Includes a more general inadequacy or awkwardness in a social context (patient may lack even simple social skills)
Adjustment disorder with anxiety	A response to a clear stressor; once the stressor has terminated, duration of symptoms less than 6 months; symptoms may be quite similar to those in generalized anxiety disorder
Major depressive disorder	Primary symptoms are severe depressed mood and marked anhedonia
Posttraumatic stress disorder	A traumatic event is persistently reexperienced
Specific phobia	Unreasonable fear and avoidance of a specific object or situation

^aBased on DSM-IV.¹⁹

Finally, Dugas et al.³⁶ present empirical evidence for a conceptional model of GAD that features as its key process variable intolerance of uncertainty. Intolerance of uncertainty was pivotal in distinguishing GAD patients from nonclinical subjects, yet 3 other variables—"beliefs about worry," "poor problem orientation," and "cognitive avoidance"—further contributed to their differentiation of the subject groups. Earlier, the same authors showed that intolerance of uncertainty also discriminates clinical women who meet GAD criteria from women who do not.³⁷

The number and severity of anxiety symptoms appear to be the most relevant factors in ascertaining the presence of GAD. The severity of anxiety symptoms may be assessed with such scales as the Hamilton Rating Scale for Anxiety (HAM-A) as part of a diagnostic assessment.³⁸ Consistent findings in our clinical trials are that active drug/placebo differences can be easily, clearly, and consistently demonstrated only if GAD patients have sufficiently severe anxious symptomatology.^{39,40}

Chronic worrying does not necessarily translate into severe anxiety or associative symptoms. Also, high placebo and psychotherapy responses can occur when the focus is on psychic symptoms and worry rather than on somatic symptoms or on mild anxiety. For example, in psychotherapy studies, HAM-A intake scores are usually 5 points lower than those used in psychopharmacology

trials, i.e., ≥ 15 versus ≥ 20 .⁴¹ Raising the number of associated symptoms in DSM-IV from 3 to ≥ 4 should also ensure that individuals with sufficiently severe symptoms are included in GAD diagnoses.⁴²

Mildly anxious patients with excessive worry may well benefit most from psychotherapy, which deals with the worry or trait and not the state aspects of anxiety, while psychopharmacology is often best at treating state anxiety. As Akiskal³⁵ proposes, many of the chronic worry symptoms of GAD might well represent trait symptoms, or "anxious temperament," to which state anxiety symptoms are added at certain times, frequently as a response to chronic stress. Similarly, Rickels and Schweizer⁴³ proposed the diagnostic term *double anxiety*, recognizing the chronic underlying anxiety of many years' duration, usually of mild degree and probably frequently a trait phenomenon, to which the acute anxious episode is added; it is the acute episode that is particularly responsive to psychopharmacologic therapy.⁴⁴ To affect not only state but also trait anxiety or temperament, we may have to prescribe medications for prolonged periods of time and probably combine medications with various psychotherapeutic approaches or possibly use psychotherapeutic approaches alone.

COMMENTS

Separation of GAD and panic disorder is not difficult if a patient has frequent spontaneous panic attacks and particularly if there are agoraphobic symptoms. However, many patients have occasional anxiety or panic attacks, and such patients should be considered as suffering from GAD.

A closer overlap may exist between GAD and social phobia. When there is clear-cut phobic avoidant behavior, social anxiety can easily be separated from GAD, but when this behavior is absent, patients should possibly be considered as suffering from GAD. The cardinal symptoms of GAD frequently overlap with those of social phobia, particularly if the social phobia is more general and not focused on a phobic situation. For example, free-floating anxiety may make the hand perspire and also make a person shy in dealing with people in public. In our opinion, many patients with subthreshold symptoms of social phobia belong in the diagnostic category of GAD rather than generalized social phobia. Similarly, it should be simple to separate GAD from obsessive-compulsive disorder, acute stress disorder, and PTSD. However, at times it may be difficult to separate adjustment disorder with anxious mood from GAD or anxiety NOS, particularly if the adjustment disorder occurs in a patient with high levels of neuroticism or trait anxiety or type C personality disorder. Table 4 presents those features distinguishing GAD from other psychiatric disorders.

Patients with concurrent threshold anxiety or mood disorders should be diagnosed according to those disorders and treated as such.⁴⁵ If there is no current comorbid diag-

Table 5. Clinical Features of Generalized Anxiety Disorder

Feature	DSM-IV ¹⁹	ICD-10 ²⁷	Proposed by Authors
Focus on excessive worry	Yes	No	No
Focus on free-floating anxiety	No	Yes	Yes
Focus on chronic duration (> 6 months)	Yes	No	No
Focus on symptom severity, including somatic symptoms	No	No	Yes
Use of the term <i>excessive</i>	Yes	No	No

nosis such as another anxiety disorder or major depression or if only subthreshold symptoms of other anxiety disorders are present, GAD should be considered primary and treated as such. Lifetime comorbid diagnoses of other anxiety or depressive disorders, not active for 1 or more years and not necessitating treatment during that time period, should not affect the diagnosis of current GAD. For example, if subthreshold concomitant depressive symptoms are present, we recommend a diagnosis of GAD, but if depressive symptoms reach full threshold, a diagnosis of major depressive disorder is appropriate. Anxious patients with dysthymia or minor depression might be given a GAD diagnosis with depression as a secondary diagnosis.

Somatization disorders are now classified separately from anxiety disorders, but in practice frequently overlap with GAD. As long as psychic symptoms of anxiety are present and GAD is considered the primary diagnosis, patients should be diagnosed and treated accordingly.

For the conduct of controlled clinical trials, it may be practical to consider using the ICD-10 criterion of illness duration of "several months" to replace the more rigid DSM-IV criterion of 6 months. Similarly, we should consider moving away from the DSM-IV focus on "excessive worry," viewing it as another important anxiety symptom such as "free-floating anxiety," rather than the cardinal symptom of anxiety. Instead, we should consider using the ICD-10 classification (not the research criteria, DCR-10) supplemented with increased severity and impairment criteria, for example, a HAM-A score of 18 or 20. In addition, the adjective *excessive*, which is not used in the definition of other primary diagnostic criteria, should be deleted (Table 5).

Two major shifts in DSM diagnostic criteria for GAD have served markedly to redefine this disorder. One is the change in duration criterion from 1 to 6 months, and the other is the increased emphasis on worry and secondary psychic symptoms, accompanied by the elimination of most somatic symptoms. The consequence is the orphaning of an enormous population of patients who suffer from generalized anxiety that is more transient and somatic in its focus and who typically present, not to psychiatrists, but in primary care settings.

One also might want to consider the separation of trait (chronic) from state (acute) anxiety,^{35,43} particularly in light

of the recent observation that many diverse diagnostic categories such as GAD, panic disorder, social phobia, PTSD, and major and minor depression all respond to treatment with the same antidepressants. Indeed, could much of the presently diagnosed comorbidity actually be artifactual? Also, it has not yet been determined whether certain personality characteristics, particularly anxious personality, cluster C personality, or increased neuroticism as an indicator of trait anxiety, are prerequisites for developing an independent anxiety disorder or are simply vulnerability factors that lead to anxiety symptoms in some patients.⁴⁶

Symptoms considered by some to be cardinal for anxiety, such as extreme worry, obsessive rumination, and somatization, are also clearly present in other disorders such as major depression. Therefore, the authors suggest that a GAD diagnosis may be most meaningfully made after considering the presence and severity of specific anxiety symptoms, illness course, and duration, together with absence of such stem or cardinal symptoms as severe depressed mood or anhedonia, frequent panic attacks, or marked phobic avoidance.

In conclusion, the authors hope that in the future, diagnostic splitters, so influential in DSM-III and DSM-IV development, will be joined by diagnostic lumpers to assure a more balanced approach to psychiatric diagnosis.⁴⁷

Drug name: buspirone (BuSpar).

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