
ANXIETY DISORDERS

Dr. Rawan Masri

Anxiety disorders as a group have the highest prevalence among all the mental disorders. Anxiety is the feeling of fear and apprehension. The fear is usually regarding unsure future events and situations that are potentially stressful or painful. Clinically, anxiety and anger often appear hand in hand, depicting the “fight or flight” response. The feared danger can be nonspecific or specific and predictable. It is often not the fear itself but the accompanied emotional disturbance, physical reaction, and behavior adaptation that are the most debilitating.

The complex interplay of biological and psychosocial elements is under continuous investigation. New treatment approaches have been invented, tested, and reported frequently. Its rich history and constantly growing knowledge rendered anxiety among the most fascinating conditions in psychiatry.

Anxiety disorders can be viewed as a family of related but distinct mental disorders, which include (1) panic disorder, (2) agoraphobia, (3) specific phobia, (4) social anxiety disorder or phobia, and (5) generalized anxiety disorder

Anxiety disorders are the most prevalent psychiatric disorders; lifetime prevalence of any anxiety – 25% .The anxiety disorders make up one of the most common groups of psychiatric disorders. The National Comorbidity Study reported that one of four persons met the diagnostic criteria for at least one anxiety disorder and that there is a 12-month prevalence rate of 17.7 percent. Women (30.5 percent lifetime prevalence) are more likely to have an anxiety disorder than are men (19.2 percent lifetime prevalence). The prevalence of anxiety disorders decreases with higher socioeconomic status.

- ▶▶ Lifetime prevalence of panic disorder, agoraphobia, and generalized anxiety disorder: 3%–5%
 - ▶▶ First-degree relatives of patients with anxiety disorders have up to eight-fold risk for anxiety disorders
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Symptoms of Anxiety

The experience of anxiety has two components: the awareness of the physiological sensations (e.g., palpitations and sweating) and the awareness of being nervous or frightened . In addition to motor and visceral effects, anxiety affects thinking, perception, and learning .

Anxious persons likely select certain things in their environment and overlook others in their effort to prove that they are justified in considering the situation frightening. If they falsely justify their fear, they augment their anxieties by the selective response and set up a vicious circle of anxiety, distorted perception, and increased anxiety. If, alternatively, they falsely reassure themselves by selective thinking, appropriate anxiety may be reduced, and they may fail to take necessary precautions.

PERIPHERAL MANIFESTATIONS OF ANXIETY

Diarrhea

Dizziness, lightheadedness

Hyperhidrosis

Hyperreflexia

Palpitations

Pupillary mydriasis

Restlessness (e.g., pacing)

Syncope

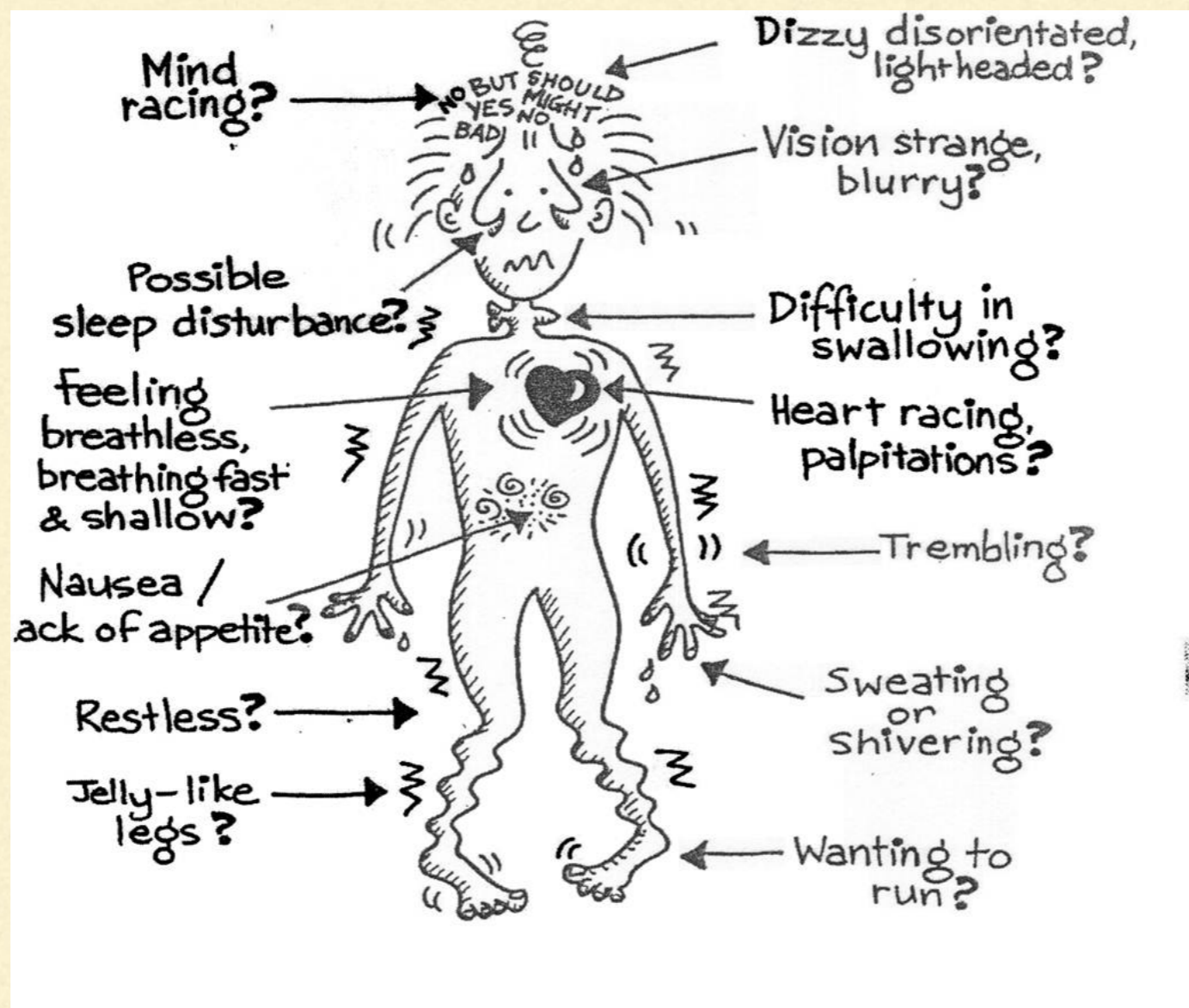
Tachycardia

Tingling in the extremities

Tremors

Upset stomach ("butterflies")

Urinary frequency, hesitancy, urgency



Neurophysiology of anxiety

The autonomic nervous systems of some patients with anxiety disorder, especially those with panic disorder, exhibit increased sympathetic tone, adapt slowly to repeated stimuli, and respond excessively to moderate stimuli.

The three major neurotransmitters associated with anxiety on the bases of animal studies and responses to drug treatment are norepinephrine (NE), serotonin, and γ -aminobutyric acid (GABA).

- ▶▶ Stimulation of locus coeruleus, the major source of central norepinephrine, may generate panic attacks, while blockade of locus coeruleus decreases panic attacks.
 - ▶▶ Structures in the limbic system, particularly amygdale, mediate anxiety response .
 - ▶▶ Serotonin and neuropeptides are involved in modulating noradrenergic and gamma-amino butyric acid (GABA)ergic system.
 - ▶▶ GABAergic system – widely distributed with highest density at the limbic system; binding with benzodiazepines reduces anxiety.
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▶▶ Clinical factors associated with organic anxiety

- ▷ Onset of symptoms after the age of 35 years
- ▷ No anticipatory anxiety
- ▷ Lack of avoidance behavior
- ▷ Lack of personal or family history of anxiety disorders
- ▷ Poor response to anxiolytic agents

▶▶ Medical work-up focus on

- ▷ Endocrine dysfunction – pheochromocytoma, thyroid disturbance, hyperparathyroidism
 - ▷ Drug intoxication or withdrawal – caffeine, alcohol, benzodiazepines, cocaine, corticosteroids, sympathomimetics
 - ▷ Hypoxia – cardiovascular, respiratory, or cerebral anoxia
 - ▷ Electrolyte abnormalities, acidosis
 - ▷ Temporal lobe seizures
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PANIC DISORDER



PANIC DISORDER



PANIC DISORDER

An acute intense attack of anxiety accompanied by feelings of impending doom is known as panic attack. The anxiety is characterized by discrete periods of intense fear that can vary from several attacks during one day to only a few attacks during a year. The attack often begins with a 10-minute period of rapidly increasing symptoms. **The major mental symptoms are extreme fear and a sense of impending death and doom.** Patients usually cannot name the source of their fear; they may feel confused and have trouble concentrating. The physical signs often include tachycardia, Chest pain, nausea, paresthesias, dyspnea, dizziness and sweating. Patients often try to leave whatever situation they are in to seek help. The attack generally lasts 20 to 30 minutes and rarely more than an hour. Patients may experience depression or depersonalization during an attack. The symptoms can disappear quickly or gradually. Between attacks, patients may have anticipatory anxiety about having another attack.

Somatic concerns of death from a cardiac or respiratory problem may be the major focus of patients' attention during panic attacks. Patients may believe that the palpitations and chest pain indicate that they are about to die. As many as 20 percent of such patients actually have syncopal episodes during a panic attack. The patients may be seen in emergency departments as young (20s), physically healthy persons who nevertheless insist that they are about to die from a heart attack.

DSM-5 CRITERIA

A . Recurrent unexpected panic attacks. A panic attack is an abrupt surge of intense fear or intense discomfort that reaches a peak within minutes, and during which time four (or more) of the following symptoms occur.

Note :The abrupt surge can occur from a calm state or an anxious state.

1. Palpitations, pounding heart, or accelerated heart rate.
 2. Sweating.
 3. Trembling or shaking.
 4. Sensations of shortness of breath or smothering.
 5. Feelings of choking.
 6. Chest pain or discomfort.
 7. Nausea or abdominal distress.
 8. Feeling dizzy, unsteady, light-headed, or faint.
 9. Chills or heat sensations.
 10. Paresthesias (numbness or tingling sensations).
 11. Derealization (feelings of unreality) or depersonalization (being detached from oneself).
 12. Fear of losing control or "going crazy."
 13. Fear of dying.
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DSM-5 CRITERIA

B. At least one of the attacks has been followed by 1 month (or more) of one or both of the following:

1. Persistent concern or worry about additional panic attacks or their consequences (e.g., losing control, having a heart attack, “going crazy”).
2. A significant maladaptive change in behavior related to the attacks (e.g. behaviors designed to avoid having panic attacks, such as avoidance of exercise or unfamiliar situations).

C. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) **or another medical condition** (e.g., hyperthyroidism, cardiopulmonary disorders).

D. The disturbance is not better explained by another mental disorder (e.g., the panic attacks do not occur only in response to feared social situations, as in social anxiety disorder; in response to circumscribed phobic objects or situations, as in specific phobia; in response to obsessions, as in obsessive-compulsive disorder; in response to separation from attachment figures, as in separation anxiety disorder).

PANIC DISORDER

Epidemiology

The lifetime prevalence of panic disorder is in the 1 to 4 percent range. Women are two to three times more likely to be affected than men, although under diagnosis of panic disorder in men may contribute to the skewed distribution.

Panic disorder most commonly develops in young adulthood, the mean age of presentation is about 25 years but both panic disorder and agoraphobia can develop at any age.

Of patients with panic disorder, 91 percent have at least one other psychiatric disorder. About one-third of persons with panic disorders have major depressive disorder before onset .

Etiology: Biological & genetic factors

The major neurotransmitter systems that have been implicated are those for **norepinephrine, serotonin, and GABA.**

Various studies have found that the first-degree relatives of patients with panic disorder have a four- to eightfold higher risk for panic disorder than first-degree relatives of other psychiatric patients. Patients with panic disorder have a higher incidence of stressful life events (particularly loss) than control subjects in the months before the onset of panic disorder. More over, the patients typically experience greater distress about life events than control subjects do. Separation from the mother early in life was clearly more likely to result in panic disorder than was paternal separation .

PANIC DISORDER

Differential Diagnosis

Panic disorder must be differentiated from a number of medical conditions that produce similar symptomatology. Panic attacks are associated with a variety of endocrinological disorders, including both hypo- and hyperthyroid states, hyperparathyroidism, and pheochromocytomas . Episodic hypoglycemia associated with insulinomas can also produce panic-like states, as can primary neuropathological processes. These include seizure disorders, vestibular dysfunction, neoplasms, or the effects of both prescribed and illicit substances on the CNS. Finally, disorders of the cardiac and pulmonary systems, including arrhythmias, chronic obstructive pulmonary disease, and asthma, can produce autonomic symptoms and accompanying crescendo anxiety that can be difficult to distinguish from panic disorder.

Course and Prognosis

Panic disorder, in general, is a chronic disorder, although its course is variable, both among patients and within a single patient. Nevertheless, about 30 to 40 percent of patients seem to be symptom free at long-term follow-up, about 50 percent have symptoms that are sufficiently mild not to affect their lives significantly, and about 10 to 20 percent continue to have significant symptoms.

AGORAPHOBIA

Agoraphobia refers to a fear of or anxiety regarding places from which escape might be difficult. It can be the most disabling of the phobias because it can significantly interfere with a person's ability to function in work and social situations outside the home. In the United States, most researchers of panic disorder believe that agoraphobia almost always develops as a complication in patients with panic disorder. That is, the fear of having a panic attack in a public place from which escape would be formidable is thought to cause the agoraphobia. Although agoraphobia often coexists with panic disorder, DSM-5 classifies agoraphobia as a separate condition that may or may not be comorbid with panic disorder.

The DSM - 5 diagnostic criteria for agoraphobia stipulates marked fear or anxiety about at least one situation from two or more of five situation groups: (1) using public transportation (e.g., bus, train, cars, planes), (2) in an open space (e.g., park, shopping center, parking lot), (3) in an enclosed space (e.g., stores, elevators, theaters), (4) in a crowd or standing in line, or (5) alone outside of the home. The fear or anxiety must be persistent and last at least 6 months

Patients with agoraphobia rigidly avoid situations in which it would be difficult to obtain help. They prefer to be accompanied by a friend or a family member in busy streets, crowded stores, closed-in spaces (e.g., tunnels, bridges, and elevators), and closed-in vehicles (e.g., subways, buses, and airplanes). Patients may insist that they be accompanied every time they leave the house.

When the panic disorder is treated, the agoraphobia often improves with time. For rapid and complete reduction of agoraphobia, behavior therapy is sometimes indicated .

DSM-5 CRITERIA

- A. Marked fear or anxiety about two (or more) of the following five situations: 1 . Using public transportation (e.g., automobiles, buses, trains, ships, planes) 2 . Being in open spaces (e.g., parking lots, marketplaces, bridges) 3 . Being in enclosed places (e.g., shops, theaters, cinemas) 4. Standing in line or being in a crowd 5 . Being outside of the home alone
- B. The individual fears or avoids these situations because of thoughts that escape might be difficult or help might not be available in the event of developing panic-like symptoms or other incapacitating or embarrassing symptoms (e.g., fear of falling in elderly adults; fear of incontinence).
- C. The agoraphobic situations almost always provoke fear or anxiety.
- D. The agoraphobic situations are actively avoided, require the presence of a companion, or are endured with intense fear or anxiety.
- E. The fear or anxiety is out of proportion to the actual danger posed by the agoraphobic situations and to the sociocultural context.
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DSM-5 CRITERIA

F. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.

G. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

H . If another medical condition (e.g., inflammatory bowel disease, Parkinson's disease) is present, the fear, anxiety, or avoidance is clearly excessive.

I. The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder—for example, the symptoms are not confined to specific phobia, situational type; do not involve only social situations (as in social anxiety disorder); and are not related exclusively to obsessions (as in obsessive-compulsive disorder), perceived defects or flaws in physical appearance (as in body dysmorphic disorder), reminders of traumatic events (as in posttraumatic stress disorder), or fear of separation (as in separation anxiety disorder).

Epidemiology

- Onset is usually before age 35
 - The lifetime prevalence of agoraphobia is somewhat controversial, varying between 2 to 6 percent across studies.
 - According to the DSM-5, persons older than age 65 years have a 0.4 percent prevalence rate of agoraphobia, but this may be a low estimate.
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Course / Prognosis

- Most cases of agoraphobia are thought to be caused by panic disorder.
 - When the panic disorder is treated, the agoraphobia often improves with time. For rapid and complete reduction of agoraphobia, behavior therapy is sometimes indicated.
 - Agoraphobia without a history of panic disorder is often incapacitating and chronic, and depressive disorders and alcohol dependence often complicate its course .
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Treatment

Similar approach as panic disorder:

CBT and (**SSRIs** for panic symptoms).

SPECIFIC PHOBIA



SPECIFIC PHOBIA

The term phobia refers to an excessive fear of a specific object, circumstance, or situation. A specific phobia is a strong, persisting fear of an object or situation. The diagnosis of specific phobia requires the development of intense anxiety, even to the point of panic, when exposed to the feared object. Persons with specific phobias may anticipate harm, such as being bitten by a dog, or may panic at the thought of losing control; for instance, if they fear being in an elevator, they may also worry about fainting after the door closes.

- A. Marked fear or anxiety about a specific object or situation (e.g., flying, heights, animals, receiving an injection, seeing blood).
 - B. The phobic object or situation almost always provokes immediate fear or anxiety.
 - C. The phobic object or situation is actively avoided or endured with intense fear or anxiety.
 - D. The fear or anxiety is out of proportion to the actual danger posed by the specific object or situation and to the sociocultural context.
 - E. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.
 - F. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.
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SPECIFIC PHOBIA

Acrophobia: Fear of heights

Agoraphobia: Fear of places in which escape might be difficult

Ailurophobia: Fear of cats

Hydrophobia: Fear of water

Claustrophobia: Fear of closed spaces

Cynophobia: Fear of dogs

Mysophobia: Fear of dirt and germs

Pyrophobia: Fear of fire

Xenophobia: Fear of strangers

Zoophobia: Fear of animals

SPECIFIC PHOBIA

Specific phobia tends to run in families. The blood-injection-injury type has a particularly high familial tendency. Studies have reported that two-thirds to three-fourths of affected probands have at least one first-degree relative with specific phobia of the same type.

Epidemiology

Phobias are the most common mental disorder in the United States, where approximately 5 to 10 percent of the population is estimated to have these troubling and sometimes disabling disorders. The lifetime prevalence of specific phobia is about 10 percent. Specific phobia is the most common mental disorder among women and the second most common among men, second only to substance-related disorders.

Comorbidity

Reports of comorbidity in specific phobia range from 50 to 80 percent. Common comorbid disorders with specific phobia include anxiety, mood, and substance-related disorders.

SPECIFIC PHOBIA

Course & prognosis

The limited information that is available suggests that most specific phobias that begin in childhood and persist into adulthood will continue to persist for many years. The severity of the condition is believed to remain relatively constant, which contrasts with the waxing and waning course seen in other anxiety disorders.

SPECIFIC PHOBIA

The most studied and most effective treatment for phobias is probably behavior therapy.

A variety of behavioral treatment techniques have been used, the most common being systematic desensitization. In this method, the patient is exposed serially to a predetermined list of anxiety-provoking stimuli graded in a hierarchy from the least to the most frightening. Through the use of antianxiety drugs, hypnosis, and instruction in muscle relaxation, patients are taught how to induce in themselves both mental and physical repose. After they have mastered the techniques, patients are taught to use them to induce relaxation in the face of each anxiety-provoking stimulus. As they become desensitized to each stimulus in the scale, the patients move up to the next stimulus until, ultimately, what previously produced the most anxiety no longer elicits the painful affect.

SOCIAL ANXIETY DISORDER



SOCIAL ANXIETY DISORDER

Social anxiety disorder (also referred to as social phobia) involves the fear of social situations, including situations that involve scrutiny or contact with strangers.

Persons with social anxiety disorder are fearful of embarrassing themselves in social situations (i.e., social gatherings, oral presentations, meeting new people). They may have specific fears about performing specific activities such as eating or speaking in front of others, or they may experience a vague, nonspecific fear of "embarrassing oneself." In either case, the fear in social anxiety disorder is of the embarrassment that may occur in the situation, not of the situation itself.

The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (i.e., will be humiliating or embarrassing; will lead to rejection or offend others). The social situations are avoided or endured with intense fear or anxiety. The fear of anxiety is out of proportion to the actual threat posed by the social situations and to the sociocultural context. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

The clinician should recognize that at least some degree of social anxiety or self-consciousness is common in the general population. Such anxiety only becomes social anxiety disorder when the anxiety either prevents an individual from participating in desired activities or causes marked distress during such activities .

Social anxiety disorder needs to be differentiated from appropriate fear and normal shyness, respectively.

DSM-5 Diagnostic Criteria for Social Anxiety Disorder

A. Marked fear or anxiety about one or more social situations in which the individual is exposed to possible scrutiny by others. Examples include social interactions (e.g., having a conversation, meeting unfamiliar people), being observed (e.g., eating or drinking), and performing in front of others (e.g., giving a speech).

Note: In children, the anxiety must occur in peer settings and not just during interactions with adults.

B. The individual fears that he or she will act in a way or show anxiety symptoms that will be negatively evaluated (i.e., will be humiliating or embarrassing; will lead to rejection or offend others).

C. The social situations almost always provoke fear or anxiety.

Note: In children, the fear of anxiety may be expressed by crying, tantrums, freezing, clinging, shrinking, or failing to speak in social situations.

D. The social situations are avoided or endured with intense fear or anxiety.

DSM-5 Diagnostic Criteria for Social Anxiety Disorder

E. The fear of anxiety is out of proportion to the actual threat posed by the social situations and to the sociocultural context.

F. The fear, anxiety, or avoidance is persistent, typically lasting for 6 months or more.

G. The fear, anxiety, or avoidance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

H. The fear, anxiety, or avoidance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition.

I. The fear, anxiety, or avoidance is not better explained by the symptoms of another mental disorder, such as panic disorder, body dysmorphic disorder, or autism spectrum disorder.

J. If another medical condition (e.g., Parkinson's disease, obesity, disfigurement from burns or injury) is present, the fear, anxiety, or avoidance is clearly unrelated or is excessive.

SOCIAL ANXIETY DISORDER

Epidemiology

Various studies have reported a lifetime prevalence ranging from 3 to 13 percent for social anxiety disorder. Females are affected more often than males, but in clinical samples, the reverse is often true. The peak age of onset for social anxiety disorder is in the teens, although onset is common as young as 5 years of age and as old as 35 years.

COMORBIDITY

Persons with social anxiety disorder may have a history of other anxiety disorders, mood disorders, substance-related disorders, and bulimia nervosa.

ETIOLOGY

Several studies have reported that some children possibly have a trait characterized by a consistent pattern of behavioral inhibition, and it may develop into severe shyness as the children grow older .

Patients with performance phobias may release more norepinephrine or epinephrine, both centrally and peripherally, than do nonphobic persons, or such patients may be sensitive to a normal level of adrenergic stimulation .

First-degree relatives of persons with social anxiety disorder are about three times more likely to be affected with social anxiety disorder than are first-degree relatives of those without mental disorders.

SOCIAL ANXIETY DISORDER

Course & prognosis

Social anxiety disorder tends to have its onset in late childhood or early adolescence. Existing prospective epidemiological findings indicate that social anxiety disorder is typically chronic, although patients whose symptoms do remit tend to stay well. This can include disruption in school or academic achievement and interference with job performance and social development.

GENERALIZED ANXIETY DISORDER



GENERALIZED ANXIETY DISORDER

Anxiety can be conceptualized as a normal and adaptive response to threat that prepares the organism for flight or fight. Persons who seem to be anxious about almost everything, however, are likely to be classified as having generalized anxiety disorder. Generalized anxiety disorder is defined as excessive and persistent anxiety and worry about several events or activities for most days during at least a 6-month period. The worry is difficult to control and is associated with somatic symptoms, such as muscle tension, irritability, difficulty sleeping, easily fatigued, difficulty concentrating and restlessness. The anxiety is not focused on features of another disorder, is not caused by substance use or a general medical condition, and does not occur only during a mood or psychiatric disorder. The anxiety is difficult to control, is subjectively distressing, and produces impairment in important areas of a person's life.

DSM-5 Diagnostic Criteria for Generalized Anxiety Disorder

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 individual finds it difficult to control the worry.

C. The anxiety and worry are associated with three (or more) of the following six symptoms (with at least some symptoms having been present for more days than not for the past 6 months):

Note: Only one item is required in children.

1. Restlessness or feeling keyed up or on edge.

2. Being easily fatigued.

3. Difficulty concentrating or mind going blank.

4. Irritability.

5. Muscle tension.

6. Sleep disturbance (difficulty falling or staying asleep, or restless, unsatisfying sleep)

DSM-5 Diagnostic Criteria for Generalized Anxiety Disorder

D. The anxiety, worry, or physical symptoms cause clinically significant distress or impairment in social, occupational, or other areas of functioning.

E. The disturbance is not attributable to the physiological effects of a substance (e.g., a drug of abuse, a medication) or another medical condition (e.g., hyperthyroidism).

F. The disturbance is not better explained by another mental disorder (e.g., anxiety or worry about having panic attacks in panic disorder, negative evaluation in social anxiety disorder [social phobia], contamination or obsessions in obsessive-compulsive disorder, separation from attachment figures in separation anxiety disorder, reminders of traumatic events in posttraumatic stress disorder, gaining weight in anorexia nervosa, physical complaints in somatic symptom disorder, perceived appearance flaws in body dysmorphic disorder, having a serious illness in illness anxiety disorder, or the content of delusional beliefs in schizophrenia or delusional disorder).

GENERALIZED ANXIETY DISORDER

Epidemiology

Generalized anxiety disorder is a common condition; reasonable estimates for its 1-year prevalence range from 3 to 8 percent. The ratio of women to men with the disorder is about 2 to 1.

Comorbidity

Generalized anxiety disorder is probably the disorder that most often coexists with another mental disorder, usually social phobia, specific phobia, panic disorder, or a depressive disorder. Perhaps 50 to 90 percent of patients with generalized anxiety disorder have another mental disorder.

Etiology

The cause of generalized anxiety disorder is not known. Biological and psychological factors probably work together. The therapeutic efficacies of benzodiazepines and the azaspirones (e.g., buspirone [BuSpar]) have focused biological research efforts on the Gamma-aminobutyric acid and serotonin neurotransmitter systems.

About 25 percent of first-degree relatives of patients with generalized anxiety disorder are also affected. Concordance rate of 50 percent in monozygotic twins and 15 percent in dizygotic twins.

GENERALIZED ANXIETY DISORDER

Course & prognosis

The age of onset is difficult to specify; most patients with the disorder report that they have been anxious for as long as they can remember. Patients usually come to a clinician's attention in their 20s, although the first contact with a clinician can occur at virtually any age. Only one-third of patients who have generalized anxiety disorder seek psychiatric treatment. Many go to general practitioners, internists, cardiologists, pulmonary specialists, or gastroenterologists, seeking treatment for the somatic component of the disorder. By definition, generalized anxiety disorder is a chronic condition that may well be lifelong.

Management of the anxiety disorders

I. Antianxiety agents, including benzodiazepines, buspirone, and β -blockers, are used to treat the symptoms of anxiety.

a. Benzodiazepines are fast-acting antianxiety agents.

(1) Because they carry a high risk of dependence and addiction, they are usually used for only a limited amount of time to treat acute anxiety symptoms.

(2) Because they work quickly, benzodiazepines, particularly Diazepam (Valium) and Alprazolam (Xanax), are used for emergency department management of panic attacks.

b. Buspirone (BuSpar) is a non-benzodiazepine antianxiety agent.

(1) Because of its low abuse potential, Buspirone is useful as long-term maintenance therapy for patients with GAD.

(2) Because it takes up to 2 weeks to work, Buspirone has little immediate effect on anxiety symptoms.

c. The β -blockers, such as propranolol (Inderal), are used to control autonomic symptoms (e.g., tachycardia) in anxiety disorders, particularly for anxiety about performing in public or taking an examination.

Management of the anxiety disorders

2. Antidepressants

- a. Antidepressants, including monoamine oxidase inhibitors (MAOIs), tricyclics, and especially **selective serotonin reuptake inhibitors (SSRIs)(First Line)**, such as paroxetine (Paxil), fluoxetine (Prozac), and sertraline (Zoloft), are the most effective long-term (maintenance) therapy for panic disorder.
- b. Recently, SSRIs (e.g., escitalopram [Lexapro]) and the selective serotonin and norepinephrine reuptake inhibitors (SNRIs) venlafaxine (Effexor) and duloxetine (Cymbalta) were approved to treat GAD.

3. Psychological management

- a. Systematic desensitization and cognitive therapy are the most effective management for phobias and are useful adjuncts to pharmacotherapy in other anxiety disorders.
 - b. Behavioral therapies, such as flooding and implosion, also are useful.
 - c. Support groups
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Mrs. W was a 33-year-old married woman. She visited an anxiety clinic reporting that she felt like she was having a heart attack whenever she left her home. Her disorder began 8 years earlier while attending a yoga class when she suddenly noticed a dramatic increase in her heartbeat, felt stabbing pains in her chest, and had difficulty breathing. She began sweating and trembling and felt dizzy. She immediately went to the emergency department, where an electrocardiogram was performed. No abnormalities were detected. Over the next few months, Mrs. W experienced similar attacks of 15 to 30 minutes' duration about four times per month. She often sought medical advice after each episode, and each time no physical abnormalities were detected. After experiencing a few of these attacks, Mrs. W became afraid of having an attack away from home and would not leave her home unless absolutely necessary, in which case she needed to have her cell phone or be accompanied by someone. Even so, she avoided crowded places such as malls, movie theaters, and banks, where rapid escape is sometimes blocked. Her symptoms and avoidance dominated her life, although she was aware that they were irrational and excessive. She experienced mild depression and restlessness and had difficulty sleeping.

Mr. G was a successful, married, 28-year-old teacher who presented for a psychiatric evaluation to treat mounting symptoms of worry and anxiety. Mr. G noted that for the preceding year, he had become more and more worried about his job performance.

For example, although he had always been a respected and popular lecturer, he found himself worrying more and more about his ability to engage students and convey material effectively. Similarly, although he had always been financially secure, he increasingly worried that he was going to lose his wealth due to unexpected expenses. Mr. G noted frequent somatic symptoms that accompanied his worries. For example, he often felt tense and irritable while he worked and spent time with his family, and he had difficulty distracting himself from worries about the upcoming challenges for the next day. He reported feeling increasingly restless, especially at night, when his worries kept him from falling asleep.

Mr. S was a successful lawyer who presented for treatment after his firm, to which he had previously been able to walk from home, moved to a new location that he could only reach by driving. Mr. S reported that he was "terrified" of driving, particularly on highways. Even the thought of getting into a car led him to worry that he would die in a fiery crash. His thoughts were associated with intense fear and numerous somatic symptoms, including a racing heart, nausea, and sweating. Although the thought of driving was terrifying in and of itself, Mr. S became nearly incapacitated when he drove on busy roads, often having to pull over to vomit.

Ms. B was a 29-year-old computer programmer who presented for treatment after she was offered promotion to a managerial position at her firm. Although she wanted the raise and the increased responsibility that would come with the new job, which she had agreed to try on a probationary basis, Ms. B reported that she was reluctant to accept the position because it required frequent interactions with employees from other divisions of the company, as well as occasional public speaking. She stated that she had always felt nervous around new people, whom she worried would ridicule her for "saying stupid things" or committing social faux pas. She also reported feeling "terrified" to speak before groups. These fears had not previously interfered with her social life and job performance. However, since starting her probationary job, Ms. B reported that they had become problematic. She noted that when she had to interact with others, her heart started racing, her mouth became dry, and she felt sweaty. At meetings, she had sudden thoughts that she would say something very foolish or commit a terrible social gaffe that would cause people to laugh. As a consequence, she had skipped several important meetings and left others early.

Mrs. K was a 35-year-old woman who initially presented for treatment at the medical emergency department at a large university-based medical center. She reported that while sitting at her desk at her job, she had suddenly experienced difficulty breathing, dizziness, tachycardia, shakiness, and a feeling of terror that she was going to die of a heart attack.

A colleague drove her to the emergency department, where she received a full medical evaluation, including electrocardiography and routine blood work, which revealed no sign of cardiovascular, pulmonary, or other illness. She was subsequently referred for psychiatric evaluation, where she revealed that she had experienced two additional episodes over the past month, once when driving home from work and once when eating breakfast. However, she had not presented for medical treatment because the symptoms had resolved relatively quickly each time, and she worried that if she went to the hospital without ongoing symptoms, "people would think I'm crazy." Mrs. K reluctantly took the phone number of a local psychiatrist but did not call until she experienced a fourth episode of a similar nature.

The End
