WHAT ARE
PANIC DISORDER AND AGORAPHOBIA?

BASIC FACTS • SYMPTOMS • FAMILIES • TREATMENTS

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basic facts

Panic disorder and agoraphobia are two separate psychiatric disorders that often occur together. Panic disorder is characterized by recurrent and sometimes unexpected panic attacks. A panic attack, or "fight or flight" response, is a sudden rush of intense anxiety with symptoms such as rapid heart rate, difficulty breathing, numbness or tingling, and/or a fear of dying. Panic attacks usually reach their peak within minutes, but people sometimes continue to feel anxious or exhausted after one occurs. In some cases, people with panic disorder experience nocturnal panic attacks, which wake them up from sleep. It is common for individuals with panic disorder to worry about having another panic attack and to make behavioral changes as a result, such as avoiding people, places, or things they associate with the attacks.

The word agoraphobia literally means "fear of wide, open spaces." However, people with a diagnosis of agoraphobia might also have extreme fear or anxiety of other types of situations, such as such as being out of their home alone or being in a crowd. Individuals with agoraphobia often try to avoid these feared situations because of their high levels of anxiety. If avoidance is not possible, they need to be accompanied by another person, and/or they endure the situations with extreme anxiety. These situations are often avoided for fear of having a panic attack. Thus many people with a diagnosis of agoraphobia also have a diagnosis of panic disorder.

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Prevalence

Nearly 5% of people in the United States will have panic disorder at some point in their lifetimes, and it is about twice as common in women. It is estimated that approximately one quarter to one third of the population will experience panic-like symptoms at some point in their lifetime, but these subclinical symptoms never progress to the full severity of panic disorder. Nonetheless, subclinical panic symptoms are often associated with high degrees of distress. The prevalence of agoraphobia is similar to that of panic disorder, with about 5% of people experiencing it at some point in their lifetime.

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Causes

Panic Disorder: There are several factors that contribute to the development of panic disorder, including genetic and family history of panic disorder or other anxiety or mood disorders, biological factors, personality and psychological factors, and stressful life events and environmental stressors.

Although much is unknown about the role of genes in the development of panic disorder, genetics research on panic disorder indicates that multiple genes are likely involved. Panic and other anxiety disorders tend to run in families, giving support to genetic hypotheses. In addition to genes, other risk factors need to be present in order for someone to develop panic disorder. For example, many scientists believe that there is a biological contribution to the development and maintenance of panic disorder, such as an imbalance in brain chemicals, specifically GABA, serotonin, and norepinephrine. Others believe panic disorder is associated with a sensitivity to changes in the body's carbon dioxide levels. Certain medical conditions, such as asthma and chronic obstructive pulmonary disease (COPD), are associated with a higher risk of panic disorder, although many people with panic disorder do not have significant medical problems.

Personality style and psychological risk factors may also contribute to the development of panic disorder. Specifically, two of the most notable personality risk factors for panic disorder are a tendency towards experiencing negative emotions and high levels of anxiety sensitivity. Individuals with anxiety sensitivity tend to misinterpret symptoms of anxiety as dangerous (e.g., equating a racing heart with having a heart attack). They also tend to be more aware of bodily sensations than those without high anxiety sensitivity. This hyperawareness, combined with the misinterpretation of the meaning of the symptoms, makes a person vulnerable to having panic attacks in the first place and then having ongoing attacks and related behavior changes.

Stressful life events and environmental factors are often contributors to the development of panic disorder as well. These factors can include loss, trauma, an extensive illness history during childhood, or stressful life events as an adult. These could be negative events such as a death of loved one, divorce, financial stress, or loss of a job. They could also be significant positive life events, such as getting married, having a baby, or getting a work promotion.

Agoraphobia: The causes for agoraphobia are very similar for those described for panic disorder, and it is likely that genetic, biological, personality and environmental stressors all play a role in the development of the disorder. For those who develop agoraphobia after having panic attacks, the stated cause of avoidance of certain situations is usually a fear of panicking in those situations.

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Panic disorder and agoraphobia cannot be diagnosed with a blood test, CAT-scan, or any other laboratory test. The only way to diagnose these disorders is with a thorough clinical interview. A medical evaluation is also important to rule out underlying medical causes of the symptoms.

Panic Disorder:

To receive a diagnosis of panic disorder, a person must have recurrent panic attacks, at least some of which are unexpected (i.e., occur out-of-the-blue). A panic attack is a sudden rush of intense anxiety, reaching its peak within minutes and characterized by at least 4 of the following symptoms:

1) Heart palpitations or increased heart rate
2) Sweating
3) Trembling or shaking
4) Shortness of breath or smothering sensations
5) Feelings of choking
6) Chest pain or discomfort
7) Nausea or abdominal distress
8) Feeling dizzy, lightheaded, or faint
9) Chills or heat sensations
10) Numbness or tingling
11) Feelings of unreality or feeling detached from oneself
12) Fear of losing control or "going crazy"
13) Fear of dying

Additionally, a person must experience at least one of the following for one month or longer:

1) Ongoing worry or concern about having more panic attacks or about the consequences of the attacks (such as going crazy, losing control, or having a heart attack).
2) Significant, maladaptive behavior change relating to the attacks, such as avoidance of certain situations or activities (e.g., avoiding crowds or exercising).

The clinician would need to check that these attacks were not the result of the effects of a substance or another medical condition, such as hyperthyroidism or asthma. Panic disorder might not be diagnosed if the symptoms are due to an underlying medical condition. In addition, panic attacks can occur in other psychiatric disorders, in which case the other disorder might be diagnosed instead of panic disorder. For example, if someone only has panic attacks in fearful social situations, such as public speaking or talking to unfamiliar people, they might be diagnosed with social anxiety disorder. If a person only has panic attacks when confronted with a very specific type of fear, such as heights, flying, spiders, or blood, they might receive a diagnosis of specific phobia. Panic attacks are also seen in other anxiety disorders, such as post-traumatic stress disorder and generalized anxiety disorder.

Agoraphobia:

To receive a diagnosis of agoraphobia, a person needs to exhibit high levels of fear or anxiety about at least two of the following situations, for at least six months or longer:

1) Using public transportation
2) Being in open spaces, such as parks or on bridges
3) Being in enclosed places such as theaters or stores
4) Being in a crowd or standing in line
5) Being outside of the home alone

A person with a diagnosis of agoraphobia fears or avoids these situations because they are concerned that they will not be able to escape them. Others fear that they might not receive help if they develop panic-like symptoms or other incapacitating or embarrassing symptoms (such as fear of incontinence or fear of falling in the elderly). The situations almost always cause fear or anxiety in individuals with agoraphobia, and their fears are out of proportion with the actual danger involved in approaching these situations. The fear or avoidance must cause significant distress or impairment in major areas of functioning in order to receive a diagnosis of agoraphobia. If a person is avoiding these situations because of concerns related to a medical condition, the anxiety and avoidance must be clearly excessive.

Finally, to receive a diagnosis of agoraphobia, the clinician must determine that the symptoms are not better explained by another mental health diagnosis. For example, if the person only avoids social situations, social anxiety disorder might be diagnosed. If they avoid places that remind them of a traumatic event, post-traumatic stress disorder might be diagnosed. Other disorders associated with avoidance, such as major depression, specific phobias, and separation anxiety disorder, might be diagnosed instead of agoraphobia if symptoms are better accounted for by those disorders.

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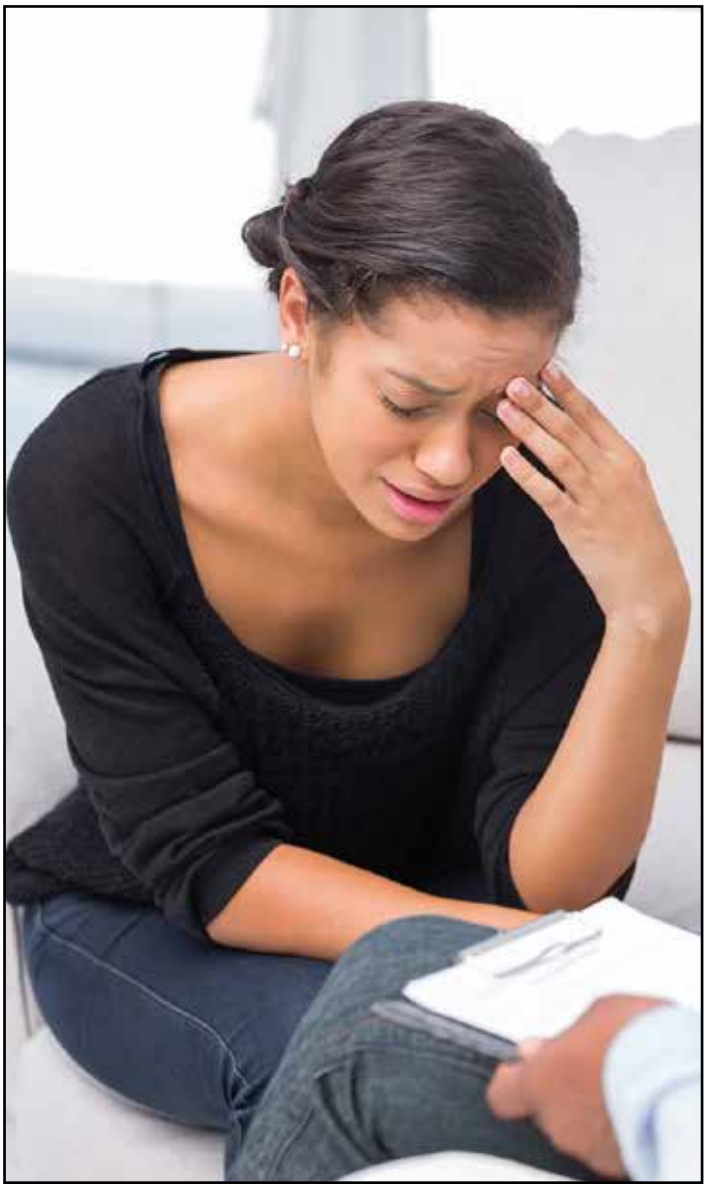

course of illness

Panic Disorder:

The average age of onset of panic disorder is low to mid 20's, although it could begin as early as adolescence. It is less common for the onset to be over age 45, and in general, the prevalence of panic disorder significantly declines in older adults over age 65. The course of untreated panic disorder varies by individual, with some having more persistent symptoms, while others experience episodes that can wax and wane. Often individuals who have panic disorder also experience other co-occurring psychiatric disorders, such as depression and other anxiety disorders. Even individuals with subclinical panic attacks have higher rates of co-occurring psychiatric disorders compared to those without any panic symptoms.

Agoraphobia:

Between one-third to one-half of people will have panic attacks prior to the onset of agoraphobia; the average age of onset for those individuals is late teens. For those who do not have panic attacks prior to the onset of agoraphobia, the average age of onset is later - in the mid to late 20's. While most develop the disorder at a younger age, a third of individuals will have an onset after age 40. Agoraphobia tends to be a chronic illness if left untreated. Most individuals with agoraphobia also have co-occurring psychiatric disorders, such as anxiety, mood, and/or substance use disorders.

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how family members can help

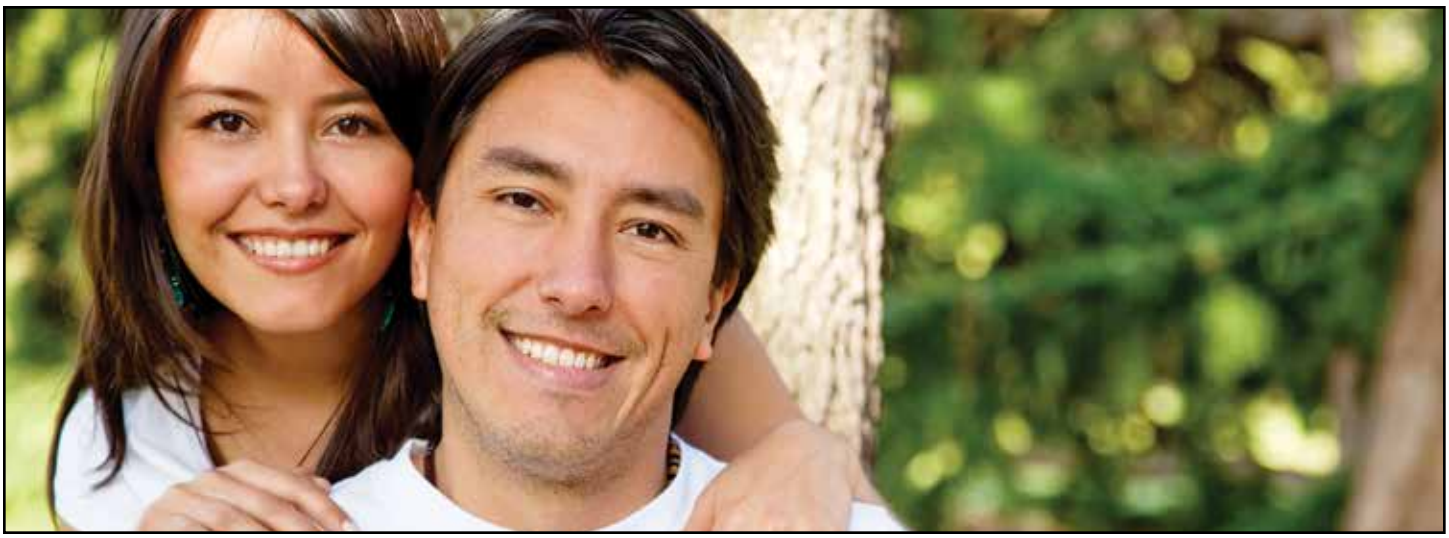
Family members of individuals with panic disorder and/or agoraphobia can support their relative's recovery in many ways. It is important for the person who is experiencing anxiety to first visit a medical doctor for a thorough evaluation. If possible, family members could also attend to help answer questions and to provide support. If medication is prescribed, family members can provide support in regularly taking those medications. Family members can also support attendance to psychotherapy appointments by giving reminders and providing transportation to the clinic.

If the individual with panic disorder and/or agoraphobia is in therapy, it might be helpful for family members to talk with the therapist to learn specifics about the illness and how they can provide support. CBT includes homework assignments, and family members can encourage their relative to engage in the homework and offer to help, if relevant. For example, family members can help reinforce the concept that panic attacks are not dangerous and work with their relative to consider alternative, non-scary thoughts about the attacks. If the person is engaging in a relaxation or mindfulness practice as part of treatment, family members can help by giving the time and space for their relative to engage in such a practice at home.

Studies have shown that partner-assisted exposure therapy helps reduce symptoms of panic and agoraphobia. Family members can encourage exposure practice with their relative. If there are situations that the person is completely avoiding, family members can offer to initially accompany them into those situations, with the goal being that the person would eventually go into those situations by themselves.

Lastly, family members can provide emotional support. Some aspects of panic disorder and agoraphobia can be quite frustrating to relatives. For example, a person with these disorders might avoid making plans, cancel at the last minute for fear of having a panic attack, frequently ask for reassurance about whether or not their symptoms are dangerous, or have difficulty doing things that are easy for most people (e.g., going to the store, driving on the freeway, or going out to restaurants). Family members who understand that these types of behaviors are a part of the disorder may feel less frustration and more warmth and empathy towards their relative.

Family members can help the process of recovering from panic disorder and/or agoraphobia in many ways. Some ways include encouraging treatment (medication and psychotherapy), assisting with treatment homework, and providing emotional support.



Medication

There are different types of medications that can be used to treat panic disorder and agoraphobia. The section titled, "Medication for Panic Disorder and Agoraphobia: What You Should Know" (pages 6-7) provides general information about these medications.

Cognitive Behavior Therapy (CBT)

One of the most effective treatments for panic disorder and agoraphobia is cognitive behavior therapy (CBT), which can be used alone or in conjunction with medications. CBT can often be utilized effectively on its own for milder cases, whereas a combination is often preferred for more severe cases. CBT is a structured treatment that can be provided in an individual or group format, usually on a weekly basis. There are also some self-help books and manuals that are based on the principles of CBT. The goal of CBT is to significantly reduce or eliminate panic attacks, as well as significantly decrease the fear and behavior changes associated with them. Much of the work of CBT is done between sessions in the form of "homework," so that the person can monitor their panic symptoms and apply the techniques learned in therapy sessions.

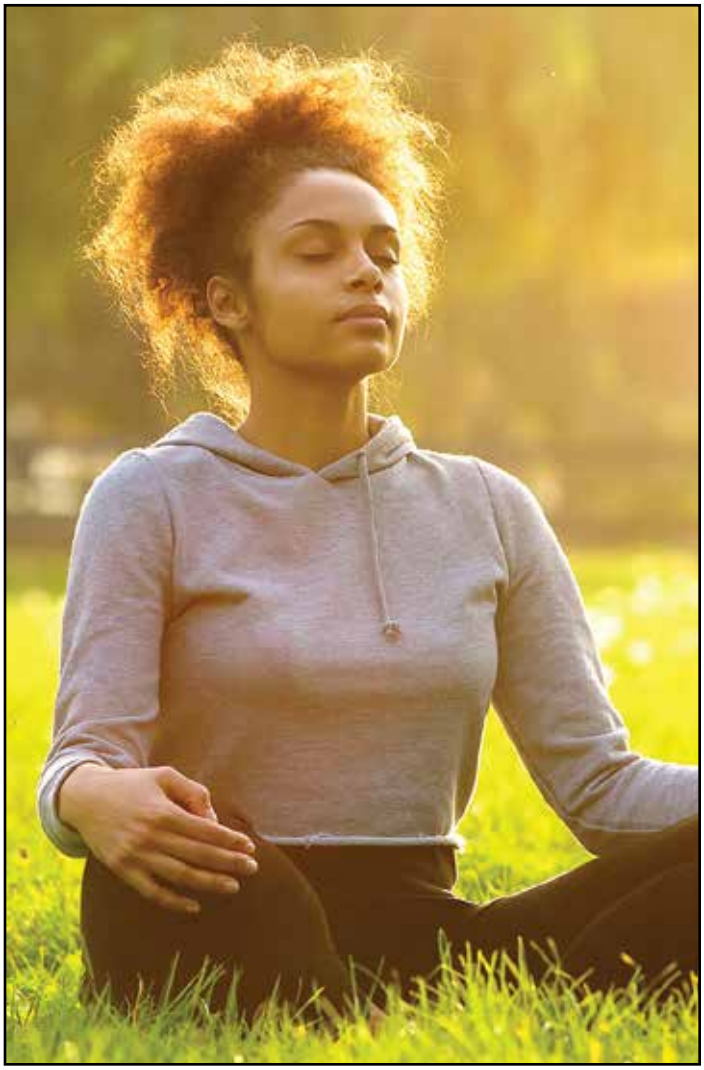
CBT for panic disorder is based on the assumptions that: 1) individuals with panic disorder misinterpret their panic attacks as dangerous or scary, 2) they are overly attuned to their bodily sensations, making them more vulnerable to experiencing attacks, and 3) they often make changes in their behaviors, such as avoidance of situations that they associate with the attacks. One of the goals of treatment is to help the person have a more realistic view of their panic attacks, in order to help make them less scary. This is done through providing education about panic disorder, teaching people to be aware of their scary thoughts about the attacks, and instructing them on how to change these thoughts to make them more realistic and less frightening.

A technique called interoceptive exposure is used to help people overcome their fear of the bodily sensations associated with panic attacks. Interoceptive exposure involves engaging in specific exercises to bring on the symptoms of anxiety and panic in a controlled way. Although often uncomfortable at first, these exposure exercises are very effective for alleviating the distress of experiencing symptoms of panic and eventually the symptoms themselves. Finally, CBT utilizes in vivo exposures, in which a person systematically starts to face the people, places, and activities that they might be avoiding as a result of the panic attacks. For example, if someone is avoiding exercising or drinking caffeine for fear of having an attack, the therapist will work with them to strategically plan on introducing and continuing these avoided activities.

With CBT for agoraphobia, the emphasis would likely be on the in vivo exposure element of treatment. By engaging in in vivo exposure therapy, individuals with agoraphobia will systematically and frequently approach feared situations and learn that they are not scary or dangerous.

Relaxation Training

Some therapists use relaxation training as a method of reducing anxiety and panic attacks. It can be used in conjunction with CBT and/or medication, but most professionals agree that relaxation training alone is probably not sufficient to fully alleviate panic symptoms for most people. One type of relaxation strategy often used for panic disorder is diaphragmatic breathing, or belly breathing. This type of breathing, which leads to deeper breaths and more oxygen in the lungs, might be particularly helpful for those who experience shortness of breath, chest pain, or dizziness during their panic attacks. Diaphragmatic breathing is also a relaxation strategy for treating more generalized anxiety, which might then reduce one's susceptibility to having a panic attack. Likewise, progressive muscle relaxation, a type of relaxation which involves tensing and relaxing different muscles in the body, can also lead to reducing generalized anxiety.



Mindfulness and Acceptance Practices

Mindfulness is another technique often used in conjunction with CBT and/or medication. Contrary to what some people think, mindfulness and relaxation are not the same thing, although many people find practicing mindfulness to be relaxing. There are many ways to practice mindfulness. One common way is to sit quietly and focus attention on one's breath, without actually trying to change the breath. People who regularly practice mindfulness can learn to be less reactive to their emotions and changes in their bodies. They can learn to be more accepting of negative emotional states, such as anxiety. For those with panic disorder and agoraphobia, mindfulness can teach people to observe their anxiety, rather than feeding into it with negative thoughts and avoidance behaviors. Thus, acceptance of one's anxiety can cause the anxiety to lessen and feel less scary.

Treatments for panic disorder and agoraphobia include cognitive behavior therapy, relaxation training, and mindfulness and acceptance practices.

medication: what you should know

• There are different types of medications that are very effective for panic disorder and agoraphobia. These include antidepressant medications, benzodiazepines, and anticonvulsants.
• These medications work by modulating gamma-aminobutyric acid (GABA), serotonin, norepinephrine, or dopamine; neurotransmitters believed to regulate anxiety and mood.
• Sometimes the medication you first try may not lead to the improvements you desire with regard to your anxiety. What works well for one person may not do as well for another. Be open to trying another medication or combination of medications in order to find a good fit. Let your doctor know if your symptoms have not improved and do not give up searching for the right medication!
•All medications may cause side effects, but many people have no side effects or minor side effects. The side effects people typically experience are tolerable and subside in a few days. Check with your doctor if any of the common side effects listed persist or become bothersome. In rare cases, these medications can cause severe side effects. Contact your doctor immediately if you experience one or more severe symptoms.

Antidepressant Medications

• Antidepressant medications, while initially developed for depression, have been found to be successful in treating anxiety disorders and are commonly used to treat panic disorder. While many available antidepressants are listed here, the evidence for their effectiveness in treating panic disorder varies considerably. You should discuss medication choices with your doctor.
• Antidepressant medications work to increase the following neurotransmitters: serotonin, norepinephrine, and/or dopamine.
• Antidepressants must be taken as prescribed for three to four weeks before you can expect to see positive changes in your symptoms. So don't stop taking your medication because you think it's not working. Give it time!
• Once you have responded to treatment, it is important to continue treatment. It is typical for treatment to continue for 6-9 months. Discontinuing treatment earlier may lead to a relapse of symptoms. If you have a more severe case of panic disorder, the doctor might recommend longer term treatment.
• To prevent the panic disorder from coming back or worsening,do not abruptly stop taking your medications, even if you are feeling better. Stopping your medication can cause a relapse. Medication should only be stopped under your doctor's supervision. If you want to stop taking your medication, talk to your doctor about how to correctly stop it.
• When taking antidepressant medications for panic disorder, if you forget to take a dose, a safe rule of thumb is: if you missed your regular time by three hours or less, you should take that dose when you remember it. If it is more than three hours after the dose should have been taken, just skip the forgotten dose and resume your medication at the next regularly scheduled time. Never double up on doses of your antidepressant to "catch up" on those you have forgotten.

SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIs) AND SEROTONIN MODULATORS

- **Citalopram (Celexa)**
- **Escitalopram (Lexapro)**
- **Fluoxetine (Prozac)**
- **Fluvoxamine (Luvox)**
- **Paroxetine (Paxil)**
- **Sertraline (Zoloft)**
- **Vilazodone (Viibryd)**
- **Vortioxetine (Brintellix)**

This handout provides only general information about medication for panic disorder and agoraphobia. It does not cover all possible uses, actions, precautions, side effects, or interactions of the medicines mentioned. This information does not constitute medical advice or treatment and is not intended as medical advice for individual problems or for making an evaluation as to the risks and benefits of taking a particular medication. The treating physician, relying on experience and knowledge of the patient, must determine dosages and the best treatment for the patient.

SEROTONIN AND NOREPINEPHRINE REUPTAKE INHIBITORS (SNRIs)

- **Desvenlafaxine (Pristiq)**
- **Duloxetine (Cymbalta)**
- **Levomilnacepran (Fetzima)**
- **Venlafaxine (Effexor)**

ATYPICAL ANTIDEPRESSANTS

- **Bupropion (Wellbutrin)**
- **Mirtazapine (Remeron)**
- **Nefazodone (Serzone)**
- **Trazodone (Desyrel)**

TRICYCLICS AND TETRACYCLICS (TCAs AND TECAs)

- **Amitriptyline (Elavil or Endep)**
- **Amoxapine (Asendin)**
- **Clomipramine (Anafranil)**
- **Desipramine (Norpramin or Pertofrane)**
- **Doxepin (Sinequan or Adapin)**
- **Imipramine (Tofranil)**
- **Maprotiline (Ludiomil)**
- **Nortriptyline (Pamelor)**
- **Protriptyline (Vivactil)**
- **Trimipramine (Surmontil)**

MONOAMINE OXIDASE INHIBITORS (MAOIs)

- **Phenelzine (Nardil)**
- **Selegiline (Emsam) patch**
- **Tranylcypromine (Parnate)**

Benzodiazepines

• Benzodiazepines are a different type of medication that are used for anxiety. Benzodiazepines work by enhancing the effects of the neurotransmitter GABA, which has a calming effect.

• Benzodiazepines can be taken on an as needed basis (p.r.n.) or might be prescribed to be taken on a regular schedule.

• Users of these medications can feel the effects quite quickly (sometimes in less than a half hour), and the effects can last for several hours up to a day, depending on what medication is being taken.

• While benzodiazepines can be effective in the short-term, for most people, they are not the best long-term treatment strategy. Many doctors prescribe a benzodiazepine as a person is getting started on an antidepressant. Use of an antidepressant is usually a better long-term medication management strategy than benzodiazepines. Hence, the doctor might taper the individual off the benzodiazepine once they are experiencing the benefits of the antidepressant.

• The use of benzodiazepines on an as needed basis should be avoided. One of the goals of psychotherapy for panic disorder, especially CBT, is for the panic sufferer to learn that while panic attacks are uncomfortable and unpleasant, they are not dangerous and can be tolerated. Becoming less fearful of the panic attack is instrumental in recovering from panic disorder. When a person takes a benzodiazepine on an as needed basis, such as when they have a panic attack or feel increased anxiety, they are depriving themselves the chance to learn that panic attacks are not dangerous. In fact, they are giving themselves the opposite message: I can't tolerate this, so I must take a medication immediately.

• Benzodiazepines may be habit-forming. Those who take benzodiazepines on a regular basis are at risk for dependency and withdrawal. Individuals might need to increase the dosage of their medication in order to get the desired effect. They may also experience symptoms of withdrawal when coming off the medication. Because of these addictive properties, benzodiazepines might not be prescribed to people with a history of substance abuse problems.

• Benzodiazepines can cause drowsiness, impair coordination and concentration, and reduce short term memory. They should not be used simultaneously with alcohol or opiate medications.

Alprazolam (Xanax)
Clonazepam (Klonopin)
Lorazepam (Ativan)

Anticonvulsant Medications

• Anticonvulsant medications are usually used to treat seizures, but they also help control mood and are helpful for individuals with panic disorder. They are generally reserved for patients who do not respond to a trial of antidepressants.

• Anticonvulsants are believed to work by increasing the neurotransmitter, GABA, which has a calming effect on the brain. It is also believed that they decrease glutamate, which is an excitatory neurotransmitter.

Valproic Acid (Depakote)
Carbamazepine (Tegretol)
Oxcarbazepine (Trileptel)

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