

Anxiety Disorder and Its Types

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1. Introduction

As we know mind, body, and spirit are seen as equal parts of the whole. As we know the unity of the body, mind and spirit is quite complex. Mental imagery, entrainment theory, divinity theory, split-brain research, and beta-endorphins all approach the same unity, each from a different vantage point, and each supporting the ancient axiom that "all points connect". As the global village knock on your doorstep, insights from all over the world offer a multicultural approach to seeking and maintaining balance in our lives. As planetary citizens, we are not immune from change. Moreover, with change comes stress, humans are not immune from stress either. The importance of anxiety stems from the need to get a handle on this condition- to deal with anxiety effectively on so as to lead a "normal" and happy life. Many people's attitudes, influenced by their rushed lifestyles and expectations of immediate gratification, reflect the need to eradicate stress rather than to manage, reduce or control their perceptions of it. As a result, stress never really goes away; it just reappears with a new face.

Anxiety Disorders affect about 40 million American adults age 18 years and older (about 18%) in a given year, causing them to be filled with fearfulness and uncertainty. Neurotic disorders with anxiety as a prominent symptom are common: a recent British survey found that 16% of the population suffered from some form of pathological anxiety. Anxiety is one of a handful of core, negative affective states.

Anxiety represents a core phenomenon around which considerable psychiatric theory has been organized. Fear and anxiety can be conceptualized as two key core negative emotions.

Unlike "fear", "anxiety" refers to brain states elicited by signals that predict impending but not immediately present danger. Thus unlike "fear", "anxiety" involves a more sustained change in the brain, manifest when a threat is still relatively removed from the organism in a spatial or temporal context. Anxiety is considered an analogue of pathological reactions to danger in humans. On the other hand when an acute, proximal threat is particularly dangerous, the emotional state elicited in the organism might better be characterized as "panic" as opposed to "fear". In both the clinical and the community setting, the prevalence of anxiety disorders is among the most common of all mental disorders. Unlike the relatively mild, brief anxiety caused by a stressful event (such as speaking in public), anxiety disorders last at least 6 months and can get worse if they are not treated. Anxiety disorders commonly occur along with other mental or physical illnesses, including alcohol or

substance abuse, which may mask anxiety symptoms or make them worse. In some cases, these other illnesses need to be treated before a person will respond to treatment for the anxiety disorder.

A preexisting anxiety disorder could be an independent risk factor for subsequent onset of suicidal ideation and attempts. Moreover, the data clearly demonstrate that comorbid anxiety disorders amplify the risk of suicide attempts in persons with mood disorders. Clinicians and policymakers need to be aware of these findings, and further research is required to delineate whether treatment of anxiety disorders reduces the risk of subsequent suicidal behavior.

Anxiety disorders are the most common of all mental health problems. It is estimated that they affect approximately 1 in 10 people. They are more prevalent among women than among men, and they affect children as well as adults. Anxiety disorders are illnesses. They can be diagnosed; they can be treated.

Individuals with childhood symptoms of anxiety and depression may have an increased tendency to use MDMA in adolescence or young adulthood. (MDMA 3,4-methylenedioxyamphetamine- Ecstasy- is a synthetic, psychoactive drug that is chemically similar to the stimulant methamphetamine and the hallucinogen mescaline). Its effects are supposed to include enhanced feelings of bonding with other people, euphoria, or relaxation. Especially individuals with symptoms of anxiety or depression may be susceptible to these positive effects. Effective therapies for anxiety disorders are available, and research is uncovering new treatments that can help most people with anxiety disorders lead productive, fulfilling lives.

This chapter will describe the etiology, symptoms and effective treatments of anxiety disorders. The following anxiety disorders which are classified in DSM-IV-TR are discussed in this chapter:

- Panic disorder with and without agoraphobia,
- Agoraphobia with and without panic disorder
- Specific phobia
- Social phobia
- Obsessive-compulsive disorder
- Posttraumatic stress disorder
- Acute stress disorder and
- Generalized anxiety disorder

The purpose of this chapter is to provide an overview of the "anxiety disorder" and its types with emphasis on a psychological approach to these disorders.

2. Definitions

Definitions of anxiety in humans rest on the presence of impairment, a disruption in normal functioning, or the presence of "clinically significant" distress.

Stress: The experience of a perceived threat (real or imagined) to one's mental, physical, or spiritual well-being, resulting from a series of physiological responses and adaptations.

"Fear": It refers to the specific set of emotions or brain states that are elicited in an organism when it confronts danger. **Basic Human fears:**

Virtually anything can trigger fear. However, events or situations that elicit anxiety tend to fall into one of six categories:

Fear of failure: it is a conditioned response from a past experience wherein one's performance did not meet one's own expectations.

Fear of rejection: Anxious feelings of not meeting the expectations of others.

Fear of the unknown: Anxious feelings about uncertainty and future events.

Fear of death: Anxious feelings about death and the dying process.

Fear of isolation: Anxious feelings of being left alone.

Fear of the loss of self-dominance: Anxious feelings of losing control of life.

The "emotion" refers to the brain state associated with the perception of a motivationally salient stimulus, a stimulus that creates a need for the organism to act. "Fear" refers to the specific set of emotions or brain states that are elicited in an organism when it confronts danger. Different forms of danger elicit different neural responses and associated differences in information processing and behavior. The term "**danger**" refers to any stimulus or situation that is capable of producing harm to the organism. The act of encountering a specifically dangerous object, such as a predator, can be conceptualized as a threat. "**Threats**" and "dangerous scenarios" can also be conceptualized as "**punishments**".

Despite the importance of self-reported feeling states in research, self reported feeling states must not be confused with emotions per se. The term "**emotion**" does not refer to a self-report but rather to a stimulus -evoked brain state, along with changes in behavior or physiology.

3. Clinical features of anxiety disorders

The history of anxiety, increased anxiety sensitivity (the fear of anxiety related sensations), and increased neuroticism are significant predictors. The trend level support for assertiveness is a predictor of anxiety onset. However, history of anxiety and anxiety sensitivity provides unique prediction.

Each anxiety disorder has different symptoms, but all the symptoms cluster around excessive, irrational fear and dread.

Anxiety is a universal and generally adaptive response to a threat, but in certain circumstances it can become maladaptive. Characteristics that distinguish abnormal from adaptive anxiety include:

- Anxiety out of proportion to the level of threat
- Persistence or deterioration without intervention (> 3 weeks)
- Symptoms that are unacceptable regardless of the level of threat, including
- Recurrent panic attacks
- Severe physical symptoms

- Abnormal beliefs such as thoughts of sudden death
- Disruption of usual or desirable functioning

Anxiety disorders should be differentiated from stress reactions, in which anxiety may be a prominent feature. These include acute stress reactions—a rapid response (in minutes or hours) to sudden stressful life events, leading to anxiety with autonomic arousal and some disorientation—and adjustment reactions—slower responses to life events (such as divorce) that occur days or weeks later as symptoms of anxiety, irritability, and depression (without biological symptoms). These are generally self limiting and are helped by reassurance, ventilation, and problem solving. Although there is considerable overlap between the various anxiety disorders, it is important to make a diagnosis as they have different optimal treatments. Extreme fear or apprehension can be considered "clinical anxiety" if it is developmentally inappropriate to an individual's life circumstances (e.g. fear of separation in a 12-year-old child) or if it is inappropriate to an individual's life circumstances' (e.g. worries about supporting one's family in a successful businessman). The clinical decision making rests heavily on clinical judgments about impairment and distress. Panic disorder is associated with reductions in total occipital cortex GABA levels. (Gamma-Amino Butyric acid –GABA-is an amino acid which acts as a neurotransmitter in the central nervous system). This abnormality might contribute to the pathophysiology of panic disorder. Patients with Panic disorder (PD) or generalized anxiety disorder (GAD) are more sensitive to bodily changes than nonanxious individuals, and patients with PD are more sensitive than those with GAD. Patients with PD experience more frequent distress than those with GAD, but their physiologic responses are comparable in intensity. The findings suggest that the perception of panic attacks reflects central rather than peripheral responses. The diminished autonomic flexibility observed in both anxiety conditions may result from dysfunctional information processing during heightened anxiety that fails to discriminate between anxiety-related and neutral inputs. The current versions of both the Diagnostic and Statistical Manual of Mental Disorders (DSM) and the World Health Organization's International Statistical Classification of Diseases and Related Health Problems (ICD-10) recognize similar groups of anxiety-related syndromes as discrete diagnostic entities. Doctors often consider anxiety to be a normal response to physical illness. Yet, anxiety afflicts only a minority of patients and tends not to be prolonged. Any severe or persistent anxious response to physical illness merits further assessment.

4. Panic disorder and agoraphobia

Recurrent "panic attacks" represent the hallmark feature of panic disorder. Classically, panic attacks are characterized by rapid onset-within minutes – and short duration –usually less than 10 to 15 minutes. The presence of lifetime panic spectrum symptoms in some patients with BPI (Bipolar type I) disorder is associated with greater levels of depression, more suicidal ideation, and a marked (6-month) delay in time to remission with acute treatment. Alternate treatment strategies are needed for patients with BPI disorder who endorse lifetime panic spectrum features. Although the major societal burden of panic is caused by PD and Panic attack without agoraphobia (PA-AG), isolated PAs also have high prevalence and meaningful role impairment.

Panic attack is an episode of abrupt intense fear accompanied by at least four of the autonomic or cognitive symptoms such as palpitations, pounding heart, or accelerated heart

rate, sweating, trembling or shaking, sensations of shortness of breath or smothering, feeling of choking, chest pain or discomfort, nausea or abdominal distress, feeling dizzy, unsteady, lightheaded, or faint, derealization (feelings of unreality) or depersonalization (being detached from oneself), fear of losing control or going crazy, fear of dying, paresthesias and chills or hot flashes.

Whole-body and regional sympathetic nervous activity are not elevated at rest in patients with panic disorder. Contrary to popular belief, the sympathetic nervous system is not globally activated during panic attacks.

DSM-IV-TR recognizes three types of panic attacks:

a) Spontaneous or unexpected panic attacks occur without cue or warning. b) Situationally bound attacks occur in the presence of a situational trigger, such as a spider. And c) Situationally predisposed panic attacks both occur on exposure to or in anticipation of exposure to a feared stimulus, and increases by an environmental cue, but does not inevitably precipitate one.

In some young adults with low levels of lead exposure, higher blood lead levels were associated with increased odds of major depression and panic disorders. Exposure to lead at levels generally considered safe could result in adverse mental health outcomes.

A panic disorder diagnosis requires the presence of at least two spontaneous panic attacks at some point. At least one of these attacks must be associated with concern about additional attacks, worry about attacks, or changes in behavior. Agoraphobia is comorbid condition of panic disorder. Agoraphobia refers to fear of or anxiety regarding places from which escape might be difficult in the event of a panic attack or panic symptoms. Agoraphobia can occur independent of a history of panic. Like most anxiety disorders, panic disorder often co-occurs with mental conditions beside agoraphobia, particularly other anxiety and depressive disorders. These include specific and social phobias, generalized anxiety disorder, and major depressive disorder. The comorbid mental conditions frequently compound panic disorder as it occurs in the community. The current edition of the ICD (ICD-10) de-emphasizes the relationship between panic disorder and agoraphobia, instead classifying agoraphobia as one of many panic disorders.

Differential Diagnosis: This condition must be differentiated from a number of medical conditions that produce similar symptomatology such as: Hypothyroid state, Hyperthyroid state, Hyperparathyroidism, Pheochromocytomas, Hypoglycemia associated with insulinomas, Primary neuropathological processes such as seizure disorders, vestibular dysfunction, neoplasms, and effects of substances on CNS, and some disorders of the cardiac and pulmonary systems such as asthma. The key to correctly diagnosing panic disorder and differentiating the condition from other anxiety disorders involves documenting recurrent spontaneous panic attacks at some point in the illness.

Epidemiology: The lifetime prevalence of panic disorder is in the 1 to 4 percent range, with 6-month prevalence approximately 0.5 to 1 percent. Estimates of agoraphobia prevalence vary from 2 to 6 percent across studies.

Course: Panic disorder typically has its onset in late adolescence or early adulthood, panic disorder tends to exhibit a fluctuating course.

5. Phobias

The term "phobia" refers to an excessive fear of a specific object, circumstance, or situation. They are classified based on the nature of the feared object or situation, and DSM-IV-TR recognizes three distinct classes of phobia: Agoraphobia (which is considered to relate closely to panic disorder), specific phobia and social phobia. Both specific and social phobia require the development of intense anxiety.

Specific phobia: There are four primary subtypes of specific phobias (animal type, natural environment type, bleed - injury type, and situational type) along with a residual category for phobias that do not clearly fit any of these four categories. The key feature of each type of phobia is that fear symptoms occur only in the presence of a specific object.

Specific phobia often involves fears of multiple objects, particularly objects that cluster within a specific subcategory.

In the clinical setting, specific phobia often co-occur with other anxiety or mood disorder. Impairment associated with specific phobia typically manifests as restricted social or professional activities.

Social Phobia: According to DSM-IV-TR criteria, social phobia or "social anxiety disorder" involves the fear of social situation, including situations that involve scrutiny or contact with strangers. In social anxiety disorder, social phobia represents a distinct condition, in terms of course, treatment, and patterns of comorbidity, from specific phobias. Individuals with social phobia typically fear embarrassing themselves in social situations, such as at social new gathering, during oral presentations, or when meeting new people. They may have specific fears about performing certain activities, such as speaking or eating in front of others. The anxiety which appears in social situations becomes social phobia when the anxiety either prevents an individual from participating in desired activities or causes marked distress during such activities. The ICD has a similar approach to categorizing phobias as in DSM-IV-TR.

Approximately 10 percent of individuals in the United States meet criteria for specific phobia. The condition is more commonly diagnosed in females than males. Prevalence estimates of social phobia vary widely, from 2 to 15 percent.

Social phobia tends to have its onset in late childhood or early adolescence. Social phobia is typically chronic.

6. Obsessive-Compulsive Disorder (OCD)

Obsessive-compulsive disorder can occur at any age but most often presents for the first time in adolescence. Long delays in diagnosis often occur. Practitioners should ask specific screening questions if obsessive-compulsive disorder is suspected. The prevalence of OCD is 2 to 3 percent and is equal for males and females.

Symptomatology

Obsessions and compulsions are the essential features of OCD, and an individual must exhibit either or both of them to meet the criteria. DSM-IV-TR recognizes obsessions as

"persistent ideas, thoughts, impulses, or images that are experienced as intrusive and inappropriate" and cause distress. Neuropsychological deficits were observed in patients with OCD that were not observed in matched patients with panic disorder or unipolar depression. As such, the cognitive dysfunction in OCD appears to be related to the specific illness processes associated with the disorder. Obsessions are anxiety provoking, which is why OCD is classified as an anxiety disorder. But they differ qualitatively from excessive worries about real-life problems. Typical obsessions associated with OCD include thoughts about contamination or doubts. In addition, anxiety-provoking thoughts must be associated with efforts to either ignore or suppress them.

Compulsions are defined as repetitive acts, behaviors, or thoughts that are designed to counteract the anxiety associated with an obsession. The key characteristic of a compulsion is that it reduces the anxiety associated with the obsession. Many compulsions are acts associated with specific obsessions, such as hand washing to counteract thoughts of contamination. Compulsions can also manifest as thoughts. Obsessions and compulsions must cause an individual marked distress, consume **at least 1 hour/day** of time, or interfere with functioning to be considered as OCD. During at least some point in the illness, adult patients must recognize symptoms of OCD as unreasonable, although there is great variability in the degree to which this is true, both across individuals and in a given individual over time. DSM-IV-TR recognizes a "poor insight" subtype of OCD in which individuals fail to recognize the irrational or unreasonable nature of their obsessions. OCD frequently co-occurs with other disorders such as major depression, panic disorder, phobias, attention-deficit/hyperactivity disorder (ADHD), eating disorders, and Tourette syndrome.

ICD-10 emphasizes that a compulsive act must not be pleasurable. ICD-10 also stipulates that obsessions or compulsions must be present on most days for 2 weeks.

Inflated responsibility is increasingly regarded a pathogenetic mechanism in obsessive-compulsive disorder. In seeming contrast, there is mounting evidence that latent aggression is also elevated in OCD. Building upon psychodynamic theories that an altruistic facade including exaggerated concerns for others is partly a defense against latent aggression. Evidence was recently obtained for high interpersonal ambivalence in (OCD) patients relative to psychiatric and healthy controls. Psychotic symptoms often lead to obsessive thoughts and compulsive behaviors.

Differential Diagnosis: some primary medical disorders can produce syndromes with resemblance to OCD. Some of the diseases of basal ganglia produce OCD like disorders, diseases such as Sydenham's chorea and Huntington's disease. OCD exhibits a superficial resemblance to obsessive-compulsive personality disorder, which is associated with an obsessive concern for details, perfectionism, and similar personality traits. Only OCD is associated with a true syndrome of obsessions and compulsions. Sometimes OCD can be difficult to differentiate from depression. The two conditions are best distinguished by their courses.

OCD typically begins in late adolescence. Small minorities of patients exhibit either complete remission of their disorder or a progressive, deteriorating course.

7. Posttraumatic stress and acute stress disorders

The prevalence of posttraumatic stress disorder (PTSD) is 2 to 15 percent in the community. It is persistent or chronic in 10 to 25 percent of patients with the disorder.

Symptomatology

Both PTSD and acute stress disorder are characterized by the onset of psychiatric symptoms immediately following exposure to a traumatic event. DSM-IV-TR explicitly notes that such a traumatic event must involve experiencing or witnessing events that involve actual or threatened death or injury or threats to the physical integrity of oneself or others. The response to the traumatic event must involve intense fear or horror. Such traumatic events include a violent accident or crime, military combat, or assault, being kidnapped, being involved in natural disasters and so on. The greater the proximity and intensity of the trauma, the greater is the probability that an individual will develop symptoms. Symptoms are in three domains: Reexperiencing the trauma, avoiding stimuli associated with the trauma, and experiencing symptoms of increased autonomic arousal, such as an enhanced startle. Flashbacks, in which the individual may act and feel as if the trauma is recurring, represent the classic form of reexperiencing. Symptoms of avoidance include: efforts to avoid thoughts or activities related to the trauma, anhedonia, reduced capacity to remember events related to the trauma, blunted affect, feelings of detachment or de-realization, and a sense of a foreshortened future. A patient must exhibit at least three such symptoms. Symptoms of increased arousal include insomnia, irritability, hypervigilance, and exaggerated startle. A patient must exhibit at least two such symptoms. The diagnosis of PTSD is only made when symptoms persist for at least 1 month; the diagnosis of acute stress disorder is made in the interim. Acute PTSD refers to an episode that lasts less than 3 months. Chronic PTSD refers to an episode lasting 3 months or longer. PTSD with delayed onset refers to an episode that develops 6 months or more after exposure to the traumatic event. The diagnosis of acute stress disorder is applied to syndromes that resemble PTSD but last less than 1 month after a trauma. Acute stress disorder is characterized by re-experiencing, avoidance, and increased arousal, much like PTSD.

Acute stress disorder is also associated with at least three of the dissociative symptoms such as:

1. A subjective sense of numbing, detachment, or absence of emotional responsiveness.
2. A reduction in awareness of his /her surroundings.
3. Derealization
4. Depersonalization and
5. Dissociative amnesia (i.e. inability to recall an important aspect of the trauma).

ICD-10 groups PTSD and acute stress reaction in a distinct category –“stress-related disorders” –rather than group them with other anxiety disorders.

Differential Diagnosis: Neurological injury following head trauma, psychoactive substance use disorders or withdrawal syndromes can contribute to clinical presentation of PTSD. Symptoms of panic disorder or generalized anxiety disorder could be similar to those of PTSD. PTSD must be differentiated from major depression, borderline personality disorder, dissociative disorders, and factitious disorders.

8. Generalized anxiety disorder

Generalized anxiety disorder (GAD) is a syndrome of ongoing anxiety and worry about many events or thoughts that the patient generally recognizes as excessive and inappropriate. Most people with GAD also have other mood and anxiety disorders. About 1%-5% of the general population report having GAD. Many of these people also have other disorders, and those with GAD report a considerable level of disability. Long term follow-up studies suggest that GAD is a condition that worsens the prognosis for any other condition, and that people who have only GAD are likely to develop further conditions. People with symptoms of generalized anxiety disorder tend to always expect disaster and can't stop worrying about health, money, family, work, or school. In people with GAD, the worry often is unrealistic or out of proportion for the situation. Daily life becomes a constant state of worry, fear, and dread. Eventually, the anxiety so dominates the person's thinking that it interferes with daily functioning, including work, school, social activities, and relationship.

Symptomatology: GAD is characterized by a pattern of frequent, persistent worry and anxiety that is disproportionate to the impact of the events or circumstances on which the worry focuses. These patients must be bothered by their degree of worry. This pattern must occur "more days than not" for at least 6 months. They find it difficult to control their worry and must report three or more of six somatic or cognitive symptoms, which include: feelings of restlessness, fatigue, muscle tension, or insomnia. Worry is a common characteristic of a variety of anxiety disorders: patients with panic disorder worry about panic attacks, patients with OCD worry about their obsessions. The worries in GAD must exceed in breath or scope the worries that characterize these other anxiety disorders. Children with marked and persistent worry can also be diagnosed with GAD; unlike adults, however, they must only meet one of the six somatic/ cognitive symptom criteria.

Prior to DSM-III, panic disorder and GAD were both subsumed under the broader category of anxiety neurosis.

GAD can be seen in all clinical settings, and in primary care. Practitioners are usually good at identifying GAD patients.

More work is needed to elucidate the potentially unique aspects of pathways and mechanisms involved in the etiopathogenesis of GAD.

Differential Diagnosis: Panic disorder, phobias, OCD and PTSD should be differentiated from GAD. Criteria for GAD include pervasive and lasting worry and associated symptoms. Patients with GAD frequently develop major depressive disorder. The prevalence of GAD ranges from 2 to 5 percent and is more common in men than women. Survival analyses reveal that the factors associated with GAD overlap more strongly with those specific to anxiety disorders than those specific to depressive disorders. In addition, GAD differs from anxiety and depressive disorders with regard to family climate and personality profiles. Hence anxiety and depressive disorders appear to differ with regard to risk constellations and temporal longitudinal patterns, and GAD is a heterogeneous disorder that is, overall, more closely related to other anxiety disorders than to depressive disorders.

9. Other anxiety disorders

I) Anxiety Disorder Not Otherwise Specified (NOS).

It is relatively common to encounter patients who do not meet criteria for any of the disorders discussed in this chapter. These patients are classified as suffering from Anxiety Disorder NOS. Two clinical features of this disorder are:

1. The anxiety described by the patients must be distressing and interfere with some aspect of functioning.
2. The anxiety must not be attributable to another psychiatric condition.

II) Substance- Induced Anxiety and Anxiety Due to a General Medical Condition.

These conditions are characterized by prominent anxiety that arises as the direct result of some underlying physiological perturbation. For patients with substance- induced anxiety, clinically significant symptoms of panic, worry, phobia or obsessions emerge in the context of the use of either prescribed or illicit substances. The first step in identifying an anxiety disorder due to either a medical condition or substance is to confirm the presence of one or the other complicating factor.

10. Treatment

10.1 Obsessive-Compulsive Disorder (OCD)

10.1.1 Pharmacotherapy

The efficacy of pharmacotherapy in OCD has been proved in many clinical trials and is enhanced by the observation that the studies find a placebo response rate of only about 5 percent.

The drugs, some of which are used to treat depressive disorders or mental disorders, can be given in their usual dosage ranges. Initial effects are generally seen after 4 to 6 weeks of treatment, although 8 to 16 weeks are usually needed to obtain maximal therapeutic benefit. Treatment with antidepressant drugs is still controversial and significant proportion of patients with OCD who respond to treatment with antidepressant drugs seem to relapse if the drug therapy is discontinued.

The standard approach is to start treatment with an SSRI or Clomipramine and then move to other pharmacological strategies if the serotonin- specific drugs are not effective. The serotonergic drugs have increased the percentage of patients with OCD who are likely to respond to treatment to the range of 50 to 70 percent.

Serotonin- Specific Reuptake Inhibitors (SSRIs)- The usual SSRIs available are: - Fluoxetine (Prozac), Fluvoxamine (Luvox), Paroxetine (Paxil) and Sertraline (Zoloft). Citalopram (Celexa) has been approved by the US Food and Drug Administration (FDA) for the treatment of OCD. Higher dosages have often been necessary for a beneficial effect, such as 80 mg a day of fluoxetine. Although the SSRIs can cause sleep disturbance, nausea and diarrhea, headache, anxiety, and restlessness, these adverse effects are often transient and are generally less troubling than the adverse effects associated with tricyclic drugs, such as Clomipramine. The best clinical outcomes occur when SSRIs are used in combination with **behavioral therapy**.

Clomipramine- Of all the tricyclic drugs, clomipramine is the most selective for serotonin reuptake versus norepinephrine reuptake and is exceeded in this respect only by the SSRIs. The potency of serotonin reuptake of clomipramine is exceeded only by sertraline and paroxetine. Clomipramine was the first drug to be FDA approved for the treatment of OCD. Its dosing must be titrated upward over 2 to 3 weeks to avoid gastrointestinal adverse effects and orthostatic hypotension, and as with other tricyclic drugs, it causes significant sedation and anticholinergic effects, including dry mouth.

If treatment with Clomipramine or an SSRI is unsuccessful, many therapists augment the first drug by the addition of Valproate (Depakene), lithium (Eskalith), or carbamazepine (Tegretol). Other drugs that can be tried in the treatment of OCD are venlafaxine (Effexor), pindolol (Visken), and the monoamine oxidase inhibitors (MAOIs) especially phenelzine (Nardil). Other pharmacological agents for treatment of unresponsive patients include buspirone (BuSpar), L-tryptophan,

5-hydroxytryptamine (5-HT) and clonazepam (Klonopin). Adding an atypical antipsychotic such as risperidol has helped in some cases.

10.1.2 Cognitive-behavioral therapy

This form of therapy for obsessive-compulsive disorder involves some components:

Exposure and response prevention

It involves repeated exposure of patient to the source of obsession. Then is asked to refrain from the compulsive behavior usually perform to reduce his/her anxiety. For example, if he/she is a compulsive hand washer, might be asked to touch the door handle in a public restroom and then be prevented from washing. As he/she sits with the anxiety, the urge to wash hands will gradually begin to go away on its own. In this way, he/she learns that he/she does not need the ritual to get rid of anxiety—that he/she has some control over his/her obsessive thoughts and compulsive behaviors.

Cognitive therapy focuses on the catastrophic thoughts and exaggerated sense of responsibility. A big part of cognitive therapy for OCD is teaching healthy and effective ways of responding to obsessive thoughts, without resorting to compulsive behavior.

Four Steps for Conquering Symptoms of Obsessive-Compulsive Disorder:

Relabel – Recognize that the intrusive obsessive thoughts and urges are the result of OCD. For example, train yourself to say, "I don't think or feel that my hands are dirty. I'm having an obsession that my hands are dirty." Or, "I don't feel that I have the need to wash my hands. I'm having a compulsive urge to perform the compulsion of washing my hands."

Reattribute – Realize that the intensity and intrusiveness of the thought or urge is caused by OCD; it is probably related to a biochemical imbalance in the brain. Tell yourself, "It's not me—it's my OCD," to remind you that OCD thoughts and urges are not meaningful, but are false messages from the brain.

Refocus – Work around the OCD thoughts by focusing your attention on something else, at least for a few minutes. Do another behavior. Say to yourself, "I'm experiencing a symptom of OCD. I need to do another behavior."

Revalue – Do not take the OCD thought at face value. It is not significant in itself. Tell yourself, "That's just my stupid obsession. It has no meaning. That's just my brain. There's no need to pay attention to it." Remember: You can't make the thought go away, but neither do you need to pay attention to it. You can learn to go on to the next behavior.

Family therapy for OCD treatment- Because OCD often causes problems in family life and social adjustment, family therapy can often be beneficial.

Group therapy for OCD treatment- Through interaction with fellow OCD sufferers, group therapy provides support and encouragement and decreases feelings of isolation.

Self-help for OCD:

1. Challenge obsessive thoughts and compulsive behaviors
 - **Learn to recognize and reduce stress-** If you have OCD, there are many ways you can help yourself in addition to seeking therapy.
 - **Refocus your attention-** When you're experiencing OCD thoughts and urges, try shifting your attention to something else.

You could exercise, jog, walk, listen to music, read, surf the web, play a video game, make a phone call, or knit. The important thing is to do something you enjoy for at least 15 minutes, in order to delay your response to the obsessive thought or compulsion.

At the end of the delaying period, reassess the urge. In many cases, the urge will no longer be quite as intense.

Try delaying for a longer period. The longer you can delay the urge, the more it will likely change.

- **Write down your obsessive thoughts or worries-** Keep a pad and pencil on you, or type on a laptop, Smartphone, or tablet. When you begin to obsess, write down all your thoughts or compulsions.

Keep writing as the OCD urges continue, aiming to record exactly what you're thinking, even if you're repeating the same phrases or the same urges over and over.

Writing it all down will help you see just how repetitive your obsessions are.

Writing down the same phrase or urge hundreds of times will help it lose its power.

Writing thoughts down is much harder work than simply thinking them, so your obsessive thoughts are likely to disappear sooner.

- **Anticipate OCD urges-** By anticipating your compulsive urges before they arise, you can help to ease them. For example, if your compulsive behavior involves checking that doors are locked, windows closed, or appliances turned off, try to lock the door or turn off the appliance with extra attention the first time.

Create a solid mental picture and then make a mental note. Tell yourself, "The window is now closed," or "I can see that the oven is turned off."

When the urge to check arises later, you will find it easier to relabel it as "just an obsessive thought."

- **Create an OCD worry period-** Rather than trying to suppress obsessions or compulsions, develop the habit of rescheduling them.

Choose one or two 10 minute “worry periods” each day, time you can devote to obsessing.

During your worry period, focus only on negative thoughts or urges. Don't try to correct them. At the end of the worry period, take a few calming breaths, let the obsessive thoughts or urges go, and return to your normal activities. The rest of the day, however, is to be designated free of obsessions and compulsions.

When thoughts or urges come into your head during the day, write them down and “postpone” them to your worry period. Save it for later and continue to go about your day.

Go over your “worry list” during the worry period. Reflect on the thoughts or urges you wrote down during the day. If the thoughts are still bothering you, allow yourself to obsess about them, but only for the amount of time you've allotted for your worry period.

- **Create a tape of your OCD obsessions-** Focus on one specific worry or obsession and record it to a tape recorder, laptop, or smartphone.

Recount the obsessive phrase, sentence, or story exactly as it comes into your mind.

Play the tape back to yourself, over and over for a 45-minute period each day, until listening to the obsession no longer causes you to feel highly distressed.

By continuously confronting your worry or obsession you will gradually become less anxious. You can then repeat the exercise for a different obsession.

2. **Take care of yourself-** A healthy, balanced lifestyle plays a big role in keeping OCD behavior, fears, and worry at bay.

Practice relaxation techniques- While stress doesn't cause OCD, a stressful event can trigger the onset of obsessive and compulsive behavior, and stress can often make obsessive-compulsive behavior worse.

Mindful meditation, yoga, deep breathing, and other stress-relief techniques may help reduce the symptoms of anxiety brought on by OCD. Try to practice a relaxation technique for at least 30 minutes a day.

Adopt healthy eating habits- Start the day right with breakfast, and continue with frequent small meals throughout the day. Going too long without eating leads to low blood sugar, which can make you feel more anxious.

Eat plenty of complex carbohydrates such as whole grains, fruits, and vegetables. Not only do complex carbs stabilize blood sugar, they also boost serotonin, a neurotransmitter with calming effects.

Exercise regularly- Exercise is a natural and effective anti-anxiety treatment that helps to control OCD symptoms by refocusing your mind when obsessive thoughts and compulsions arise.

For maximum benefit, try to get 30 minutes or more of aerobic activity on most days. Aerobic exercise relieves tension and stress, boosts physical and mental energy, and enhances well-being through the release of endorphins, the brain's feel-good chemicals.

Also Exercise training reduces anxiety symptoms among sedentary patients who have a chronic illness.

Avoid alcohol and nicotine- Alcohol temporarily reduces anxiety and worry, but it actually causes anxiety symptoms as it wears off. Similarly, while it may seem that cigarettes are calming, nicotine is actually a powerful stimulant. Smoking leads to higher, not lower, levels of anxiety and OCD symptoms.

Get enough sleep- Not only can anxiety and worry cause insomnia, but a lack of sleep can also exacerbate anxious thoughts and feelings. When you're well rested, it's much easier to keep your emotional balance, a key factor in coping with anxiety disorders such as OCD.

3. **Reach out for support-** OCD can get worse when you feel powerless and alone, so it's important to build a strong support system. The more connected you are to other people, the less vulnerable you'll feel. Just talking about your worries and urges can make them seem less threatening.

Stay connected to family and friends- Obsessions and compulsions can consume your life to the point of social isolation. In turn, social isolation can aggravate your OCD symptoms. It's important to have a network of family and friends you can turn to for help and support. Involving others in your treatment can help guard against setbacks and keep you motivated.

Join an OCD support group- You're not alone in your struggle with OCD, and participating in a support group can be an effective reminder of that. OCD support groups enable you to both share your own experiences and learn from others who are facing the same problems.

Helping a loved one with OCD- If a friend or family member has OCD, your most important job is to educate yourself about the disorder. Share what you've learned with your loved one and let them know that there is help available. Simply knowing that OCD is treatable can sometimes provide enough motivation for your loved one to seek help.

11. Generalized anxiety disorder (GAD) treatment

11.1 Pharmacotherapy

The decision to prescribe an anxiolytic to patients with GAD should rarely be made on the first visit. Because of the long-term nature of the disorder, a treatment plan must be carefully thought out. The major drugs to be considered for the treatment of GAD are benzodiazepines, the serotonergic and the norepinephrine-specific reuptake inhibitors (SSRIs), buspirone (BuSpar), and venlafaxine (Effexor). Other drugs that may be useful are the tricyclic drugs (e.g., imipramine [Tofranil]), antihistamines, β -adrenergic antagonists (e.g., propranolol [Inderal]).

Although drug treatment of GAD is sometimes seen as a 6-to 12-month treatment. Some evidence indicates that treatment should be long term, perhaps lifelong. About 25 percent of patients in the first month after the discontinuation of therapy, and 60 to 80 percent relapse over the course of the next year. Although some patients become dependent on the benzodiazepines, tolerance rarely develops to the therapeutic effects of the benzodiazepines, buspirone, venlafaxine, or the SSRIs.

Benzodiazepines- Benzodiazepines have been the drugs of choice for GAD. They can be prescribed on as-needed basis, so that patients take a rapidly acting benzodiazepine when

they feel particularly anxious. The alternative approach is to prescribe benzodiazepines for a limited period, during which psychosocial therapeutic approaches are implemented.

Several problems are associated with the use of benzodiazepines in GAD. About 25 to 30 percent of all patients fail to respond, and tolerance and dependence can occur. Some patients also experience impaired alertness while taking the drugs and, therefore, are at risk for accidents involving automobiles and machinery.

The clinical decision to initiate treatment with a benzodiazepine should be considered and specific. The patient's diagnosis, the specific target symptoms, and the duration of treatment should all be defined, and the information should be shared with the patient. Treatment for most anxiety conditions lasts for 2 to 6 weeks, followed by 1 or 2 weeks of tapering drug use before it is discontinued. The most common clinical mistake with benzodiazepine treatment is routinely to continue treatment indefinitely.

For the treatment of anxiety, it is usual to begin giving a drug at the low end of its therapeutic range and to increase the dosage to achieve a therapeutic response. The use of a benzodiazepine with an intermediate half-life (8 to 18 hours) will likely avoid some of the adverse effects associated with the use of benzodiazepines with long half-lives, and the use of divided doses prevents the development of adverse effects associated with high peak plasma levels. The improvement produced by benzodiazepines may go beyond a simple anti-anxiety effect. For example, the drugs may cause patients to regard various occurrences in a positive light. The drugs can also have a mild dis-inhibiting action, similar to that observed after ingesting modest amounts of alcohol.

Buspirone- Buspirone is a 5-HT_{1A} receptor partial agonist and is most likely effective in 60 to 80 percent of patients with GAD. Data indicate that buspirone is more effective in reducing the cognitive symptoms of generalized anxiety disorder than in reducing the somatic symptoms. Evidence also indicates that patients who have previously had treatment with benzodiazepines are not likely to respond to treatment with buspirone. The lack of response may be caused by the absence, with buspirone treatment, of some of the nonanxiolytic effects of benzodiazepines. The major disadvantage of buspirone is that its effects take 2 to 3 weeks to become evident, in contrast to the almost immediate anxiolytic effects of the benzodiazepines. One approach is to initiate benzodiazepine and buspirone use simultaneously, then taper off the buspirone use after 2 to 3 weeks, at which point the buspirone should have reached its maximal effects. Some studies have also reported that long-term in combined treatment with benzodiazepine and buspirone may be more effective than either drug alone. Buspirone is not an effective treatment for benzodiazepine withdrawal.

Venlafaxine- Venlafaxine is effective in treating the insomnia, poor concentration, restlessness, irritability, and excessive muscle tension associated with GAD. Venlafaxine is a nonselective inhibitor of the reuptake of three biogenic amines – serotonin, and, to a lesser extent, dopamine.

Selective Serotonin Reuptake Inhibitors -SSRIs may be effective, especially for patients with comorbid depression. The prominent Disadvantage of SSRIs, especially fluoxetine (Prozac), is that they can transiently increase anxiety and cause agitated states. For this reason, the SSRIs sertraline (Zoloft), citalopram (Celexa), or paroxetine (Paxil) are better

choices in patients with high anxiety disorder. It is reasonable to begin treatment with sertraline, citalopram, or paroxetine plus a benzodiazepine, then to taper benzodiazepine use after 2 to 3 weeks. Further studies are needed to determine whether SSRIs are as effective for GAD as they are for panic disorder and OCD.

Other Drugs- If conventional pharmacological treatment (e.g., with buspirone or a benzodiazepine) is ineffective or not completely effective, then a clinical reassessment is indicated to rule out comorbid conditions, such as depression, or to better understand patient's environmental stresses. Other drugs that have proved useful for generalized anxiety disorder include the tricyclic and tetracyclic drugs. The β -adrenergic receptor antagonists may reduce the somatic manifestations of anxiety, but not the underlying condition, and their use is usually limited to situational anxieties, such as performance anxiety.

Treatment of GAD with an antidepressant should be continued for at least 12 months. Preliminary data demonstrate that improved patients who relapse while off their anti-anxiety medication after at least 6 months of treatment will again most likely respond to a second course of treatment with the same medication.

11.2 Psychotherapy

1. **Look at your worries in new ways-** The core symptom of GAD is chronic worrying. It's important to understand what worrying is, since the belief you hold about worrying plays a huge role in triggering and maintaining GAD.

Understanding worrying- You may feel like your worries come from the outside—from other people, events that stress you out, or difficult situations you're facing. But, in fact, worrying is self-generated. The trigger comes from the outside, but an internal running dialogue maintains the anxiety itself.

When you're worrying, you're talking to yourself about things you're afraid of or negative events that might happen. You run over the feared situation in your mind and think about all the ways you might deal with it. In essence, you're trying to solve problems that haven't happened yet, or worse, simply obsessing on worst-case scenarios. All this worrying may give you the impression that you're protecting yourself by preparing for the worst or avoiding bad situations. But more often than not, worrying is unproductive, sapping your mental and emotional energy without resulting in any concrete problem-solving strategies or actions.

How to distinguish between productive and unproductive worrying? If you're focusing on "what if" scenarios, your worrying is unproductive. Once you've given up the idea that your worrying somehow helps you, you can start to deal with your worry and anxiety in more productive ways. This may involve challenging irrational worrisome thoughts, learning how to postpone worrying, and learning to accept uncertainty in your life.

Self-help strategies for chronic worriers- Have fears and "what ifs" taken over your life? Is your worrying out of control? The good news is that chronic worrying is a mental habit you can learn how to break. You can teach yourself to stay calm and collected and to look at your fears from a more balanced perspective.

2. **Practice relaxation techniques-** Anxiety is more than just a feeling. It's the body's physical "fight or flight" reaction to a perceived threat. Your heart pounds, you breathe

faster, your muscles tense up, and you feel light-headed. When you're relaxed, the complete opposite happens. Your heart rate slows down, you breathe slower and more deeply, your muscles relax, and your blood pressure stabilizes. Since it's impossible to be anxious and relaxed at the same time, strengthening your body's relaxation response is a powerful anxiety-relieving tactic.

If you struggle with GAD, relaxation techniques such as progressive muscle relaxation, deep breathing, and meditation can teach you how to relax.

The key is regular practice. Try to set aside at least 30 minutes a day. As you strengthen your ability to relax, your nervous system will become less reactive and you'll be less vulnerable to anxiety and stress. Over time, the relaxation response will come easier and easier, until it feels natural.

Progressive muscle relaxation- When anxiety takes hold, progressive muscle relaxation can help you release muscle tension and take a "time out" from your worries. The technique involves systematically tensing and then releasing different muscle groups in your body. As your body relaxes, your mind will follow.

Deep breathing- When you're anxious, you breathe faster. This hyperventilation causes symptoms such as dizziness, breathlessness, lightheadedness, and tingly hands and feet. These physical symptoms are frightening, leading to further anxiety and panic. But by breathing deeply from the diaphragm, you can reverse these symptoms and calm yourself down. **Meditation-** Many types of meditation have been shown to reduce anxiety. Mindfulness meditation, in particular, shows promise for anxiety relief. Research shows that mindfulness meditation can actually change your brain. With regular practice, meditation boosts activity on the left side of the prefrontal cortex, the area of the brain responsible for feelings of serenity and joy.

3. Learn to calm down quickly

Learn to recognize and reduce hidden stress - Many people with GAD don't know how to calm and soothe themselves. But it's a simple, easy technique to learn, and it can make a drastic difference in your anxiety symptoms. The best methods for self-soothing incorporate one or more of the physical senses: vision, hearing, smell, taste, and touch. Try the following sensory-based, self-soothing suggestions when your generalized anxiety disorder (GAD) symptoms are acting up:

Sight (Take in a beautiful view). **Sound** (Listen to soothing music. Enjoy the sounds of nature). **Smell** (Light scented candles. **Taste** (Cook a delicious meal. Slowly eat a favorite treat, savoring each bite). **Touch** (Take a warm bubble bath. Wrap yourself in a soft blanket and so on).

4. Connect with others

GAD gets worse when you feel powerless and alone, but there is strength in numbers. The more connected you are to other people, the less vulnerable you'll feel. **Identify unhealthy relationship patterns.** Once you're aware of any anxiety-driven relationship patterns, you can look for better ways to deal with any fears or insecurities you're feeling. **Build a strong support system.** Connecting to others is vital to your emotional health. A strong support system doesn't necessarily mean a vast network of friends. **Talk it out when your worries**

start spiraling. It's helpful to bounce your worries off someone who can give you a balanced, objective perspective. **Know who to avoid when you're feeling anxious.** No matter how close you are.

5. Change your lifestyle

A healthy, balanced lifestyle plays a big role in keeping the symptoms of GAD at bay. **Adopt healthy eating habits-** Start the day right with breakfast. Eat plenty of complex carbohydrates such as whole grains, fruits, and vegetables. Not only do complex carbs stabilize blood sugar, they also boost serotonin, a neurotransmitter with calming effects. **Limit caffeine and sugar-** Stop drinking or cut back on caffeinated beverages, including soda, coffee, and tea. Caffeine can increase anxiety, interfere with sleep, and even provoke panic attacks. Reduce the amount of refined sugar you eat, too. Sugary snacks and desserts cause blood sugar to spike and then crash, leaving you feeling emotionally and physically drained. **Exercise regularly-** For maximum relief for GAD, try to get at least 30 minutes of aerobic activity on most days. Aerobic exercise boosts physical and mental energy, and enhances well-being through the release of endorphins, the brain's feel-good chemicals. **Avoid alcohol and nicotine-** Alcohol temporarily reduces anxiety and worry, but it actually causes anxiety symptoms as it wears off. Drinking for GAD relief also starts you on a path that can lead to alcohol abuse and dependence. Lighting up when you're feeling anxious is also a bad idea. While it may seem like cigarettes are calming, nicotine is actually a powerful stimulant. Smoking leads to higher, not lower, levels of anxiety. And finally **get enough sleep.**

12. Panic

With treatment, most patients exhibit dramatic improvement the symptoms of panic disorder and agoraphobia. The two most effective treatments are pharmacotherapy and cognitive-behavioral therapy. Family and group therapy may help affected patients and their families adjust to the patient's disorder and to the psychosocial difficulties that the disorder may have precipitated.

12.1 Pharmacotherapy

Overview. Alprazolam (Xanax) and paroxetine (Paxil) are the two drugs approved by the FDA for the treatment of panic disorder. In general, experience is showing superiority of the selective serotonin reuptake inhibitors (SSRIs) and clomipramine (Anafranil) over the benzodiazepines, Monoamine oxidase inhibitors (MAOIs), and tricyclic and tetracyclic drugs in terms of effectiveness and tolerance of adverse effects. A few reports have suggested a role for venlafaxine (Effexor), and buspirone (BuSpar) has been suggested as an additive medication in some cases. Venlafaxine is approved by the FDA for treatment of GAD and it may be useful in panic disorder combined with depression. Adrenergic receptor antagonists have not been found to be particularly useful for panic disorder. A conservative approach is to begin treatment with paroxetine, sertraline (Zoloft), citalopram (celexa), or fluvoxamine (Luvox) in isolated panic disorder. If rapid control of severe symptoms is desired, a brief course of alprazolam should be initiated concurrently with the SSRI, followed by slowly tapering use of the benzodiazepines in long-term use. Fluoxetine (prozac) is an effective drug for panic with comorbid depression, although its initial

activating properties may mimic panic symptoms for the first several weeks, and it may be poorly tolerated on this basis.

Clonazepam (klonopin) can be prescribed for patients who anticipate a situation in which panic may occur (0.5to 1 mg as required). Common dosages for antipanic drugs are listed in the table below.

DRUG	Starting (mg)	Maintenance(mg)
SSRIs		
Paroxetine	5-10	20-60
Paroxetine CR	12.5-25	62.5
Fluoxetine	2-5	20-60
Sertraline	12.5-25	50-200
Fluvoxamine	12.5	100-150
Citalopram	10	20-40
Escitalopram	10	20
Tricyclic Antidepressants		
Clomipramine	5-12.5	50-125
Imipramine	10-25	150-500
Desipramine	10-25	150-200
Benzodiazepines		
Alprazolam	0.25-0.5 tid	0.5-2 tid
Clonazepam	0.25-0.5 bid	0.5-2 bid
Diazepam	2-5 bid	5-30 bid
Lorazepam	0.25-0.5 bid	0.5-2 bid
MAOIs		
Phenelzine	15 bid	15-45 bid
Tranylcypromine	10 bid	10-30 bid
RIMAs		
Moclobemide	50	300-600
Brofaromine	50	150-200
Atypical Antidepressants		
Venlafaxine	6.25-25	50-150
Venlafaxine XR	37.5	150-225
Other Agents		
Valproic acid	125 bid	500-750 bid
Inositol	6'000 bid	6'000 bid

SSRIs: selective serotonin reuptake inhibitors, MAOIs: monoamine oxidase Inhibitors, RIMAs: reversible inhibitors of monoamine oxidase type-A, Bid: twice a day, Tid: three times a day

Table 1. Recommended daily dosages for antipanic drugs.

Selective Serotonin reuptake Inhibitors (SSRIs) - All SSRIs are effective for panic disorder. Paroxetine and paroxetine CR have sedative effects and to calm patients immediately, which leads to greater compliance and less discontinuation. Citalopram, escitalopram (Lexapro), fluvoxamine, and sertraline are the next best tolerated. Anecdotal reports suggest that patients with panic disorder are particularly sensitive to the activating effects of SSRIs, particularly fluoxetine, so they should be given initially at small dosages and titrated up

slowly. Once at therapeutic dosages- for example, 20 mg a day of paroxetine-some patients may experience increased sedation. One approach for patients with panic disorder is to give 5 or 10 mg a day of paroxetine or 12.5 to 25 mg of paroxetine CR for 1 to 2 weeks, then increase the dosage by 10mg of paroxetine or 12.5 mg of paroxetine CR a day every 1 to 2 weeks to a maximum of 60 mg of paroxetine or 62.5 mg of paroxetine CR. If sedation becomes intolerable, then taper the paroxetine dosage down to 10 mg a day of paroxetine or 12.5 mg of paroxetine CR and switch to fluoxetine at 10 mg a day and titrate upward slowly. Other strategies can be used, based on the experience of clinician.

Benzodiazepines- Benzodiazepines have the most rapid onset of action against panic, often within the first week, and they can be used for long periods without the development of tolerance to the antipanic effects. Alprazolam has been the most widely used benzodiazepine for panic disorder, but controlled studies have demonstrated equal efficacy for lorazepam (Ativan), and case reports have also indicated that clonazepam may be effective. Some patients use Benzodiazepines as needed when faced with a phobic stimulus. Benzodiazepines can reasonably be used as the first agent for treatment of panic disorder, while a serotonergic drug is being slowly titrated to a therapeutic dose. After 4 to 12 weeks, benzodiazepine use can be slowly tapered (over 4 to 10 weeks) while the serotonergic drug is continued. The major reservation among clinicians regarding the use of benzodiazepines for panic disorder is the potential for dependence, cognitive impairment, and abuse, especially after long-term use. Patients should be instructed not to drive, abstain from alcohol or other CNS depressant medications or operate dangerous equipment while taking benzodiazepines. Benzodiazepines elicit a sense of well-being, whereas discontinuation of benzodiazepines produces a well-documented and unpleasant withdrawal syndrome. Anecdotal reports and small case series have indicated that addiction to alprazolam is one of the most difficult to overcome, and it may require a comprehensive program of detoxification. Benzodiazepines dosage should be tapered slowly, and all anticipated withdrawal effects should be thoroughly explained to the patient.

Tricyclic and Tetracyclic Drugs- At the present time SSRIs are considered the first line agents for the treatment of panic disorder. Data however, show that among tricyclic drugs, clomipramine and imipramine (Tofranil) are the most effective in the treatment of panic disorder. Clinical experience indicates that the dosages must be titrated slowly upward to avoid overstimulation and that the full clinical benefit requires full dosages and may not be achieved for 8 to 12 weeks. Some data support the efficacy of desipramine (Norpramin), and less evidence suggests a role for maprotiline (Ludiomil), trazodone (Desyrel), nortriptyline (Pamelor), amitriptyline (Elavil), and doxepin (Adapin). Tricyclic drugs are less widely used than SSRIs because the Tricyclic drugs generally have more severe adverse effects at the higher dosages required for effective treatment of panic disorder.

Monoamine Oxidase Inhibitors (MAOIs) - The most robust data support the effectiveness of phenelzine (Nardil), and some data also support the use of tranylcypromine (Parnate). MAOIs appear less likely to cause overstimulation than either SSRIs or tricyclic drugs, but they may require full dosages for at least 8 to 12 weeks to be effective. The need for dietary restrictions has limited the use of MAOIs, particularly since the appearance of the SSRIs.

12.2 Treatment nonresponse

If patients fail to respond to one class of drugs, another should be tried. Recent data support the effectiveness of venlafaxine. The combination of a SSRI or a tricyclic drug and a

benzodiazepines or of a SSRIs and lithium or a tricyclic drug can be tried. Case reports have suggested the effectiveness of carbamazepine (Tegretol), valproate (Depakene) and calcium channel inhibitors. Buspirone may have a role in the augmentation of other medications but has little effectiveness by itself. Clinicians should reassess the patient, particularly to establish the presence of comorbid conditions such as depression, alcohol use or other substance use.

12.3 Duration of pharmacotherapy

Once it becomes effective pharmacological treatment should generally continue for 8 to 12 months. Data indicate that panic disorder is a chronic, perhaps lifelong condition that recurs when treatment is discontinued. Studies have reported that 30 to 90 percent of patients with panic disorder who have had successful treatment have a relapse when their medication is discontinued. Patients may be likely to relapse if they have been given benzodiazepines and the benzodiazepine therapy is terminated in that causes withdrawal symptoms.

13. Cognitive behavioral therapy

Cognitive behavioral therapy focuses on the thinking patterns and behaviors that are sustaining or triggering the panic attacks. It helps you look at your fears in a more realistic light. For example, if you had a panic attack while driving, what is the worst thing that would really happen? While you might have to pull over to the side of the road, you are not likely to crash your car or have a heart attack. Once you learn that nothing truly disastrous is going to happen, the experience of panic becomes less terrifying.

Exposure therapy for panic attacks and panic disorder - In exposure therapy for panic disorder, you are exposed to the physical sensations of panic in a safe and controlled environment, giving you the opportunity to learn healthier ways of coping. You may be asked to hyperventilate, shake your head from side to side, or hold your breath. These different exercises cause sensations similar to the symptoms of panic.

If you have agoraphobia, exposure to the situations you fear and avoid is also included in treatment. You face the feared situation until the panic begins to go away. You learn that the situation isn't harmful and that you have control over your emotions.

Self-help tips for panic attacks and panic disorder:

Learn to recognize and reduce hidden stress

Learn about panic- Simply knowing more about panic can help relieving your distress. Read about anxiety, panic disorder, and the fight-or-flight response experienced during a panic attack. You'll learn that the sensations and feelings you have when you panic are normal and that you aren't going crazy.

Avoid smoking and caffeine- Smoking and caffeine can provoke panic attacks in people who are susceptible. As a result, it's wise to avoid cigarettes, coffee, and other caffeinated beverages. Also be careful with medications that contain stimulants, such as diet pills and non-drowsy cold medications.

Learn how to control your breathing - Hyperventilation brings on many sensations (such as lightheadedness and tightness of the chest) that occur during a panic attack. Deep breathing, can relieve the symptoms of panic.

Practice relaxation techniques - When practiced regularly, activities such as yoga, meditation, and progressive muscle relaxation strengthen the body's relaxation response.

Telephone-based collaborative care for panic disorder and generalized anxiety disorder is more effective than usual care at improving anxiety symptoms, health-related quality of life, and work-related outcomes.

14. Phobia

14.1 Treatment of phobia

Although phobias are common, they don't always cause considerable distress or significantly disrupt life. For example, if somebody has a snake phobia, it may cause no problems in his/her everyday activities if he/she lives in a city. On the other hand, if he/she has a severe phobia of crowded spaces, living in a big city would pose a problem. If phobia doesn't really impact life that much, it's probably nothing to be concerned about.

Consider treatment for your phobia if:

It causes intense and disabling fear, anxiety, and panic. You recognize that your fear is excessive and unreasonable.

You avoid certain situations and places because of your phobia. Your avoidance interferes with your normal routine or causes significant distress. You've had the phobia for at least six months.

Self-help or therapy for phobias: which treatment is best?

When it comes to treating phobias, self-help strategies and therapy can both be effective. What's best for you depends on a number of factors, including the severity of your phobia, finances and the amount of support you need. The more you can do for yourself, the more is control you'll feel, which goes a long way when it comes to phobias and fears. If your phobia is so severe that it triggers panic attacks or uncontrollable anxiety, you may need more help. Therapy for phobias not only does work extremely well, but you tend to see results very quickly. However, support doesn't have to come in the guise of a professional therapist. Just having someone to hold your hand or stand by your side.

What you can do:

1. Face your fears, one step at a time.

When it comes to conquering phobias, facing your fears is the key. While avoidance may make you feel better in the short-term, it prevents you from learning that your phobia may not be as frightening or overwhelming as you think.

Exposure: Gradually and repeatedly facing your fears - The most effective way to overcome a phobia is by gradually and repeatedly exposing yourself to what you fear in a safe and controlled way. You'll learn to ride out the anxiety and fear until it inevitably passes. Through repeated experiences facing your fear, you'll begin to realize that the worst isn't going to happen. Successfully facing your fears takes planning, practice, and patience.

The following tips will help you get the most out of the exposure process:

Climbing up the “fear ladder” - If you’ve tried exposure in the past and it didn’t work, you may have started with something too scary or overwhelming. It’s important to begin with a situation that you can handle, and work your way up from there, building your confidence and coping skills as you move up the “fear ladder.”

- **Facing a fear of dogs:**

A sample fear ladder- Look at pictures of dogs. - Watch a video with dogs in it. - Look at a dog through a window. - Stand 10 feet away from a dog on a leash. - Stand 5 feet away from a dog on a leash. - Stand beside a dog on a leash. - Pet a small dog that someone is holding. - Pet a larger dog on a leash. - Pet a larger dog off leash.

Make a list- Make a list of the frightening situations related to your phobia. If you’re afraid of flying, your list (in addition to the obvious matters, such as taking a flight or getting through takeoff) might include booking your ticket, packing your suitcase, driving to the airport, watching planes take off and land, going through security, boarding the plane, and listening to the flight attendant present the safety instructions.

Build your fear ladder- Arrange the items on your list from the least scary to the scariest. When creating the ladder, it can be helpful to think about your end goal (for example, to be able to be near dogs without panicking) and then break down the steps needed to reach that goal.

Work your way up the ladder- Start with the first step (in this example, looking at pictures of dogs) and don’t move on until you start to feel more comfortable doing it. If at all possible, stay in the situation long enough for your anxiety to decrease. Once you’ve done a step on several separate occasions without feeling too much anxiety, you can move on to the next step. **Practice-** It’s important to practice regularly. The more often you practice, the quicker your progress will be. However, don’t rush. Your fears won’t hurt you.

2. **Learn relaxation techniques.**

By learning and practicing relaxation techniques, you can become more confident in your ability to tolerate uncomfortable sensations and calm yourself down quickly. Relaxation techniques such as deep breathing, meditation, and muscle relaxation are powerful antidotes to anxiety, panic, and fear.

3. **Challenge negative thoughts.**

Learning to challenge unhelpful thoughts is an important step in overcoming your phobia. You may underestimate your ability to cope. The anxious thoughts that trigger and fuel phobias are usually negative and unrealistic. Begin by writing down any negative thoughts you have when confronted with your phobia. Many times, these thoughts fall into the following categories (with examples):

Fortune telling- I’ll make a fool of myself for sure.

Overgeneralization - All dogs are dangerous.

Catastrophizing- The person next to me coughed. Maybe it’s the swine flu. I’m going to get very sick!

15. Social anxiety disorder treatment

1. Challenging negative thoughts

The one with social anxiety disorder, or social phobia, may find himself/herself overwhelmed by thoughts like:

People will think I'm stupid. I won't have anything to say. I'll seem boring.

Challenging these negative thoughts is one effective way to reduce the symptoms of social anxiety disorder. The first step is to identify the automatic negative thoughts that underlie fear of social situations. The next step is to analyze and challenge them. It helps to ask questions about the negative thoughts: "Even if I'm nervous, will people necessarily think I'm incompetent?" Through this logical evaluation of negative thoughts, he/she can gradually replace them with more realistic and positive ways of looking at social situations that trigger anxiety.

15.1 Unhelpful thinking styles involved in social phobia

Mind reading - Assuming you know what other people are thinking, and that they see you in the same negative way that you see yourself.

Fortune telling- Predicting the future, usually while assuming the worst will happen. You just "know" that things will go horribly, so you're already anxious before you're even in the situation.

Catastrophizing -Blowing things out of proportion. If people notice that you're nervous, it will be "awful," "terrible," or "disastrous."

Personalizing -Assuming that people are focusing on you in a negative way or that what's going on with other people has to do with you.

2. Breathing control

Learning to slow your breathing down can help you bring your physical symptoms of anxiety back under control.

3. Facing fears

Avoidance leads to more problems- While avoiding nerve-wracking situations may help you feel better in the short term. In fact, the more you avoid a feared social situation, the more frightening it becomes.

Challenging social anxiety one step at a time- While it may seem impossible to overcome a feared social situation, you can do it by taking it one small step at a time. The key is to start with a situation that you can handle and gradually work your way up to more challenging situations.

Working your way up the social phobia "anxiety ladder"- Don't try to face your biggest fear right away. This will backfire and reinforce your anxiety.

Be patient- Overcoming social anxiety takes time and practice.

Use the skills you've learned to stay calm, such as focusing on your breathing and challenging negative assumptions.

4. Building better relationships

The following suggestions are good ways to start interacting with others in positive ways:

Take a social skills class or an assertiveness training class. Volunteer doing something you enjoy, such as stuffing envelopes for a campaign. Work on your communication skills. Clear and emotionally-intelligent communication.

5. Changing the lifestyle

Avoid or limit caffeine- Coffee, tea, caffeinated soda, energy drinks, and chocolate act as stimulants that increase anxiety symptoms.

Avoid drinking- alcohol increases your risk of having an anxiety attack.

Quit smoking- Nicotine is a powerful stimulant. Smoking leads to higher, not lower, levels of anxiety.

Get adequate sleep- Being well rested will help you stay calm in social situations.

Group therapy for social anxiety disorder / social phobia would help a lot.

Other cognitive-behavioral techniques for social anxiety disorder include **role-playing and social skills training**, often as part of a therapy group.

Group therapy for social anxiety disorder uses acting, videotaping and observing, mock interviews, and other exercises to work on situations that make you anxious in the real world.

15.2 Medication for social anxiety disorder/social phobia

Medication is sometimes used to relieve the symptoms of social anxiety, but it's not a cure for social anxiety disorder or social phobia. After stopping the medication, symptoms will probably return full force. Medication is considered most helpful when used in addition to therapy and other self-help techniques that address the root cause of social anxiety disorder.

Cognitive therapy and Interpersonal psychotherapy (IPT) led to considerable improvements that were maintained 1 year after treatment. Cognitive therapy (CT) is more efficacious than is IPT in reducing social phobia symptoms.

15.3 Medical treatment of social disorder

Three types of medication are used in the treatment of social anxiety disorder / social phobia:

Beta blockers - Beta blockers are used for relieving performance anxiety. They work by blocking the flow of adrenaline that occurs when you're anxious. While beta blockers don't affect the emotional symptoms of anxiety, they can control physical symptoms such as shaking hands or voice, sweating, and rapid heartbeat.

Antidepressants - Antidepressants can be helpful when social anxiety disorder is severe and debilitating. Three specific antidepressants- paroxetine (Paxil), venlafaxine (Effexor), and sertraline (Zoloft) -have been approved by the FDA for the treatment of social phobia.

Benzodiazepines – Benzodiazepines are fast-acting anti-anxiety medications. However, they are sedating and addictive, so they are typically prescribed only when other medications for social phobia have not worked.

15.4 Medication alone is not enough

Remember, anxiety medications aren't a cure. Medication may treat some symptoms of anxiety, but can't change the underlying issues and situations in your life that are making you anxious. Anxiety medication won't solve your problems if you're anxious because of mounting bills, a tendency to jump to "worst-case scenarios", or an unhealthy relationship. That's where therapy and other lifestyle changes come in. Alternatives to medication include: cognitive-behavioral therapy, which is widely accepted to be more effective for anxiety than drugs. To overcome anxiety for good, you may also need to make major changes in your life. Lifestyle changes that can make a difference in anxiety levels include regular exercise, adequate sleep, and a healthy diet. Other effective treatments for anxiety include talk therapy, meditation, biofeedback, hypnosis, and acupuncture.

The advantage of non-drug treatments for anxiety is that they produce lasting changes and long-term relief. If your anxiety is so severe that it interferes with therapy, medication may be useful in the short-term to get your symptoms under control. Once your anxiety is at a manageable level, other forms of behavior and talk therapy can be successfully pursued.

15.5 Anti-anxiety drug dependence and withdrawal

Anti-anxiety medications including popular benzodiazepines such as alprazolam (Xanax) , clonazepam (klonopin), diazepam (Valium), and lorazepam (Ativan) are meant for short-term use. However, many people take anti-anxiety drugs for long periods of time. This is risky because, when taken regularly, benzodiazepines quickly lead to physical dependence. Drug tolerance is also common, with increasingly larger doses needed to get the same anxiety relief as before.

According to the American Academy of Family Physicians, benzodiazepines lose their therapeutic anti-anxiety effect after 4 to 6 months of regular use.

Most people become addicted to their anti-anxiety drug within a couple of months, but problems may arise sooner. For some, drug dependency develops after a few short weeks. The body is used to the medication, so withdrawal symptoms occur if the dose is decreased or discontinued.

Psychological dependence can be an issue, too. If the patient has been relying on an anti-anxiety drug to keep his/her anxiety in check, he/she may lose confidence in his/her abilities to deal with life's difficulties and start to think he/she "needs" the medication to survive.

To quit anti-anxiety medication, it's important to do so under the guidance of a medical health professional. The key is to slowly decrease the dose over a period of time. If it stops abruptly, the patient may experience severe withdrawal symptoms such as: Increased anxiety, Insomnia, Confusion, Pounding heart, Sweating and Shaking.

Gradually tapering off the drug will help minimize the withdrawal reaction. However, if the patient has taken anti-anxiety medication for a few months, he/she may still experience some withdrawal symptoms. Anxiety, insomnia, and depression may last for months after he/she has quit. Unfortunately, these persistent withdrawal symptoms are frequently mistaken for a return of the original problem, causing some people to restart the medication.

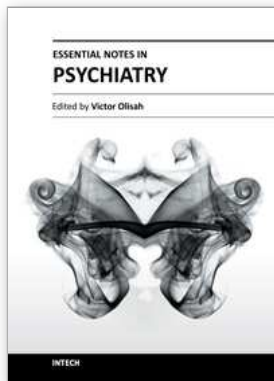
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