SICKNESS AND HEALTH III

8.1 CLINICAL ANXIETY AND HEALTH: Anxiety is a normal reaction to stress and can actually be beneficial in some situations. For some people, however, anxiety can become excessive. While the person suffering may realize their anxiety is too much, they may also have difficulty controlling it and it may negatively affect their day-to-day living. There are a wide variety of anxiety disorders, including post-traumatic stress disorder, obsessive-compulsive disorder, and panic disorder to name a few. Collectively, they are among the most common mental disorders experienced by Americans.

The following anxiety disorders are discussed on this website:

- generalized anxiety disorder (GAD)
- obsessive-compulsive disorder (OCD),
- panic disorder,
- post-traumatic stress disorder (PTSD), and
- social phobia (or social anxiety disorder).

Causes

NIMH supports research into the causes, diagnosis, prevention, and treatment of anxiety disorders and other mental illnesses. Scientists are looking at what role genes play in the development of these disorders and are also investigating the effects of environmental factors such as pollution, physical and psychological stress, and diet. In addition, studies are being conducted on the "natural history" (what course the illness takes without treatment) of a variety of individual anxiety disorders, combinations of anxiety disorders, and anxiety disorders that are accompanied by other mental illnesses such as depression.

Scientists currently think that, like heart disease and type 1 diabetes, mental illnesses are complex and probably result from a combination of genetic, environmental, psychological, and developmental factors. For instance, although NIMH-sponsored studies of twins and families suggest that genetics play a role in the development of some anxiety disorders, problems such as PTSD are triggered by trauma. Genetic studies may help explain why some people exposed to trauma develop PTSD and others do not.

Several parts of the brain are key actors in the production of fear and anxiety. Using brain imaging technology and neurochemical techniques, scientists have discovered that the amygdala and the hippocampus play significant roles in most anxiety disorders.

The amygdala is an almond-shaped structure deep in the brain that is believed to be a communications hub between the parts of the brain that process incoming sensory signals and the parts that interpret these signals. It can alert the rest of the brain that a threat is present and trigger a fear or anxiety response. The emotional memories stored in the central part of the amygdala may play a role in anxiety disorders involving very distinct fears, such as fears of dogs, spiders, or flying.

The hippocampus is the part of the brain that encodes threatening events into memories. Studies have shown that the hippocampus appears to be smaller in some people who were victims of child abuse or who served in military combat. Research will determine what causes this reduction in size and what role it plays in the flashbacks, deficits in explicit memory, and fragmented memories of the traumatic event that are common in PTSD.

By learning more about how the brain creates fear and anxiety, scientists may be able to devise better treatments for anxiety disorders. For example, if specific neurotransmitters are found to play an important role in fear, drugs may be developed that will block them and decrease fear responses; if enough is learned about how the brain generates new cells throughout the lifecycle, it may be possible to stimulate the growth of new neurons in the hippocampus in people with PTSD.

Current research at NIMH on anxiety disorders includes studies that address how well medication and behavioral therapies work in the treatment of OCD, and the safety and effectiveness of medications for children and adolescents who have a combination of anxiety disorders and attention deficit hyperactivity disorder.

Signs & Symptoms

Unlike the relatively mild, brief anxiety caused by a stressful event (such as speaking in public or a first date), anxiety disorders last at least 6 months and can get worse if they are not treated. Each anxiety disorder has different symptoms, but all the symptoms cluster around excessive, irrational fear and dread.

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.

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. If you think you have an anxiety disorder, you should seek information and treatment right away.

Who Is At Risk?

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.

Women are 60% more likely than men to experience an anxiety disorder over their lifetime. Non-Hispanic blacks are 20% less likely, and Hispanics are 30% less likely, than non-Hispanic whites to experience an anxiety disorder during their lifetime.

A large, national survey of adolescent mental health reported that about 8 percent of teens ages 13–18 have an anxiety disorder, with symptoms commonly emerging around age 6. However, of these teens, only 18 percent received mental health care.

Diagnosis

A doctor must conduct a careful diagnostic evaluation to determine whether a person's symptoms are caused by an anxiety disorder or a physical problem. If an anxiety disorder is diagnosed, the type of disorder or the combination of disorders that are present must be identified, as well as any coexisting conditions, such as depression or substance abuse. Sometimes alcoholism, depression, or other coexisting conditions have such a strong effect on the individual that treating the anxiety disorder must wait until the coexisting conditions are brought under control.

Treatments

In general, anxiety disorders are treated with medication, specific types of psychotherapy, or both. Treatment choices depend on the problem and the person's preference.

People with anxiety disorders who have already received treatment should tell their current doctor about that treatment in detail. If they received medication, they should tell their doctor what medication was used, what the dosage was at the

beginning of treatment, whether the dosage was increased or decreased while they were under treatment, what side effects occurred, and whether the treatment helped them become less anxious. If they received psychotherapy, they should describe the type of therapy, how often they attended sessions, and whether the therapy was useful.

Often people believe that they have "failed" at treatment or that the treatment didn't work for them when, in fact, it was not given for an adequate length of time or was administered incorrectly. Sometimes people must try several different treatments or combinations of treatment before they find the one that works for them.

Medication

Medication will not cure anxiety disorders, but it can keep them under control while the person receives psychotherapy. Medication must be prescribed by physicians, usually psychiatrists, who can either offer psychotherapy themselves or work as a team with psychologists, social workers, or counselors who provide psychotherapy. The principal medications used for anxiety disorders are antidepressants, anti-anxiety drugs, and beta-blockers to control some of the physical symptoms. With proper treatment, many people with anxiety disorders can lead normal, fulfilling lives.

Antidepressants

Antidepressants were developed to treat depression but are also effective for anxiety disorders. Although these medications begin to alter brain chemistry after the very first dose, their full effect requires a series of changes to occur; it is usually about 4 to 6 weeks before symptoms start to fade. It is important to continue taking these medications long enough to let them work.

SSRIs

Some of the newest antidepressants are called selective serotonin reuptake inhibitors, or SSRIs. SSRIs alter the levels of the neurotransmitter serotonin in the brain, which, like other neurotransmitters, helps brain cells communicate with one another.

Fluoxetine (Prozac®), sertraline (Zoloft®), escitalopram (Lexapro®), paroxetine (Paxil®), and citalopram (Celexa®) are some of the SSRIs commonly prescribed for panic disorder, OCD, PTSD, and social phobia. SSRIs are also used to treat panic disorder when it occurs in combination with OCD, social phobia, or

depression. Venlafaxine (Effexor®), a drug closely related to the SSRIs, is used to treat GAD. These medications are started at low doses and gradually increased until they have a beneficial effect.

SSRIs have fewer side effects than older antidepressants, but they sometimes produce slight nausea or jitters when people first start to take them. These symptoms fade with time. Some people also experience sexual dysfunction with SSRIs, which may be helped by adjusting the dosage or switching to another SSRI.

Tricyclics

Tricyclics are older than SSRIs and work as well as SSRIs for anxiety disorders other than OCD. They are also started at low doses that are gradually increased. They sometimes cause dizziness, drowsiness, dry mouth, and weight gain, which can usually be corrected by changing the dosage or switching to another tricyclic medication.

Tricyclics include imipramine (Tofranil®), which is prescribed for panic disorder and GAD, and clomipramine (Anafranil®), which is the only tricyclic antidepressant useful for treating OCD.

MAOIs

Monoamine oxidase inhibitors (MAOIs) are the oldest class of antidepressant medications. The MAOIs most commonly prescribed for anxiety disorders are phenelzine (Nardil®), followed by tranylcypromine (Parnate®), and isocarboxazid (Marplan®), which are useful in treating panic disorder and social phobia. People who take MAOIs cannot eat a variety of foods and beverages (including cheese and red wine) that contain tyramine or take certain medications, including some types of birth control pills, pain relievers (such as Advil®, Motrin®, or Tylenol®), cold and allergy medications, and herbal supplements; these substances can interact with MAOIs to cause dangerous increases in blood pressure. The development of a new MAOI skin patch may help lessen these risks. MAOIs can also react with SSRIs to produce a serious condition called "serotonin syndrome," which can cause confusion, hallucinations, increased sweating, muscle stiffness, seizures, changes in blood pressure or heart rhythm, and other potentially life-threatening conditions.

Anti-Anxiety Drugs

High-potency benzodiazepines combat anxiety and have few side effects other than drowsiness. Because people can get used to them and may need higher and higher

doses to get the same effect, benzodiazepines are generally prescribed for short periods of time, especially for people who have abused drugs or alcohol and who become dependent on medication easily. One exception to this rule is people with panic disorder, who can take benzodiazepines for up to a year without harm.

Clonazepam (Klonopin®) is used for social phobia and GAD, lorazepam (Ativan®) is helpful for panic disorder, and alprazolam (Xanax®) is useful for both panic disorder and GAD.

Some people experience withdrawal symptoms if they stop taking benzodiazepines abruptly instead of tapering off, and anxiety can return once the medication is stopped. These potential problems have led some physicians to shy away from using these drugs or to use them in inadequate doses.

Buspirone (Buspar®), an azapirone, is a newer anti-anxiety medication used to treat GAD. Possible side effects include dizziness, headaches, and nausea. Unlike benzodiazepines, buspirone must be taken consistently for at least 2 weeks to achieve an anti-anxiety effect.

Beta-Blockers

Beta-blockers, such as propranolol (Inderal®), which is used to treat heart conditions, can prevent the physical symptoms that accompany certain anxiety disorders, particularly social phobia. When a feared situation can be predicted (such as giving a speech), a doctor may prescribe a beta-blocker to keep physical symptoms of anxiety under control.

Taking Medications

Before taking medication for an anxiety disorder:

- Ask your doctor to tell you about the effects and side effects of the drug.
- Tell your doctor about any alternative therapies or over-the-counter medications you are using.
- Ask your doctor when and how the medication should be stopped. Some drugs can't be stopped abruptly but must be tapered off slowly under a doctor's supervision.
- Work with your doctor to determine which medication is right for you and what dosage is best.
- Be aware that some medications are effective only if they are taken regularly and that symptoms may recur if the medication is stopped.

Psychotherapy

Psychotherapy involves talking with a trained mental health professional, such as a psychiatrist, psychologist, social worker, or counselor, to discover what caused an anxiety disorder and how to deal with its symptoms.

Cognitive-Behavioral Therapy

Cognitive-behavioral therapy (CBT) is very useful in treating anxiety disorders. The cognitive part helps people change the thinking patterns that support their fears, and the behavioral part helps people change the way they react to anxiety-provoking situations.

For example, CBT can help people with panic disorder learn that their panic attacks are not really heart attacks and help people with social phobia learn how to overcome the belief that others are always watching and judging them. When people are ready to confront their fears, they are shown how to use exposure techniques to desensitize themselves to situations that trigger their anxieties.

People with OCD who fear dirt and germs are encouraged to get their hands dirty and wait increasing amounts of time before washing them. The therapist helps the person cope with the anxiety that waiting produces; after the exercise has been repeated a number of times, the anxiety diminishes. People with social phobia may be encouraged to spend time in feared social situations without giving in to the temptation to flee and to make small social blunders and observe how people respond to them. Since the response is usually far less harsh than the person fears, these anxieties are lessened. People with PTSD may be supported through recalling their traumatic event in a safe situation, which helps reduce the fear it produces. CBT therapists also teach deep breathing and other types of exercises to relieve anxiety and encourage relaxation.

Exposure-based behavioral therapy has been used for many years to treat specific phobias. The person gradually encounters the object or situation that is feared, perhaps at first only through pictures or tapes, then later face-to-face. Often the therapist will accompany the person to a feared situation to provide support and guidance.

CBT is undertaken when people decide they are ready for it and with their permission and cooperation. To be effective, the therapy must be directed at the person's specific anxieties and must be tailored to his or her needs. There are no side effects other than the discomfort of temporarily increased anxiety.

CBT or behavioral therapy often lasts about 12 weeks. It may be conducted individually or with a group of people who have similar problems. Group therapy is particularly effective for social phobia. Often "homework" is assigned for participants to complete between sessions. There is some evidence that the benefits of CBT last longer than those of medication for people with panic disorder, and the same may be true for OCD, PTSD, and social phobia. If a disorder recurs at a later date, the same therapy can be used to treat it successfully a second time.

Medication can be combined with psychotherapy for specific anxiety disorders, and this is the best treatment approach for many people.

Living With

If you think you have an anxiety disorder, the first person you should see is your family doctor. A physician can determine whether the symptoms that alarm you are due to an anxiety disorder, another medical condition, or both.

If an anxiety disorder is diagnosed, the next step is usually seeing a mental health professional. The practitioners who are most helpful with anxiety disorders are those who have training in cognitive-behavioral therapy and/or behavioral therapy, and who are open to using medication if it is needed.

You should feel comfortable talking with the mental health professional you choose. If you do not, you should seek help elsewhere. Once you find a mental health professional with whom you are comfortable, the two of you should work as a team and make a plan to treat your anxiety disorder together.

Remember that once you start on medication, it is important not to stop taking it abruptly. Certain drugs must be tapered off under the supervision of a doctor or bad reactions can occur. Make sure you talk to the doctor who prescribed your medication before you stop taking it. If you are having trouble with side effects, it's possible that they can be eliminated by adjusting how much medication you take and when you take it.

Most insurance plans, including health maintenance organizations (HMOs), will cover treatment for anxiety disorders. Check with your insurance company and find out. If you don't have insurance, the Health and Human Services division of your county government may offer mental health care at a public mental health center that charges people according to how much they are able to pay. If you are on public assistance, you may be able to get care through your state Medicaid plan.

Ways to Make Treatment More Effective

Many people with anxiety disorders benefit from joining a self-help or support group and sharing their problems and achievements with others. Internet chat rooms can also be useful in this regard, but any advice received over the Internet should be used with caution, as Internet acquaintances have usually never seen each other and false identities are common. Talking with a trusted friend or member of the clergy can also provide support, but it is not a substitute for care from a mental health professional.

Stress management techniques and meditation can help people with anxiety disorders calm themselves and may enhance the effects of therapy. There is preliminary evidence that aerobic exercise may have a calming effect. Since caffeine, certain illicit drugs, and even some over-the-counter cold medications can aggravate the symptoms of anxiety disorders, they should be avoided. Check with your physician or pharmacist before taking any additional medications.

The family is very important in the recovery of a person with an anxiety disorder. Ideally, the family should be supportive but not help perpetuate their loved one's symptoms. Family members should not trivialize the disorder or demand improvement without treatment.

Clinical Trials

NIMH supports research studies on mental health and disorders. See also: A Participant's Guide to Mental Health Clinical Research.

Participate, refer a patient or learn about results of studies inClinicalTrials.gov, the NIH/National Library of Medicine's registry of federally and privately funded clinical trials for all disease.