ANXIETY

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Anxiety disorder can be very debilitating. Between 15% and 20% of the population may at any point in time be affected by anxiety. From a communication perspective there is much that can be done to help a person suffering from anxiety with the help of psychotherapy. But medication can be an important and fast acting support in the process

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Introduction

Anxiety is a normal human emotion which can confer and advantage on the individual experiencing it. Repeated intense anxiety, however, can interfere with life, and a good size of the population suffers from anxiety disorder, and in many instances repeated panic attacks.

Psychotherapy is often the preferred approach to treat anxiety in the long run. At the same time, medication can be very helpful in the beginning to lower the anxiety to a tolerable level and to maintain this state until the effects of psychotherapy bring about a lasting effect. In some cases, medication may also be necessary for the long run.

There are various kinds of psychotherapy which have shown to treat various anxiety conditions, such as generalized anxiety disorder, panic attacks, social anxiety, and more. CBT, psychodynamic psychotherapy, interpersonal psychotherapy and others have made valid contributions. The author has developed communication-focused therapy (CFT) which focuses on processes which underlie most of these approaches, and which has been described by the author for several mental health conditions, including anxiety and depression. (G)(H)

Psychotherapy and Medication

Medication can be an important support to lower the level of anxiety significantly, while the psychotherapy is beginning to work. (1,2) Except for short acting anxiolytics, there are no specific long-term ones. However, serotonergic antidepressants, such as the selective serotonin reuptake inhibitors (SSRIs) and the serotonin and norepinephrine reuptake inhibitors (SNRIs), are usually considered first choice in the treatment of anxiety disorders and panic attacks. Other types of medication, which work primarily on GABA receptors, such as the antiepileptics gabapentin and pregabalin, or on the dopamine neurotransmission system, such as second-generation antipsychotics, are also used to increase the effect of the antidepressant. The effectiveness of SSRIs in the treatment of anxiety and panic attacks is usually good to very good, while the mentioned augmentation strategies often decrease anxiety levels in patients who respond only partially to the SSRIs. The SNRIs are also effective in most cases of anxiety but can increase the anxiety in the beginning more than the SSRIs.

In the case of anxiety, medication should always be combined with psychotherapy and optimally also with a therapeutic approach which involves the body or some form of meditation, such as mindfulness, or both. Since anxiety is experienced through the body, approaches involving the body can help to stop the vicious cycle in which anxiety causes bodily sensations, which in turn again cause anxiety.

Symptoms

Anxiety is an emotion characterized by an unpleasant state of inner turmoil, often accompanied by nervous behavior, such as pacing back and forth, somatic complaints, and rumination. (A) If the anxiety becomes sudden and more intense, it can lead to panic attacks, episodic anxiety attacks of high intensity with the fear of impending doom.

Fear is, unlike anxiety, a response to a real or perceived threat (B) or the expectation of a future threat. (C) Anxiety contains an element of uncertainty, which is often less directed at the outside world, but more at the inside. There may, for example, be a sense of losing control over an important bodily function or over one's emotions. In a sense it is a perceived need for control over a part of oneself that is not under conscious control.

Physical Symptoms

Anxiety is often accompanied by muscular tension (C), restlessness, fatigue and problems in concentration. The physiological symptoms of anxiety may include: (E)(F)

- Neurological, as headache, paresthesia, vertigo, or presyncope.
- Digestive, as abdominal pain, nausea, diarrhea, indigestion, dry mouth, or bolus.
- Respiratory, as shortness of breath or sighing breathing.
- Cardiac, as palpitations, tachycardia, or chest pain.
- Muscular, as fatigue, tremors, or tetany.
- Cutaneous, as perspiration, or itchy skin.
- Uro-genital, as frequent urination, urinary urgency, dyspareunia, or impotence.

Avoidance

People facing anxiety may withdraw from situations which have provoked anxiety in the past. [4] This may be certain situations or groups of people. In the extreme, anxiety can lead to total withdrawal into one's room and avoidance of life itself.

The problem with avoidance is that it can further increase the levels of anxiety. Meaningful communication helps to regulate one's inner life, and withdrawal can lead to even more anxiety, a worsening of the mood and decreases in motivation and initiative. Frequently, people suffering from anxiety get into a vicious cycle, which maintains the anxiety and can also come with the mentioned symptoms of depression.

Co-Morbidity

Anxiety has been linked with physical symptoms such as Irritable Bowel Syndrome (IBS) and can heighten other mental health illnesses such as OCD and panic disorder. As the anxiety level increases, the activation of the autonomic nervous system increases, and various brain regions can be activated or deactivated. Over time, this can lead to various psychiatric and physical symptoms, which could be managed if the anxiety is treated.

Causes

Anxiety may have biological, psychological or social/external reasons. Often, there is a combination of all these factors. One may have a biological predisposition for anxiety, which is heritable to an extent, have been exposed to anxious family members and/or have experienced traumatizing events, that compromised one's sense of certainty and predictability in the world. Anxiety can then be triggered by events, often on an interpersonal level, which cause strong, and usually conflicting emotions. The anxiety may not begin right away, and panic attacks can often be delayed by days or even months.

Biological Causes

Anxiety disorders are partly genetic but may also be triggered, due to drug use, including alcohol and caffeine, as well as withdrawal from certain drugs. They often occur with other mental disorders, particularly major depressive disorder, bipolar disorder, certain personality disorders, and eating disorders.

There are other psychiatric and medical problems that may mimic the symptoms of an anxiety disorder, such as hyperthyroidism. It s important that other medical issues are treated before psychiatric medication is initiated, unless treatment either takes a long time or is not possible.

Neuroanatomy

Neural circuitry involving the amygdala (which regulates emotions like anxiety and fear, stimulating the HPA Axis and sympathetic nervous system) and hippocampus (which is implicated in emotional memory along with the amygdala) is thought to underlie anxiety. People who have anxiety tend to show high activity in response to emotional stimuli in the amygdala. Some writers believe that excessive anxiety can lead to an overpotentiation of the limbic system (which includes the amygdala and nucleus accumbens), giving increased future anxiety, but this does not appear to have been proven.

Research upon adolescents who as infants had been highly apprehensive, vigilant, and fearful finds that their nucleus accumbens is more sensitive than that in other people when deciding to make an action that determined whether they received a reward. This suggests a link between circuits responsible for fear and also reward in anxious people. As researchers note, "a sense of 'responsibility', or self agency, in a context of uncertainty (probabilistic outcomes) drives the neural system underlying appetitive motivation (i.e., nucleus accumbens) more strongly in temperamentally inhibited than noninhibited adolescents".

Genetic

Genetics and family history (e.g., parental anxiety) may predispose an individual for an increased risk of an anxiety disorder, but generally external stimuli will trigger its onset or exacerbation. Genetic differences account for about 43% of variance in panic disorder and 28% in generalized anxiety disorder. Although single genes are neither necessary nor sufficient for anxiety by themselves, several gene polymorphisms have been found to correlate with anxiety: PLXNA2, SERT, CRH, COMT and BDNF. Several of these genes influence neurotransmitters (such as serotonin and norepinephrine) and hormones (such as cortisol) which are implicated in anxiety. The epigenetic signature of at least one of these genes BDNF has also been associated with anxiety and specific patterns of neural activity.

Medical conditions

Many medical conditions can cause anxiety. This includes conditions that affect the ability to breathe, like COPD and asthma, and the difficulty in breathing that often occurs near death. Conditions that cause abdominal pain or chest pain can cause anxiety and may in some cases be a somatization of anxiety; the same is true for some sexual dysfunctions. Conditions that affect the face or the skin can cause social anxiety especially among adolescents, and developmental disabilities often lead to social anxiety for children as well. Life-threatening conditions like cancer also cause anxiety.

Furthermore, certain organic diseases may present with anxiety or symptoms that mimic anxiety. These disorders include certain endocrine diseases (hypo- and hyperthyroidism,

hyperprolactinemia), metabolic disorders (diabetes), deficiency states (low levels of vitamin D, B2, B12, folic acid), gastrointestinal diseases (celiac disease, non-celiac gluten sensitivity, inflammatory bowel disease), heart diseases, blood diseases (anemia), cerebral vascular accidents (transient ischemic attack, stroke), and brain degenerative diseases (Parkinson's disease, dementia, multiple sclerosis, Huntington's disease), among others.

Substance-induced

Several drugs can cause or worsen anxiety, whether in intoxication, withdrawal, or from chronic use. These include alcohol, tobacco, cannabis, sedatives (including prescription benzodiazepines), opioids (including prescription pain killers and illicit drugs like heroin), stimulants (such as caffeine, cocaine and amphetamines), hallucinogens, and inhalants. While many often report self-medicating anxiety with these substances, improvements in anxiety from drugs are usually short-lived (with worsening of anxiety in the long-term, sometimes with acute anxiety as soon as the drug effects wear off) and tend to be exaggerated. Acute exposure to toxic levels of benzene may cause euphoria, anxiety, and irritability lasting up to 2 weeks after the exposure.

Psychological Causes

Poor coping skills (e.g., rigidity/inflexible problem solving, denial, avoidance, impulsivity, extreme self-expectation, affective instability, and inability to focus on problems) are associated with anxiety. Anxiety is also linked and perpetuated by the person's own pessimistic outcome expectancy and how they cope with feedback negativity.

Evolutionary psychology

An evolutionary psychology explanation is that increased anxiety serves the purpose of increased vigilance regarding potential threats in the environment as well as increased tendency to take proactive actions regarding such possible threats. This may cause false positive reactions but an individual suffering from anxiety may also avoid real threats. This may explain why anxious people are less likely to die due to accidents.

When people are confronted with unpleasant and potentially harmful stimuli such as foul odors or tastes, PET-scans show increased blood flow in the amygdala. In these studies, the participants also reported moderate anxiety. This might indicate that anxiety is a protective mechanism designed to prevent the organism from engaging in potentially harmful behaviors.

Cognitive Distortions

Cognitive distortions such as overgeneralizing, catastrophizing, mind reading, emotional reasoning, binocular trick, and mental filter can result in anxiety. For example, an overgeneralized belief that something bad "always" happens may lead someone to have excessive fears of even minimally risky situations and to avoid benign social situations due to anticipatory anxiety of embarrassment. Such unhealthy thoughts can be targets for successful treatment with cognitive therapy.

Psychodynamic Processes

Psychodynamic theory posits that anxiety is often the result of opposing unconscious wishes or fears that manifest via maladaptive defense mechanisms (such as suppression, repression, anticipation, regression, somatization, passive aggression, dissociation) that develop to adapt to problems with early objects (e.g., caregivers) and empathic failures in childhood. For example, persistent parental discouragement of anger may result in repression/suppression of angry feelings which manifests as gastrointestinal distress (somatization) when provoked by another while the anger remains unconscious and outside the individual's awareness. Such conflicts can be targets for successful treatment with psychodynamic therapy.

Social Factors

Social risk factors for anxiety include a history of trauma (e.g., physical, sexual or emotional abuse or assault), early life experiences and parenting factors (e.g., rejection, lack of warmth, high hostility, harsh discipline, high maternal negative affect, anxious childrearing, modelling of dysfunctional and drug-abusing behavior, discouragement of emotions, poor socialization,

poor attachment, and child abuse and neglect), cultural factors (e.g., stoic families/cultures, persecuted minorities including the disabled), and socioeconomics (e.g., uneducated, unemployed, impoverished (although developed countries have higher rates of anxiety disorders than developing countries)).

Social Anxiety

Social anxiety varies in degree and severity. For some people, it is characterized by experiencing discomfort or awkwardness during physical social contact (e.g. embracing, shaking hands, etc.), while in other cases it can lead to a fear of interacting with unfamiliar people altogether. Those suffering from this condition may restrict their lifestyles to accommodate the anxiety, minimizing social interaction whenever possible. Social anxiety also forms a core aspect of certain personality disorders, including avoidant personality disorder.

Humans generally require social acceptance and thus sometimes dread the disapproval of others. Apprehension of being judged by others may cause anxiety in social environments. This is often the result of 'projection' by projecting one's own criticisms and doubts into other people, and then dreading that one is being criticized or judged by one's own criticisms or judgments. Since we do not know what other people think, we make assumptions of what they might think. In social anxiety, one makes assumptions that others are very critical and unforgiving, which is often how one feels towards oneself if one suffers from (social) anxiety, especially in combination with some form of depression.

Treatment

There are various therapeutic approaches to treat anxiety, among them cognitive behavioral therapy (CBT), psychodynamic psychotherapy and communication-focused therapy (CFT) which was developed by the author.

Communication-Focused Therapy (CFT)

Ineffective or maladaptive communication patterns and styles can often be observed in individuals suffering from anxiety. They tend to have a greater difficulty communicating their emotions and their needs, wants and aspirations. Identifying and analyzing these patterns is part of CFT, a therapeutic approach which has been developed by the author. This also includes better communication patients have with themselves to better identify own needs and values. The objective should be to have more meaningful communication with oneself and others, which is anxiety reducing and makes it easier to perceive and identify meaning in the world and oneself.

Medication

Selective Serotonin Reuptake Inhibitors (SSRIs)

The long-term solution should be a combination of psychotherapy/counselling and, if indicated, an antidepressant from the group of serotonin reuptake inhibitors (SSRIs). Neurobiologically, all SSRIs can be effective in reducing anxiety and allowing even house bound patients to partake in daily life again, but a few of them are usually prescribed in practice. While they can take up to three weeks, and sometimes even more, to show their full effect, they are generally described as non-addictive and especially in the case of the newer ones, such as escitalopram, patients report few, and in many cases no side-effects. If there are mild side-effects, they often tend to go away after a couple of days. In the case of anxiety, starting with a very low dose (a quarter tablet) for two days and then increasing the dose slowly mostly eliminates subjective side-effects. In practice, if there are side effects in the beginning in the form of tension and an increase in anxiety, this often actually means that they will work. The side effects probably come from the increased serotonin levels at the synapses meeting a hypersensitivity to serotonin. A reconfiguration in the receptor density takes time but will lead to a fading away of the symptoms and the heightened anxiety levels.

The mainstream opinion is that they can be taken over many years and are quite safe. One should pick the SSRI with the best side effect profile for the specific patients. Escitalopram, for

example, is linked less with weight gain and nervousness. Sertraline can be more activating, citalopram and paroxetine more sedating. Paroxetine can be increased in dose to 60mg if OCD is also an issue. Higher doses of fluoxetine and sertraline can also be helpful if an eating disorder is a comorbid problem. However, at least in theory, in different doses all the SSRIs can have similar effects.

SSRIs can be combined with a variety of other drugs. However, they should not be combined with MAO inhibitors (antidepressants), certain neuroleptics and other medication, which can increase the serotonin level and in combination lead to the rare but potentially life-threatening serotonin syndrome. They can increase the effect of alcohol, so additional care should be taken in this regard.

Being for at least six months to a year on SSRIs often seems to have the effect, that once the medication is discontinued anxieties are less likely to return for some time. The reason does not seem to be entirely biological but also an effect of learning. As the memory of feeling anxious becomes a distant memory, one is less likely to feel anxious.

Before an SSRI is given certain conditions should be excluded in a conversation with the patient. Among them are a certain type of heart arrhythmia (abnormalities in the QT interval). If the patient is treated for a medical condition, it helps contacting the GP or specialist and asking if there are any indications the patient might suffer from a condition that may be a reason for caution.

But overall, the SSRIs, with escitalopram as a personal favorite, have shown to be an enormous help in treating anxiety and allowing patients to lead normal lives. In combination with psychotherapy / counselling the long-term prognosis for anxiety disorders in most cases has become very good.

Antiepileptics

Among the antiepileptics, pregabalin is increasingly used in the treatment of anxiety, most frequently as an add-on to an SSRI. It is mostly well-tolerated, although it may have to be used at a relatively high dose. Aside from treatment for anxiety disorders, some other off-label uses of pregabalin include restless leg syndrome, prevention of migraines, and alcohol withdrawal.

When pregabalin is taken at high doses over a long period of time, addiction may occur, but if taken at usual doses the risk of addiction is low. Pregabalin is a gabapentinoid and acts by inhibiting certain calcium channels.

Second Generation Antipsychotics (SGAa)

SGAs are often used to augment an SSRI, but they can also be used in the treatment of anxiety disorders by themselves. They usually work faster and can be quite powerful in their effect, while potential side effects can be more severe than in the SSRIs, although from clinical experience they are quite rare. An increase in appetite and metabolic side effects is, however, more common in olanzapine, and possibly to a lesser degree in quetiapine. There is little consensus on the use of SGAs in anxiety disorders. Many psychiatrists would probably say that in their clinical experience, they are helpful, while some studies did not find a difference between SGAs and placebo. They may thus be a worthwhile option in the individual case, but the risks and benefits need to be weighed off.

Benzodiazepines

Most anxiolytics belong to the group of benzodiazepines, and although they can be very effective in reducing anxiety for up to a couple of hours, they have three main disadvantages.

The first disadvantage is that they are potentially addictive if taken regularly, the second that they do not work instantaneously, and their effect only lasts for a short time, and the third that they can lead to drowsiness and a lowered reaction time, which means that a patient on this medication should not be driving a car or operating heavy machinery while taking them. If someone suffers from sudden anxiety bouts of anxiety or even panic attacks, it can be over by the time the medication starts working. However, many patients are helped quite effectively by merely having an anxiolytic in their pocket. This works because often the anxiety about feeling anxious and having all the physical symptoms associated with it is the main factor in maintaining the anxiety.

Non-benzodiazepine anxiolytics

There are alternatives to the benzodiazepines. However, drugs like buspiron (Buspar®), can take weeks to unfold their anxiolytic effect and many patients do not find them as effective as

the benzodiazepines. Often a better option is to start with a benzodiazepine and an SSRI and to wait until the benzodiazepine is no longer needed. For most SSRIs, this interval is in the region of two to three weeks. However, it can be much faster or in some cases even take months.

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