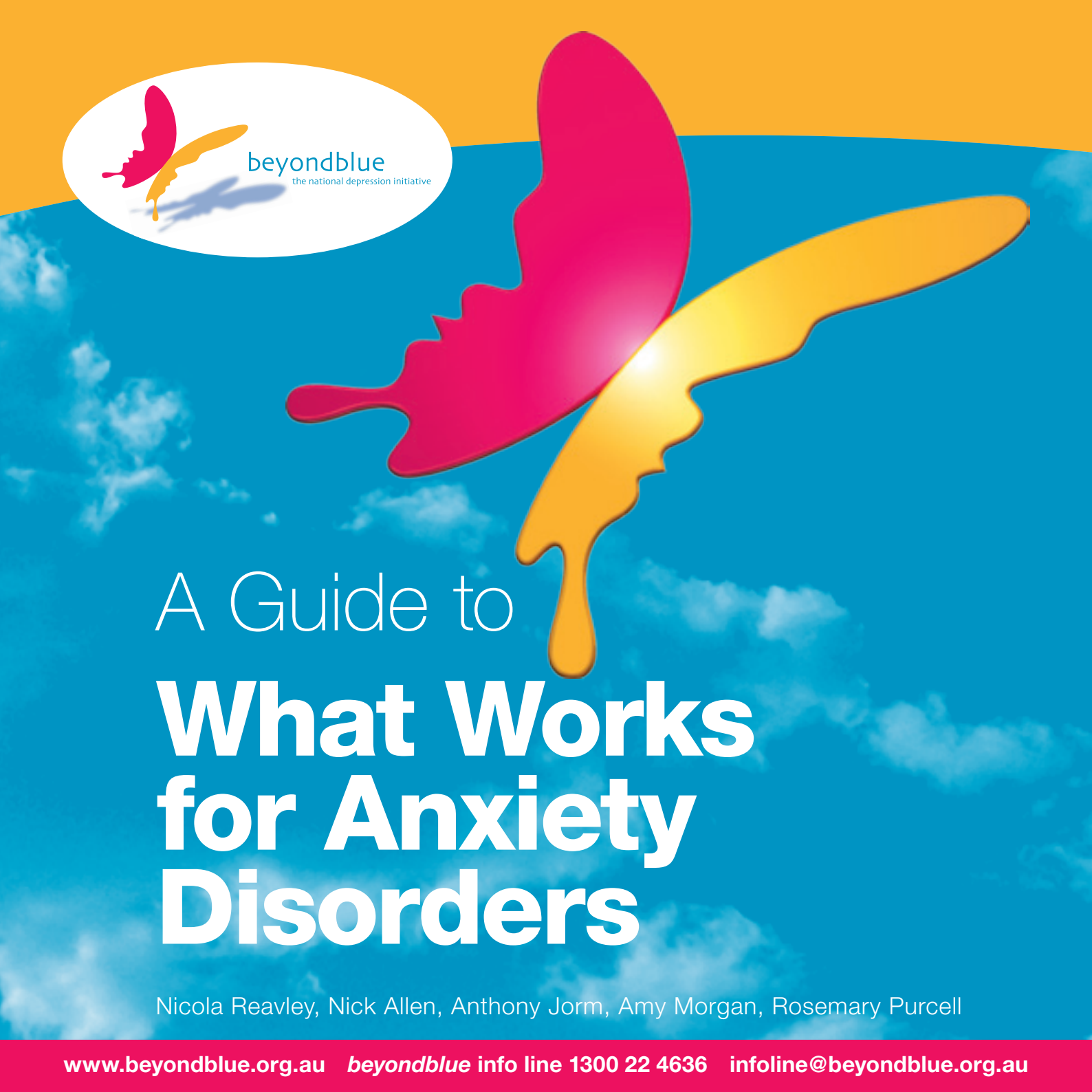


A Guide to

# What Works for Anxiety Disorders

Nicola Reavley, Nick Allen, Anthony Jorm, Amy Morgan, Rosemary Purcell

www.beyondblue.org.au *beyondblue* info line 1300 22 4636 infoline@beyondblue.org.au

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The authors of this guide are researchers at Orygen Youth Health Research Centre and the Department of Psychology, The University of Melbourne, Victoria, Australia.

**Complementary and Lifestyle Interventions**

# What is an anxiety disorder?

Everyone experiences anxiety at some time. Anxiety can be quite useful in helping a person to avoid dangerous situations and solve everyday problems. In most cases, anxiety will pass when the situations causing it pass. However, in some people, anxiety lasts longer or gets worse. It may happen for no apparent reason and other symptoms may develop. The person may also have difficulty doing his/her work or study and have problems interacting with family and friends. When these things happen, the person has an *anxiety disorder.*

## Different types of anxiety disorders

There are different types of anxiety disorders. Many people have symptoms of more than one. The main ones are:

- Generalised Anxiety Disorder
- Post-Traumatic Stress Disorder and Acute Stress Disorder
- Panic Disorder and Agoraphobia
- Social Phobia
- Specific Phobias
- Obsessive Compulsive Disorder.

**Generalised Anxiety Disorder (GAD)**

People with GAD feel anxious and worried about problems such as money, health, family and work. They may feel that things will go wrong or that they can't cope, even when there are no signs of trouble. They may also have other symptoms such as:

- restlessness or feeling edgy
- becoming tired easily
- difficulty concentrating or mind going blank
- irritability
- muscle tension (sore neck, shoulders or back)
- finding it hard to fall or stay asleep.

Not every person who has GAD has all these symptoms. People with GAD have three or more symptoms for more days than not, for at least six months. They also find their anxiety difficult to control. GAD can make it difficult for people to concentrate at school or work, function at home and generally get on with their lives.

**Post-Traumatic Stress Disorder (PTSD) and Acute Stress Disorder (ASD)**

PTSD and ASD happen to people after distressing or traumatic events. These include war, major accidents, natural disasters and violent assaults. They may have experienced the event or seen it happen to someone else. They also react with intense fear, helplessness or horror.

People with ASD or PTSD re-experience the trauma in the form of dreams, flashbacks or intrusive thoughts. They may find it hard to remember parts of the traumatic event. They also feel anxious in situations that remind them of the original trauma and try to avoid these. They may feel emotionally numb and lose interest in others or the outside world. They may also have other symptoms, including:

- constant watchfulness
- irritability or outbursts of anger
- difficulty concentrating or mind going blank
- being startled easily
- finding it hard to fall or stay asleep.

In ASD, the person gets over the event within a month.
In PTSD, the distress lasts longer than one month. Only some people who experience ASD develop PTSD.

### Panic Disorder and Agoraphobia

People with Panic Disorder have panic attacks and worry about having more. A panic attack is an intense feeling of fear or anxiety. It happens suddenly and develops rapidly. A person having a panic attack may also have other symptoms such as a racing heart, sweating, shortness of breath, chest pain and dizziness. A person experiencing a panic attack may also worry about losing control or 'going crazy'.

In Panic Disorder, the person has recurrent panic attacks or persistently fears having one. The person may avoid certain places or activities because of the fear of panic attacks. If these worries last for more than a month, the person is said to have Panic Disorder.

Having a panic attack does not always mean that a person will develop Panic Disorder. Some people may develop Panic Disorder after only a few panic attacks. Others may have many panic attacks without developing a Panic Disorder.

Some people who have panic attacks develop Agoraphobia. They avoid situations because they worry about having a panic attack. They worry that it will be difficult or embarrassing to get away or that there will be no one to help them. Some people avoid situations like crowds, enclosed places such as shopping malls, or driving. Others may avoid leaving their homes altogether.

### Social Phobia

People with Social Phobia are afraid of one or more social situations. They are afraid that they will behave in an embarrassing way. The key fear is that others will think badly of them. The anxiety may sometimes lead to panic attacks. Commonly feared situations include speaking or eating in public, social events and dating. Some people avoid these social situations altogether. This may affect their work, education or social lives.

### Specific Phobias

Specific Phobias are phobias of specific objects or situations. The most common fears are of spiders, insects, mice, snakes and heights. Other fears include an animal, blood, injections, storms, driving, flying, or enclosed places. The anxiety may sometimes lead to panic attacks. People with phobias avoid feared objects or situations. This may affect their work, education or social lives.

### Obsessive Compulsive Disorder (OCD)

People with OCD have obsessive thoughts that cause anxiety. They also feel the need to carry out certain behaviours to reduce this anxiety. These are known as compulsions and are repetitive. These compulsive behaviours take up at least one hour a day.

Common obsessive thoughts include:

- fear of contamination by things that are not clean
- fear of forgetting to do things (e.g. locking doors or turning off the stove)
- fear of not being able to do things in an exact way
- thoughts of violence, accidents or sex
- fear of becoming sick.

Common compulsions include:

- washing hands or clothes
- checking that doors and windows are locked or that appliances are turned off
- tidying things in a particular way
- hoarding things like newspapers or books
- touching things over and over again.

OCD is the least common anxiety disorder. However, it can have a serious impact on the person's life.

### Mixed anxiety, depression and substance abuse

Many people have symptoms of more than one anxiety disorder. A high level of anxiety over a long period will often lead to depression. Many people have a mixture of anxiety and depression.

Substance abuse frequently occurs with anxiety disorders. People may use alcohol or other drugs to help them cope. However, alcohol and other drug abuse can lead to increased anxiety.

Fact sheets on anxiety disorders can be obtained from *beyondblue: the national depression initiative*. Call the info line on **1300 22 4636** (local call cost) or visit **www.beyondblue.org.au**

## Anxiety and physical health problems

Anxiety can also occur in people with physical health problems. These include heart disease, cancer or thyroid conditions. Treatment for anxiety may also involve treatment of these physical health problems. The side-effects of some prescription drugs also include anxiety symptoms.

## Anxiety disorders are common, but often untreated

Anxiety disorders affect many people. A national survey of the mental health of Australians was carried out in 2007. This survey asked people about a range of symptoms of anxiety disorders and other mental health problems. A special computer program was used to make a diagnosis based on the answers provided. Approximately 14 per cent of Australian adults have an anxiety disorder in a given year. Shown opposite are the percentages of people found to be affected by particular types of anxiety disorder.

**Percentage of Australians aged 16 years or over affected by anxiety disorders[1]**

| Type of disorder | Percentage affected in previous 12 months | Percentage affected at any time in their life |
|---|---|---|
| Generalised Anxiety Disorder | 2.7% | 5.9% |
| Panic Disorder | 2.6% | 5.2% |
| Agoraphobia | 2.8% | 6.0% |
| Social Phobia | 4.7% | 10.6% |
| Post-Traumatic Stress Disorder | 6.4% | 12.2% |
| Obsessive Compulsive Disorder | 1.9% | 2.8% |

Anxiety disorders tend to begin in childhood, adolescence or early adulthood. Anxiety disorders are more common in females than males.

Although these disorders are common, many people affected by them do not get treatment. In the national survey, many of those who had an anxiety disorder in the previous 12 months did not receive any professional help.

1 Australian Bureau of Statistics. 2007 *National Survey of Mental Health and Wellbeing: Summary of Results.* (Document 4326.0). Canberra: ABS; 2008.

# Getting help for anxiety disorders

There are several different types of health professionals who can provide help for anxiety disorders:

## General Practitioners (GPs)

GPs are the best starting point for someone seeking professional help. A good GP can carry out the following:

- make a diagnosis
- check for any physical health problem or medication side-effect that may be the cause of anxiety disorders
- discuss treatment options available
- work with the person to draw up a Mental Health Treatment Plan (see box below)
- provide brief counselling
- prescribe medication
- refer a person to a mental health specialist such as a psychologist or psychiatrist.

When consulting a GP about anxiety disorders, it is advisable to book a long appointment when the GP is less busy. It is also best to raise the issue of anxiety early in the consultation. Some GPs are better at dealing with anxiety disorders than others. The GP should take the time to listen and discuss various treatment options, taking account of the person's treatment preferences. If the person is not entirely happy with the service provided by a GP, it is best to try another one.

A GP Mental Health Treatment Plan involves the GP assessing the person, identifying needs, setting and agreeing on management goals, identifying any action to be taken by the person, selecting appropriate treatment options and arranging for ongoing management of the person, and documenting this in the plan.

## Psychiatrists

A psychiatrist is a medical practitioner who specialises in treating people with mental illness, including anxiety disorders. Psychiatrists mostly treat an anxiety disorder when it is severe or not responding to treatment provided by a GP. Psychiatrists are experts on medical aspects of anxiety disorders and can provide medical (e.g. medication) and psychological treatment (i.e. talking therapy). They can be particularly helpful if someone has an anxiety disorder combined with physical health problems. They can also help if there are complications with medications, such as side-effects or interactions with other medications. Most psychiatrists work in private practice, but some work for hospitals and mental health services. To see a private psychiatrist requires a referral from a GP.

## Psychologists

A psychologist is someone who has studied human behaviour at university and has had supervised professional experience in the area. Psychologists are registered with a state registration board. Some psychologists provide treatment to people with mental health problems, including anxiety disorders. Psychologists do not have a medical degree, so do not prescribe medication. Many psychologists work for state health services, while others are private practitioners. Many specialist psychologists have advanced training in how to help people who have an anxiety disorder, for example, clinical, counselling, developmental and health psychologists.

A clinical psychologist is a psychologist who has undergone additional specialist training in how to treat people with mental health problems. They are particularly skilled at providing Cognitive Behaviour Therapy (CBT) and other psychological treatments. Many are members of the Australian Psychological Society's College of Clinical Psychologists. It is best to get a referral to a private clinical psychologist from a GP.

As part of a Mental Health Treatment Plan, a GP can refer a person to a psychologist. The following types of treatment are commonly provided:

- psycho-education (providing information about a mental health problem and how to manage it)
- Cognitive Behaviour Therapy (CBT)
- relaxation strategies
- social skills training
- exposure therapy.

## Occupational Therapists and Social Workers

Most occupational therapists and social workers work in state health or welfare services. However, some work as private practitioners and are registered by Medicare. They provide similar treatments to psychologists.

## Mental health nurse practitioners

Mental health nurses are specially trained to care for people with mental health problems. They work with psychiatrists and General Practitioners to review the state of a person's mental health; monitor the person's medication and provide people with information about mental health problems and treatment. Some mental health nurses have training in psychological therapies.

## Counsellors

Counsellors are people who can provide psychological support. However, counsellors generally are not registered by the government, so anyone can call themselves a 'counsellor' without any qualifications. However, a well-qualified counsellor may be a registered psychologist. Unless a counsellor is registered by Medicare, the person cannot claim a rebate and will have to pay the full fee.

## Complementary health practitioners

There are many alternative and complementary treatments for anxiety disorders. However, many providers of these services will not be registered or covered by Medicare. Some services may be covered by private health insurance. If you're seeking complementary treatments, it is best to check whether the practitioner is registered by a state board or a professional society.

**Finding a GP or mental health practitioner with an interest in anxiety disorders**

*beyondblue* has a website giving contact details of GPs and other mental health practitioners who are interested in treating depression and anxiety disorders. This information can be found at **www.beyondblue.org.au** (click on Find a doctor or other mental health practitioner) or phone the *beyondblue* info line **1300 22 4636**.

## Medicare rebates

Medicare rebates are available for a range of mental health treatments. The rebate will depend on what service is being provided and who is providing it.

It is important to note that while the rebate (the amount a person can claim from Medicare) is standard, the amount the provider actually charges can vary from one mental health professional to another.

It's a good idea to find out the cost of the service and the available rebate before making an appointment. The receptionist should be able to provide this information. Also find out if payment or part-payment is required on the day of the consultation.

# How family and friends can help

Family and friends can be an important source of support to a person who has an anxiety disorder. They can assist the person to get appropriate professional help. They can also provide positive support which will help the person to recover. The following resources provide useful advice on how family and friends can help:

- The FREE *beyondblue* booklet, *Guide for Carers: Caring for others, caring for yourself* gives information on supporting and caring for a person with an anxiety disorder or depression. This can be ordered from **www.beyondblue.org.au** or by calling **1300 22 4636**. It can also be downloaded from the Get Information section of the *beyondblue* website.
- The FREE *beyondblue* DVD, *Carers' Stories of Hope and Recovery* contains interviews with people who have cared for a family member or friend with anxiety, depression or a related disorder. This can be ordered from **www.beyondblue.org.au** or by calling **1300 22 4636**.
- Practical advice on how to provide initial help to someone who has anxiety, depression or other mental health problems is available at the Mental Health First Aid website **www.mhfa.com.au/Guidelines.shtml**

# How to use this booklet

There is a wide range of treatments for anxiety disorders. While each treatment has its supporters, treatments vary a lot in how much supporting scientific evidence is behind them. This booklet provides a summary of what the scientific evidence says about each treatment. However, when a treatment is shown to have some effect in research this does not mean it is available, used in clinical practice, or will be recommended or work equally well for every person. There is no substitute for the advice of a mental health practitioner, who can advise on the best treatment options available.

We have rated the evidence for the effectiveness of each treatment using a 'thumbs up' scale:

| | |
|---|---|
|  | There are many studies showing that the treatment works |
|  | There is a number of studies showing that the treatment works but the evidence is not as strong as the best treatments |
|  | There are at least two good studies showing that the treatment works |
|  | The evidence shows that the treatment does not work or there are significant risks involved in using the treatment |
| ? | There is not enough evidence to say whether or not the treatment works |

When a treatment is shown to work scientifically, this does not mean it will work equally well for every person. While it might work for the average person, some people will have complications, side-effects or incompatibilities with their lifestyle. The best approach is to try a treatment that works for most people and that you are comfortable with. If you do not recover quickly enough, or experience problems with the treatment, then try another.

The choice of treatment will also vary according to several factors, including the seriousness of symptoms and the other treatments that have been tried. Before choosing a treatment, it's a good idea to talk to your health practitioner.

Another factor to consider is beliefs about treatment. A treatment is more likely to work if a person believes in it and is willing to commit to it.[2,3,4] Even the most effective treatments will not work if they are used occasionally or half-heartedly. Some people have strong beliefs about particular types of treatment. For example, some do not like taking medications in general, whereas others have great faith in medical treatments. However, having strong beliefs in a particular treatment may not be enough, especially if there is no good evidence that the treatment works.

To help people make choices about treatment that suits their beliefs, and that have evidence for their effectiveness, we have organised the reviews in this booklet in three sections:

- **Medical** – These treatments are generally provided by a medical practitioner.
- **Psychological and Counselling** – These treatments can be provided by a range of health practitioners, but particularly psychiatrists, psychologists and clinical psychologists.
- **Complementary and Lifestyle** – These treatments can be provided by a range of health practitioners, including complementary practitioners. Some of them can be used as self-help.

Each of these broad approaches includes treatments that are supported by scientific evidence as effective. We recommend that people seek treatments that they believe in and are also supported by evidence.

Whatever treatments are used, they are best done under the supervision of a GP or mental health professional. This is particularly important where more than one treatment is used. Often, combining treatments that work is the best approach. However, sometimes there can be side-effects from combinations, particularly prescribed or complementary medications.

2 Chambless DL et al. 'Predictors of response to cognitive-behavioral group therapy for social phobia'. *Journal of Anxiety Disorders* 1997; 11:221-40.

3 Price M et al. 'Greater expectations: using hierarchical linear modeling to examine expectancy for treatment outcome as a predictor of treatment response'. *Behavior Therapy* 2008; 39:398-405.

4 Schulte D. 'Patients' outcome expectancies and their impression of suitability as predictors of treatment outcome'. *Psychotherapy Research* 2008; 18:481-94.

# How this booklet was developed

## Searching the literature

To produce these reviews, the scientific literature was searched systematically on the following online databases: the Cochrane Library, PubMed, PsycINFO and Web of Science. For many of the searches, we relied on work that had been done for a recent review article by two of the authors:

Morgan AJ, Jorm AF. 'Outcomes of self-help efforts in anxiety disorders'. *Expert Reviews in Pharmacoeconomic Outcomes Research*, 2009; 9:445-459.

## Evaluating the evidence

Studies were excluded if they involved people who had not been diagnosed with an anxiety disorder or had not sought help. Where there was an existing recent systematic review or meta-analysis, this was used as the basis for drawing conclusions. Where a systematic review did not exist, individual studies were read and evaluated. A study was considered adequate if it had an appropriate control group and participants were randomised.

## Writing the reviews

The reviews were written to be at the 8th grade reading level or lower. Each review was written by one of the authors and checked for readability and clarity by a second author. All authors discussed and reached consensus on the 'thumbs up' rating for each treatment.

## If a treatment gets the 'thumbs up' does that mean it will work for me?

When a treatment is shown to work in research studies, this does not mean it will work equally well for every person. While it might work for the average person, some people will have complications, side-effects or the treatment may not fit well with their lifestyle.

## What if a treatment gets a 'thumbs down'? Does that mean it won't work for me, or that I shouldn't try it?

Not necessarily. Treatments can have a 'thumbs down' rating either because the evidence shows that the treatment isn't effective, or it does work, but the risks associated with the treatment outweigh the potential benefits. It is for these reasons that we have not recommended these treatments.

This doesn't mean, however, that these treatments should never be used, or that someone already receiving one of these treatments should stop. These treatments may not work for the average person, but they may be helpful to some people (for example, those who have tried other treatments, but have not had any benefit from them).

If you have any concerns about a treatment that has received a 'thumbs down' rating, you should discuss the pros and cons of it with a GP or mental health professional to decide whether the treatment is suitable for you.

It is not recommended that you stop using your current treatments until you have consulted a health professional.

# A summary of what works for anxiety disorders (and what doesn't)

| Medical Interventions | Generalised Anxiety Disorder (GAD) | Post-Traumatic Stress Disorder (PTSD) | Social Phobia | Panic Disorder and Agoraphobia | Specific Phobias | Obsessive Compulsive Disorder (OCD) |
|---|---|---|---|---|---|---|
| Anti-anxiety drugs | | | | | | |
| – Short-term use (up to four weeks) | 👍👍 | ? | 👍👍 | 👍👍 | 👎 | ? |
| – Long-term use | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |
| Anti-convulsant drugs | 👍👍 | 👎 | 👍 | 👎 | ? | ? |
| Antidepressant drugs | | | | | | |
| – Adults | 👍👍👍 | 👍👍👍 | 👍👍👍 | 👍👍👍 | ? | 👍👍👍 |
| – Children and adolescents | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |
| Antipsychotic drugs | 👍 | ? | ? | ? | ? | ? |
| Azapirone drugs | 👍 | ? | ? | 👎 | ? | ? |
| Beta-blockers | ? | ? | 👎 | 👎 | ? | ? |
| Deep Brain Stimulation (DBS) | 👎 | 👎 | 👎 | 👎 | 👎 | ? |
| Electroconvulsive Therapy (ECT) | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |
| Lithium | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |
| Psychosurgery (aka 'neurosurgery') | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 Overall<br>? For OCD that hasn't responded to other treatment |
| Stimulant drugs | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |
| Transcranial Magnetic Stimulation (TMS) | ? | 👍 | ? | ? | ? | 👎 |
| Vagus Nerve Stimulation (VNS) | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |

| Psychological and Counselling Interventions | Generalised Anxiety Disorder (GAD) | Post-Traumatic Stress Disorder (PTSD) | Social Phobia | Panic Disorder and Agoraphobia | Specific Phobias | Obsessive Compulsive Disorder (OCD) |
|---|---|---|---|---|---|---|
| Applied muscle tension | ? | ? | ? | ? | 👍 For blood and injury phobia | ? |
| Behaviour Therapy (aka 'exposure therapy') | ? | 👍👍👍 | 👍👍 | 👍👍 | 👍👍👍 | 👍👍👍 |
| Cognitive Behaviour Therapy (CBT) | 👍👍👍 | 👍👍👍 | 👍👍👍 | 👍👍👍 | 👍👍👍 | 👍👍👍 |
| Eye Movement Desensitisation and Reprocessing (EMDR) | ? | 👍👍👍 | ? | ? | ? | ? |
| Psychodynamic psychotherapy | 👍 | ? | ? | 👍 | ? | ? |

| Complementary and Lifestyle Interventions | Generalised Anxiety Disorder (GAD) | Post-Traumatic Stress Disorder (PTSD) | Social Phobia | Panic Disorder and Agoraphobia | Specific Phobias | Obsessive Compulsive Disorder (OCD) |
|---|---|---|---|---|---|---|
| Acupuncture | 👍 | ? | ? | ? | ? | ? |
| Alcohol | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |
| Bibliotherapy | ? | ? | 👍 | 👍👍 | 👍 | ? |
| Computer-aided psychological therapy | ? | 👍 | 👍👍 | 👍👍 | 👍 | ? |
| Kava | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |
| Relaxation training | 👍👍 | 👍 | 👍 | 👍👍 | 👍 | ? |
| Smoking cigarettes | 👎 | 👎 | 👎 | 👎 | 👎 | 👎 |
| Yoga | 👍 | ? | ? | ? | ? | ? |

# Medical Interventions

## Anti-anxiety drugs

| Short-term use (up to four weeks) | Our rating | Long-term use | Our rating |
|---|---|---|---|
| GAD | 👍👍 | GAD | 👎 |
| PTSD and ASD | ? | PTSD and ASD | 👎 |
| Social Phobia | 👍👍 | Social Phobia | 👎 |
| Panic Disorder and Agoraphobia | 👍👍 | Panic Disorder and Agoraphobia | 👎 |
| Specific Phobias | 👎 | Specific Phobias | 👎 |
| OCD | ? | OCD | 👎 |

### WHAT ARE THEY?

Anti-anxiety drugs are used mainly for short-term, intense anxiety. They may also be known as tranquilisers, anxiolytics or 'benzos', since benzodiazepines (BZDs) are the largest group of anti-anxiety drugs. Common types of anti-anxiety drugs include alprazolam, clonazepam, diazepam and oxazepam. These drugs can be prescribed only by a doctor.

### HOW ARE THEY MEANT TO WORK?

Anti-anxiety drugs work on brain nerve cells. These drugs tend to work very fast in reducing anxiety symptoms.

### DO THEY WORK?

#### GAD

A review of a number of good quality studies found that BZDs are generally more effective than placebo (dummy) pills in reducing anxiety symptoms. However, most studies only lasted for four weeks. This suggests that these drugs are only effective in the short term. Longer-term use of BZDs does not appear to be helpful. This is because most patients do not recover from GAD when taking these drugs on their own.

#### PTSD and ASD

Only one good-quality study has compared a BZD to placebo in a small trial of 16 adults. The BZD was no better than the placebo in improving PTSD symptoms over the five weeks of the study.

#### Social Phobia

Three good-quality studies have compared a BZD to a placebo in Social Phobia. All found that the BZD was better than the placebo in the short term (e.g. under three months). However, there is no information on whether they are useful over longer periods of time.

### Panic Disorder and Agoraphobia

A number of good-quality studies have compared BZDs with a placebo pill for the treatment of Panic Disorder (with and without Agoraphobia). These studies show that BZDs are more effective than a placebo in reducing panic attacks and anxiety in the immediate or short term. However, they are not as effective as other drugs (e.g. antidepressants, see page 14), especially in the longer term.

### Specific Phobias

Two good-quality studies have compared a BZD to a placebo in people with Specific Phobias. In both studies, the BZD was better than the placebo in reducing immediate anxiety levels. However, both studies showed poor outcomes when used over a longer period of time. After one week or three months, anxiety levels in the BZD groups had either returned to pre-treatment levels, or become worse.

### OCD

One study compared a BZD to a placebo in 27 adults with OCD. Only three people had improved after 10 weeks of treatment. Overall, the BZD was not more effective than the placebo.

## ARE THERE ANY RISKS?

Long-term use of anti-anxiety drugs can cause addiction and usually the person develops tolerance to many of the medication effects. There can also be a range of side-effects, including memory loss, sleepiness, dizziness and headache.

## RECOMMENDATION

There is evidence that anti-anxiety drugs are effective in the short term only for reducing symptoms of Panic Disorder, GAD and Social Phobia, but not for PTSD and Specific Phobias. However, they are not recommended as a long-term treatment for anxiety disorders. This is because they have a risk of addiction, and may cause memory problems. If anti-anxiety drugs are used, they should only be taken for a short period of time to avoid addiction.

# Anti-convulsant drugs

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | 👍👍 | Panic Disorder and Agoraphobia | 👎 |
| PTSD and ASD | 👎 | Specific Phobias | ? |
| Social Phobia | 👍 | OCD | ? |

## WHAT ARE THEY?

Anti-convulsant drugs are used mainly in the treatment of epilepsy. However, they are also used as a mood stabiliser, which means that they help to reduce intense changes in mood. Anti-convulsants have been used mainly in bipolar depression, as well as major depression that has not responded to other medications or psychological therapies. They have also been used for anxiety disorders, since depression frequently co-occurs with these conditions. These drugs can be used together with another medication (e.g. an antidepressant or anti-anxiety drug) or on their own. These drugs can be prescribed only by a doctor.

## HOW ARE THEY MEANT TO WORK?

Anti-convulsant drugs work by reducing excessive activity of neurons (nerve cells) in the fear circuits in the brain. It is not known exactly how they work, but the effect is to calm ‘hyperactivity’ in the brain.

## DO THEY WORK?

### GAD

Several good-quality studies have compared anti-convulsant drugs to placebo (dummy) pills as a short-term treatment for GAD (i.e. four to eight weeks). Research shows that the anti-convulsant drug pregabalin is more effective than placebo pills in reducing anxiety symptoms. However, other anti-convulsants have not been found to be effective compared to placebo pills. There are no studies of whether these drugs are helpful over longer periods of time.

### PTSD and ASD

There have been three good-quality studies that have compared an anti-convulsant drug to placebo pills. In the largest study, treatments were given to 232 people for 12 weeks. There was no difference in PTSD symptoms between the groups at the end of the study. Another study of 38 people also found no difference in PTSD symptoms between those who received an anti-convulsant and those who got a placebo. The final study compared the use of an anti-convulsant versus a placebo for 12 weeks in 15 people. The results showed that PTSD symptoms improved more in those who received the anti-convulsant drug compared to the placebo. However, this was only in the 10 people who completed the study.

### Social Phobia

There have been two good-quality studies that have compared an anti-convulsant to placebo pills. Both studies showed that the anti-convulsant was more effective than the placebo in reducing symptoms of Social Phobia over a period of 10 to 14 weeks.

### Panic Disorder and Agoraphobia

There have been two good-quality studies that have compared an anti-convulsant to placebo pills. In the larger study, treatment was given to 103 people for eight weeks. The results showed no difference in panic symptoms between groups at the end of treatment. The same results were found in a smaller study of 14 people who received treatment for eight weeks.

### Specific Phobias

There is no evidence on whether anti-convulsants do or don't work for Specific Phobias.

### OCD

There have been no good-quality studies comparing an anti-convulsant drug to placebo pills in people with OCD. There is limited evidence from case studies that people who have been prescribed an anti-convulsant drug for OCD may experience some benefit.

## ARE THERE ANY RISKS?

Common side-effects of anti-convulsants include the risk of developing a serious rash, feeling dizzy, heavy sedation (sleepy), nausea, tremor (shakes) and weight gain. Different types of anti-convulsants have different side-effects. Most side-effects diminish over time.

## RECOMMENDATION

There are mixed results for the use of anti-convulsants for anxiety disorders. Overall, the evidence is not as strong as for other treatments. There is some evidence that these drugs may work for GAD and Social Phobia, but only in the short term. However, these drugs have been found to be ineffective for PTSD and Panic Disorder. There is limited evidence for their effectiveness in OCD.

# Antidepressant drugs

| | Our rating | | Our rating |
|---|---|---|---|
| GAD<br>– Adults<br>– Children and adolescents |  | Panic Disorder and Agoraphobia<br>– Adults<br>– Children and adolescents |  |
| PTSD and ASD<br>– Adults<br>– Children and adolescents |  | Specific Phobias<br>– Adults<br>– Children and adolescents |  |
| Social Phobia<br>– Adults<br>– Children and adolescents |  | OCD<br>– Adults<br>– Children and adolescents |  |

## WHAT ARE THEY?

Antidepressants are drugs that are used mostly to treat depression. Although these drugs are called antidepressants, they also have anti-anxiety effects. Some anxiety disorders are long lasting and these drugs are considered better to use over longer periods of time than anti-anxiety drugs. These drugs can be prescribed only by a doctor.

There are many different types of antidepressants. The type that is used the most is called selective serotonin reuptake inhibitors (SSRIs). Some examples of SSRIs are sertraline, escitalopram, citalopram, paroxetine, fluoxetine and fluvoxamine. There are also serotonin and noradrenaline reuptake inhibitors (SNRIs), the most common drug being venlafaxine. Older-style drugs that are still used are called tricyclic antidepressants, and include imipramine and clomipramine.

## HOW ARE THEY MEANT TO WORK?

Different types of antidepressants work in slightly different ways, but they all act on chemicals in the brain related to emotions and motivation.

## DO THEY WORK?

### GAD

A review of a number of studies, involving more than 2000 adults with GAD, found that antidepressants were more effective than placebo (dummy pills) in the medium term (i.e. up to seven months). Overall, it was not clear whether one type of antidepressant was better than others. One small study also found an SSRI was better than a placebo in children and adolescents. The SNRI venlafaxine has also been shown to be more effective than placebo pills in children and adolescents.

### PTSD and ASD

There has been a number of good-quality studies of SSRI drugs for PTSD in adults – these have found that SSRIs are better than placebo pills in the short to medium term (i.e. three months or less in this study). Some SSRIs may be more effective than others, although more research is needed. There are no good-quality studies of antidepressants for PTSD in children or adolescents.

### Social Phobia

A review of a number of studies, involving more than 5000 adults with Social Phobia, compared antidepressants to placebo pills. Overall, these studies show that antidepressants are more effective than placebo pills in the short term. A smaller number of studies also show longer-term benefits where the drugs have prevented relapse. Three studies in children and adolescents have shown that antidepressants are better than placebo pills in the short term.

### Panic Disorder and Agoraphobia

There have been many good-quality studies which have compared antidepressants to placebo pills. These studies show that antidepressants are more effective than placebo pills in the short term for reducing the number of panic attacks or general anxiety symptoms in adults. There are no good-quality studies of antidepressants for Panic Disorder in children or adolescents.

### Specific Phobias

There is no evidence on whether antidepressants do or don't work for Specific Phobias.

### OCD

A review of a number of studies, involving more than 3000 adults, found that SSRI drugs were more effective than placebo pills in treating OCD in the short to medium term (i.e. between six weeks and three months in this study). Antidepressants have also been compared with placebo pills in 10 studies of children and adolescents with OCD. Pooling results from these studies shows that antidepressants are moderately effective.

## ARE THERE ANY RISKS?

Side-effects of antidepressants have been noted in people who are taking these drugs for depression. As anxiety and depression often occur together, it is important to be aware of possible side-effects. Some antidepressants have worse side-effects than others. SSRIs appear to have fewer side-effects than other types of antidepressants. Some common side-effects of SSRIs are mild headache, nausea, drowsiness and sexual problems. Some of these last for only a short time. There is not enough research on the rates at which anxiety and depression symptoms happen again once antidepressants are stopped. It is likely that this will happen in many cases.

There may be risks to an unborn child if SSRIs are taken in early pregnancy. The risks of antidepressants to children who are breastfed by mothers taking antidepressants are unknown.

In young people, there has been a link between SSRIs and suicidal behaviour (increased by twofold). However, there may be a point at which the potential benefits are judged to outweigh the risks.

For everyone who begins taking an antidepressant, a doctor should check frequently if they are improving and whether there are side-effects or any sign of suicidal thinking. This is especially important in the first few weeks.

## RECOMMENDATION

There is evidence that antidepressants are an effective treatment in the short term for most anxiety disorders.

## Anti-glucocorticoid (AGC) drugs

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT ARE THEY?

AGCs are drugs that reduce the body's production of cortisol which is a stress hormone. AGCs are prescribed by a doctor.

### HOW ARE THEY MEANT TO WORK?

High levels of anxiety, especially over long periods of time, can lead to over-activity of the body's stress system. This can cause the body to produce too much cortisol. It is believed that drugs that target the stress system might also help treat anxiety disorders.

### DO THEY WORK?

**PTSD and ASD**

The use of AGCs was studied in five women who had severe, long-lasting PTSD. None of the people had benefited from years of treatment with psychological therapies or other drugs. All reported an improvement in general anxiety symptoms after taking the AGC drug, as well as some specific PTSD symptoms, such as nightmares, difficulty concentrating and feeling numb. This was a low-quality study because there was no comparison group and no follow-up of the people to see whether the benefits lasted more than a couple of weeks.

**OCD**

There has only been a single case study of an AGC in a person with OCD. There was no benefit from the AGC alone, although symptoms improved when the AGC was combined with an antidepressant drug.

**Other anxiety disorders**

There is no evidence on whether AGCs work for GAD, Social Phobia, Panic Disorder or Specific Phobias.

### ARE THERE ANY RISKS?

AGCs can cause a number of side-effects, including rash, fatigue, constipation, appetite changes, and sleep problems.

### RECOMMENDATION

There has not been any good-quality research on whether AGCs are useful for treating anxiety disorders. More studies are needed before any benefits of AGCs can be known.

## Antipsychotic drugs

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | 👍 | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT ARE THEY?

Antipsychotics are usually used to treat psychotic disorders, such as schizophrenia. They can be prescribed only by a doctor. Newer antipsychotic drugs (called 'atypical' antipsychotics) may also help to reduce anxiety symptoms. Older antipsychotics (called 'typical' antipsychotics) have more side-effects and are rarely used for treating anxiety disorders. Antipsychotics are usually used to treat more severe anxiety disorders that haven't responded to psychological therapies or other drugs. These drugs are most commonly used in combination with other drugs (e.g. antidepressants), but can be used on their own. Here, we have reviewed studies in which antipsychotics are used as the main treatment.

### HOW ARE THEY MEANT TO WORK?

Different types of antipsychotics work in different ways, but they all act on chemicals in the brain.

### DO THEY WORK?

**GAD**

Two large studies have compared an 'atypical' antipsychotic to placebo (dummy) pills. One study involved 900 people and had eight weeks of treatment. It found that the antipsychotic improved anxiety more than the placebo. The second study involved over 400 people and treatment lasted for one year. The group taking the antipsychotic drug had lower anxiety symptoms than the group receiving the placebo.

**PTSD and ASD**

Three small studies have compared an antipsychotic drug to placebo (dummy) pills. Most of the participants were female. In one study, the antipsychotic was no better than placebo pills in reducing PTSD symptoms. In the second study, the antipsychotic drug was more effective than the placebo. In the final study, the antipsychotic drug was better than the placebo, however many of the people were on other drugs at the same time. This makes it difficult to tell if the benefits were due to the antipsychotic drug or the other drugs.

### Social Phobia

Two small studies have compared an antipsychotic drug with a placebo over eight weeks of treatment. One study involved 12 people and showed that the antipsychotic drug was more effective than the placebo. The second study involved 15 people and results were mixed. Although some people benefited from the antipsychotic, the study was too small to tell whether it was more helpful overall than the placebo.

### Panic Disorder and Agoraphobia

There have only been small, low-quality studies of antipsychotics for Panic Disorder. One study involved 10 adults with severe panic that had not responded to other treatments. They were given an antipsychotic drug for eight weeks. The number of panic attacks in the group reduced. However, six out of 10 participants experienced the side-effect of weight gain.

### Other anxiety disorders

There is no evidence on whether antipsychotic drugs alone work for Specific Phobias or OCD.

## ARE THERE ANY RISKS?

Common side-effects of antipsychotics include dry mouth, weight gain, feeling sedated or drowsy, and movement problems in the limbs and face. Different antipsychotics may produce different side-effects. Some of these may need to be checked often.

## RECOMMENDATION

There is limited evidence for using antipsychotics alone to treat anxiety disorders. There is some evidence that these drugs may help severe GAD, however more research is needed to be sure.

# Azapirone drugs

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | 👍 | Panic Disorder and Agoraphobia | 👎 |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT ARE THEY?

Azapirones (AZPs) are drugs that are used to treat a range of mental health problems, including anxiety disorders, depression and psychosis. They can be used on their own, or along with another drug (such as an antidepressant). The most commonly used AZP is buspirone. These drugs can be prescribed only by a doctor.

## HOW ARE THEY MEANT TO WORK?

Azapirones work on brain nerve cells. These drugs act in a similar way to benzodiazepines (see Anti-anxiety drugs, page 12) by working relatively fast to reduce anxiety symptoms. However, unlike benzodiazepines, these drugs can be used for longer periods of time as they are not addictive.

## DO THEY WORK?

### GAD

Four good-quality studies have compared AZPs to placebo (dummy) pills for reducing GAD symptoms. Three of these studies showed that AZPs were better than placebo pills and one found no differences in anxiety symptoms between the groups.

### Social Phobia

One study gave 30 people with Social Phobia either an AZP (buspirone) or placebo pills for three months. The results showed no difference between groups in anxiety symptoms at the end of the study.

### Panic Disorder and Agoraphobia

Three high-quality trials have compared an AZP (buspirone) to a placebo. In each study, the AZP was found to be no better than placebo pills in reducing panic attacks and anxiety symptoms.

### Other anxiety disorders

There is no evidence on whether azapirone drugs alone work for Specific Phobias, PTSD or OCD.

## ARE THERE ANY RISKS?

Azapirones can cause a number of side-effects, including drowsiness, dizziness, nausea, weakness, insomnia and lightheadedness.

## RECOMMENDATION

There is mixed evidence for the effectiveness of azapirones for the treatment of anxiety disorders. These drugs appear to be effective for people with GAD. However, they are not helpful for Panic Disorder. There is not enough evidence yet as to whether they are useful for Social Phobia.

# Beta-blockers

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | 👎 |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | 👎 | OCD | ? |

## WHAT ARE THEY?

Beta-blockers are drugs that can help reduce some symptoms of anxiety, such as a fast heart rate, rapid breathing or tremor (shakes). They are mainly used to treat heart conditions and high blood pressure. However, they are also used for Social Phobia and performance anxiety (e.g. stressful events such as public speaking or performing). They can be prescribed only by a doctor.

## HOW ARE THEY MEANT TO WORK?

Beta-blockers act on the body's 'fight or flight' response. They reduce a person's heart rate caused by over-excitement, physical activity or anxiety.

## DO THEY WORK?

### GAD

Several studies have compared a beta-blocker to placebo (dummy) pills and/or other anxiety drugs in people with chronic anxiety. The results have been mixed. Some studies showed that the beta-blocker was better than placebo pills, while others showed that they were no more effective than placebo pills. In most studies, beta-blockers were not as effective as the other anti-anxiety drugs.

### PTSD and ASD

There have only been small case studies in which beta-blockers have been used to treat PTSD in adults and children. These studies show that PTSD symptoms, especially hyperarousal (feeling wound up and edgy), are reduced after taking these drugs. However, these were low-quality studies with no comparison groups.

### Social Phobia

Two studies have compared a beta-blocker to placebo pills or another anxiety treatment over several months. In both studies, the beta-blocker was no better than a placebo. In one of the studies, the beta-blocker was less effective compared to an antidepressant drug.

### Panic Disorder and Agoraphobia

One study compared a beta-blocker, a benzodiazepine and a placebo in people with Panic Disorder over five weeks. The results showed that the beta-blocker was no better than the placebo in reducing anxiety symptoms or the number of panic attacks.

### Other anxiety disorders

There is no evidence on whether beta-blockers work for Specific Phobias or OCD.

## ARE THERE ANY RISKS?

Beta-blockers can cause a range of side-effects, including nausea, diarrhoea, fatigue, dizziness, vision problems and poor concentration. However, most people can cope with these side-effects. These drugs should be avoided by people with asthma, as they can affect the bronchial muscle. They should also be avoided by people with cardiovascular (heart) disease.

## RECOMMENDATION

There is mixed evidence on beta-blockers for anxiety disorders. The evidence suggests that these drugs are not effective for GAD, Social Phobia and Panic Disorder. There is not enough good quality research as to whether they are useful for PTSD.

# Deep Brain Stimulation (DBS)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | 👎 | Panic Disorder and Agoraphobia | 👎 |
| PTSD and ASD | 👎 | Specific Phobias | 👎 |
| Social Phobia | 👎 | OCD | ? |

## WHAT IS IT?

DBS is a type of brain stimulation. It requires surgery to implant a device (called a 'brain pacemaker') and wiring under the skin into the chest, neck and brain. The pacemaker is usually placed under the skin near the shoulder. Wiring then goes from the pacemaker, into the neck and then connects to an 'electrode' that is placed in the brain. This sends electric impulses to the part of the brain that needs stimulating. Different brain areas are targeted for different disorders. DBS has mostly been used for people with Parkinson's disease. With anxiety disorders, DBS has only been used to treat severe OCD that has not responded to other treatments.

## HOW IS IT MEANT TO WORK?

It is not known exactly how DBS works, other than stimulating parts of the brain.

## DOES IT WORK?

### OCD

There have been several studies of DBS for severe OCD. In one good-quality study, 16 patients had DBS devices implanted. At different times over six months, the participants received either active (real) or 'sham' (fake) stimulation. The results showed that OCD symptoms improved more with active DBS compared to the sham condition. There have been smaller studies, involving only a few people, all with severe, long-standing OCD. These studies generally compared OCD symptoms when stimulation was turned on versus off. Overall, these studies show that some, but not all, people improve with DBS.

### Other anxiety disorders

There is no evidence on whether Deep Brain Stimulation works for GAD, PTSD, Social Phobia, Panic Disorder or Specific Phobias.

## ARE THERE ANY RISKS?

There are serious risks involved in Deep Brain Stimulation. These can include damage to the brain which might affect movement, memory, or the senses (e.g. seeing or hearing). It can also cause changes in personality. There are also risks of infection from surgery.

## RECOMMENDATION

DBS may be promising for some people with severe, long-standing OCD, but more high-quality research is needed before we can say whether or not it works.

# Electroconvulsive Therapy (ECT)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD |  | Panic Disorder and Agoraphobia |  |
| PTSD and ASD |  | Specific Phobias |  |
| Social Phobia |  | OCD |  |

## WHAT IS IT?

In ECT, electrical currents are passed though the brain to cause a seizure. The treatment is given under a general anaesthetic, along with muscle relaxants. Usually, a series of ECT treatments is given over several weeks. ECT is most often used for severe depression that has not responded to other treatments, or where there is a risk of death from suicide or refusal to eat or drink. It may also be used for severe anxiety disorders that have not responded to other treatments. ECT may also be known as ‘shock therapy’.

## HOW IS IT MEANT TO WORK?

It is not understood exactly how ECT works to treat anxiety, other than stimulating parts of the brain.

## DOES IT WORK?

### OCD

There have only been case studies of ECT for adults with severe, long-standing OCD that hasn’t improved with drug or psychological therapies. A review of 32 cases found that ECT improved OCD symptoms for most people for up to one year. However, these were poor-quality studies with no comparison groups.

### Other anxiety disorders

There is no evidence on whether Electroconvulsive Therapy works for GAD, PTSD, Social Phobia, Panic Disorder or Specific Phobias.

## ARE THERE ANY RISKS?

The most common side-effects of ECT are confusion and memory problems. There are also risks associated with having a general anaesthetic.

## RECOMMENDATION

There is not enough good-quality evidence as to whether ECT is helpful for severe OCD. ECT has not been tested in any other anxiety disorders. Given its potential side-effects, it is not a recommended treatment.

# Glucocorticoid drugs

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT ARE THEY?

Glucocorticoids are stress hormones that are released as part of the body's 'fight or flight' system. There are drugs available that act like these hormones. These drugs can be prescribed only by a doctor.

## HOW ARE THEY MEANT TO WORK?

There is evidence that glucocorticoids can alter memory processes, by making it easier to forget things. Since traumatic or fearful memories are associated with PTSD and Specific Phobias, it has been suggested that glucocorticoids may be helpful in treating these conditions by making it harder to remember fearful memories.

## DO THEY WORK?

### PTSD and ASD

There has been one low-quality study of the use of glucocorticoids in three people with long-standing PTSD. Over three months, they received either glucocorticoids or placebo (dummy) pills. Each person had fewer intrusive memories or nightmares when taking the glucocorticoid, compared to the placebo condition.

### Social Phobia

One study compared glucocorticoids to placebo pills in 20 people with Social Phobia who were exposed to a stressful situation (performing in front of an audience). The group that received the glucocorticoids reported less fear and anxiety than the people in the placebo group. The same researchers also gave either a glucocorticoid or placebo pills to 20 people who were not exposed to a stressful condition. There were no differences in fear symptoms between the two groups.

### Specific Phobias

Twenty people with spider phobias were given either a glucocorticoid or a placebo pill an hour before being shown a photograph of a spider. This procedure was repeated six times over a two-week period. The group that received the glucocorticoid reported less fear immediately after seeing the image of the spider than the placebo group.

### Other anxiety disorders

There is no evidence on whether glucocorticoids work for GAD, Panic Disorder or OCD.

## ARE THERE ANY RISKS?

Prolonged use of glucocorticoids can cause weight gain and easy bruising. It is not known whether these drugs cause memory problems.

## RECOMMENDATION

There is not enough good-quality research on whether glucocorticoids are useful for treating PTSD and phobias. The research to date shows that they may be helpful for temporarily reducing fear and anxiety. However, there is no evidence on whether they work over longer periods of time.

# Lithium

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | 👎 | Panic Disorder and Agoraphobia | 👎 |
| PTSD and ASD | 👎 | Specific Phobias | 👎 |
| Social Phobia | 👎 | OCD | 👎 |

## WHAT IS IT?

Lithium is a drug that is used mainly to treat bipolar disorder (previously called 'manic-depression'). It has also been used to treat depression. Lithium can be prescribed only by a doctor. Because depression and anxiety often occur together, lithium may be used to treat severe anxiety disorders. Lithium may be used in combination with other drugs. Here, we have reviewed studies in which lithium is used as the main treatment.

## HOW IS IT MEANT TO WORK?

It is not clear how lithium works to treat anxiety, other than to act on neurotransmitters (chemical messengers) in the brain.

## DOES IT WORK?

### PTSD and ASD

Lithium treatment for PTSD has been examined only in a series of case studies without comparison groups. The largest study involved 14 people who had not had any benefit from other drug treatments. Eight of the 14 reported an improvement in nightmares, jumpiness ('startle responses') and feeling out of control. Of the remaining people, two did not improve on lithium and two stopped taking the drug due to side effects.

### Other anxiety disorders

There is no evidence on whether lithium works for GAD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

## ARE THERE ANY RISKS?

Common side-effects of lithium include headaches, nausea and feeling dazed. High levels of lithium in the blood can be toxic and cause more serious side-effects, including tremor and convulsions, and in some cases death. People taking lithium must have their blood monitored to make sure the dose is at a safe level.

## RECOMMENDATION

There is little evidence for the use of lithium to treat anxiety disorders. Given its potential side-effects, it is not a recommended treatment.

# Psychosurgery (aka 'neurosurgery')

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | 👎 | Specific Phobias | 👎 |
| PTSD and ASD | 👎 | OCD – Overall | 👎 |
| Social Phobia | 👎 | For severe OCD that hasn't responded to other treatment | ? |
| Panic Disorder and Agoraphobia | 👎 | | |

## WHAT IS IT?

In psychosurgery, a very small cut or burn (a 'lesion') is made to a part of the brain. In anxiety disorders, the lesions are made in the parts of the brain that control emotions. Psychosurgery has been used only for severe, chronic and very disabling OCD that has not improved with other types of treatment. It is considered a 'treatment of last resort' because the surgery cannot be undone (i.e. it is not reversible).

In Australia, psychosurgery must be approved by a State Psychosurgery Review Board (which might be named differently in each state or territory). Only certain neurosurgeons are allowed to perform this kind of surgery.

## HOW IS IT MEANT TO WORK?

It is not known exactly how psychosurgery works. It may work by 'interrupting' brain processes that are causing symptoms.

## DOES IT WORK?

### OCD

Several studies have compared OCD symptoms before and after psychosurgery. In all studies, the people had severe, long-standing OCD. Overall, the studies showed that many, but not all, people improved after the surgery. Some studies showed that the benefits lasted many years after the surgery.

### Other anxiety disorders

There is no evidence on whether psychosurgery works for GAD, PTSD, Social Phobia, Panic Disorder or Specific Phobias.

## ARE THERE ANY RISKS?

There are many serious risks involved in psychosurgery. These can include damage to the brain which might affect movement, memory, or the senses (e.g. seeing or hearing). It can also cause changes in personality. Psychosurgery cannot be reversed.

## RECOMMENDATION

Given the risks and side-effects, psychosurgery is not a recommended treatment for anxiety disorders. People with severe, chronic and disabling OCD may benefit, but it is a 'last resort' treatment because of the risk of serious side-effects.

## Stimulant drugs

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | 👎 | Panic Disorder and Agoraphobia | 👎 |
| PTSD and ASD | 👎 | Specific Phobias | 👎 |
| Social Phobia | 👎 | OCD | 👎 |

### WHAT ARE THEY?

Stimulants help improve alertness and energy levels and are usually used to treat Attention Deficit Hyperactivity Disorder (ADHD). They are rarely used to treat anxiety disorders alone. They may be used to manage certain symptoms that may occur with anxiety, such as lack of energy or poor concentration. Only a doctor can prescribe these drugs. Common types of stimulants include amphetamines, methylphenidate and modafinil.

### HOW ARE THEY MEANT TO WORK?

Most stimulants work by increasing the activity of neurotransmitters (chemical messengers) in the brain. The effect of these drugs is usually felt quite quickly.

### DO THEY WORK?

**PTSD and ASD**

There is a single case report of an adult with PTSD who experienced some improvement in symptoms after taking a stimulant drug for six weeks. However, the drug was prescribed to treat the person's obesity, rather than to treat the PTSD.

**Other anxiety disorders**

There is no evidence on whether stimulant drugs work for GAD, PTSD, Social Phobia, Panic Disorder or Specific Phobias.

### ARE THERE ANY RISKS?

Side-effects may include headache, difficulty sleeping, a lack of appetite and nausea. Stimulants can be highly addictive and may lead to abuse or dependence in some people. Because these drugs 'stimulate' the brain, they may trigger panic attacks or increase anxiety.

### RECOMMENDATION

There is virtually no research evidence as to whether stimulants are helpful for managing anxiety. Given their potential side-effects, they are not a recommended treatment for anxiety disorders.

## Transcranial Magnetic Stimulation (TMS)

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | 👍 | Specific Phobias | ? |
| Social Phobia | ? | OCD | 👎 |

### WHAT IS IT?

TMS is a type of brain stimulation. A metal coil that contains an electric current is held to the side of the head. This produces a magnetic field that stimulates parts of the brain. TMS is usually given daily or several times a week. It is used mainly for people with severe and long-standing anxiety disorders who have not benefited from other medical treatments or psychological therapies.

### HOW IS IT MEANT TO WORK?

It is not known exactly how TMS works, other than stimulating parts of the brain.

### DOES IT WORK?

**GAD**

One study gave 10 people with GAD TMS six times over three weeks. After treatment, the people reported a decrease in their anxiety symptoms. However, there was no control group that received a sham (fake) TMS treatment.

**PTSD and ASD**

There has been one good study that gave actual or sham TMS to 24 people with PTSD. The treatments were given daily for 10 days. The results showed that actual TMS was better than the sham treatment in reducing PTSD and anxiety symptoms. Another study in nine people found that actual TMS was better at reducing PTSD symptoms than the sham treatment when combined with exposure therapy (see Behaviour Therapy, page 27).

**Panic Disorder and Agoraphobia**

One study involved 15 people whose Panic Disorder had not improved with antidepressant medication. They were given either actual or sham TMS each day for 10 days. All participants continued taking medication. The results showed no difference between the groups in reducing panic and anxiety symptoms.

### OCD

There have been three good-quality studies that have given 66 adults with OCD either actual TMS or a sham treatment. In each study, there was no difference in OCD symptoms between the active and the sham TMS groups at the end of the treatments.

### Other anxiety disorders

There is no evidence on whether TMS works for Social Phobia or Specific Phobias.

## ARE THERE ANY RISKS?

There is a risk of seizure with TMS. However, the risk is low. The effects of TMS on memory, attention and concentration are not yet understood.

## RECOMMENDATION

The current evidence from three small studies suggests that TMS is not effective for the treatment of OCD. Two studies suggest that it may be a promising treatment for PTSD. There is not enough evidence yet to say whether TMS is an effective treatment for other forms of anxiety disorder.

# Vagus Nerve Stimulation (VNS)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD |  | Panic Disorder and Agoraphobia |  |
| PTSD and ASD |  | Specific Phobias |  |
| Social Phobia |  | OCD |  |

## WHAT IS IT?

VNS is a type of brain stimulation. It requires surgery to insert a device (like a 'pacemaker') and wiring under the skin in the chest and neck. This sends electric signals to the vagus nerve, which is connected to the brain. VNS has been used mostly for people with severe depression or epilepsy.

## HOW IS IT MEANT TO WORK?

This is unclear, but it is thought to affect brain chemistry and blood flow to different parts of the brain.

## DOES IT WORK?

There has been only one low-quality study of VNS in people whose anxiety disorders had not responded to previous medications or psychological treatments. VNS devices were implanted in seven people with OCD, two with PTSD and one with Panic Disorder. All were allowed to keep using any medications they were receiving. The results showed that only three people improved by the end of the study (12 weeks). The study was low-quality because VNS was not compared to no treatment or fake treatment (e.g. 'sham' VNS).

### Other anxiety disorders

There is no evidence on whether VNS works for GAD, Social Phobia or Specific Phobias.

## ARE THERE ANY RISKS?

As surgery is involved in VNS, it is a highly invasive procedure. Voice changes are common, and neck pain can also occur.

## RECOMMENDATION

There is not enough evidence to say whether or not VNS works for anxiety disorders. Given the risks and side-effects, it is not a recommended treatment.

# Psychological and Counselling Interventions

## Acceptance and Commitment Therapy (ACT)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

ACT is a type of Cognitive Behaviour Therapy (CBT). However, it is different to CBT because it does not teach people how to change their thinking and behaviour. Rather, ACT teaches them to 'just notice' and accept their thoughts and feelings, especially unpleasant ones that they might normally avoid. This is because ACT therapists believe it is unhelpful to try to control or change distressing thoughts or feelings. In this way, it is similar to Mindfulness Based Cognitive Therapy (MBCT, see page 33). ACT usually involves individual meetings with a therapist.

### HOW IS IT MEANT TO WORK?

ACT is thought to work by helping people accept difficult emotions and avoid 'over thinking' these experiences. Over thinking occurs when people focus on their 'self talk' rather than the experiences themselves. ACT encourages people to accept their reactions and to experience them without trying to change them. Once the person has done this, he/she is encouraged to respond to situations in ways that are consistent with the person's life goals. The person is then encouraged to put those choices into action.

### DOES IT WORK?

There has been one study that compared ACT with CBT (see page 29) in a mixed group of people with anxiety and depression problems. It found that ACT was as about as effective as CBT.

**Social Phobia**

There has also been one study that tested ACT in people with Social Phobia. It found that many people improved, but did not compare ACT with no treatment or with another treatment.

**OCD**

There has been one study that tested ACT in people with OCD. As with the study on Social Phobia, it found that many people improved, but it did not compare ACT to another treatment.

**Other anxiety disorders**

There is no evidence on whether ACT works for GAD, PTSD, Panic Disorder or Specific Phobias.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough evidence to say whether or not ACT works.

# Applied muscle tension

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias (Blood and injury phobia) | 👍 |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

People who have strong anxiety reactions to blood or injuries often show a unique response, where their blood pressure initially rises, then drops dramatically. When the blood pressure drops, these people sometimes faint. Applied muscle tension teaches people to raise their blood pressure by tensing their muscles when they are around blood or injuries to prevent this response.

## HOW IS IT MEANT TO WORK?

Teaching people to raise their blood pressure using muscle tension reduces the likelihood of fainting and helps people to gain confidence that they can cope with seeing blood or injuries. In this way, progressively, they are able to confront and overcome their fear.

## DOES IT WORK?

### Specific Phobias

Applied muscle tension was specifically designed for blood and injury phobia. There have been a small number of studies that have found that applied muscle tension works as well as relaxation training (see page 54), and one that has found it is better than exposure therapy alone (see Behaviour Therapy, page 27).

### Other anxiety disorders

There is no evidence on whether applied muscle tension works in GAD, PTSD, Social Phobia, Panic Disorder or OCD.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

There is some evidence that applied muscle tension helps blood and injury phobias.

# Art therapy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

Art therapy is a form of treatment that encourages people to express their feelings using art materials, such as paints, chalk or pencils. In art therapy, the person works with a therapist, who combines other techniques with drawing, painting or other types of art work, and often focuses on the emotional qualities of the different art materials.

## HOW IS IT MEANT TO WORK?

Art therapy is based on the belief that the process of making a work of art can be healing. Issues that come up during art therapy are used to help the person to cope better with stress, work through traumatic experiences, improve his/her decisions, and have better relationships with family members and friends.

## DOES IT WORK?

### PTSD and ASD

One study examined the effect of a one-hour session of art therapy on children who had PTSD symptoms after physical injury. In the session, art was used to retell the incident. Children who did the art therapy intervention did not appear to reduce their PTSD symptoms more than children who did not do art therapy.

### Other anxiety disorders

There is no evidence on whether art therapy works in GAD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

We do not yet know if art therapy works for anxiety disorders.

# Behaviour Therapy (BT) (aka 'exposure therapy')

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | 👍👍 |
| PTSD and ASD | 👍👍👍 | Specific Phobias | 👍👍👍 |
| Social Phobia | 👍👍 | OCD | 👍👍👍 |

## WHAT IS IT?

Behaviour Therapy (BT) for anxiety disorders relies mainly on a treatment called 'graded exposure'. There is a number of different approaches to exposure therapy. However, they are all based on exposing people to the things that make them anxious. These approaches include:

### In vivo exposure

This involves confronting the feared situation, usually in a gradual way. 'In vivo' means 'in real life'. The treatment usually lasts a number of hours. It can be completed in one long session or across multiple sessions. This treatment might also include being exposed to body sensations of anxiety (like giddiness or shortness of breath). Applied muscle tension (see page 26) is a treatment of this type used for phobias of blood, injection or injury.

### Virtual reality exposure

Virtual reality exposure uses a computer program to create the feared situation. The simulated environment changes in a natural way depending on the person's head or body movements. Getting the exposure through virtual reality has a number of advantages. The person can be exposed safely (e.g. to spiders or heights) in a convenient and private location (e.g. an office). For some feared situations (e.g. flying), it is cheaper to use virtual reality than real life exposure. Virtual reality exposure therapy is used mainly in the treatment of phobias. However, it has been used with some other anxiety disorders too. This treatment is provided by practitioners with specialist equipment.

### Systematic desensitisation

This involves gradually exposing the person to fearful mental images and thoughts or to actual situations, while the person has relaxed using relaxation training (see page 54). The exposure starts with situations that produce mild fears and works up to the most fearful.

### Flooding (also called 'implosion therapy')

This involves intensive rather than gradual exposure to the situations the person fears. The exposure can be in real life or using mental images (imaginal exposure).

Behaviour Therapy is often combined with cognitive approaches as part of Cognitive Behaviour Therapy (CBT, see page 29). This section reviews evidence for using BT alone, without the cognitive aspects of CBT.

## HOW IS IT MEANT TO WORK?

Anxiety problems often persist because the person avoids fearful situations. Avoiding these situations means that the person does not have the opportunity to learn that he/she can cope with the fear. The person needs to learn that their fear will reduce without the need to avoid or escape the situation and that their fears about the situation often do not come true or are not as bad as they thought.

## DOES IT WORK?

There are different types of exposure treatments that are specifically designed for different types of anxiety problems.

### GAD

There is no evidence on whether Behaviour Therapy works for GAD.

### PTSD and ASD

PTSD is often treated using an approach called 'prolonged exposure', which uses exposure in real life or in imagination to help people confront memories of their traumatic experiences. There is strong support for this approach across a number of well-designed studies. Virtual reality exposure therapy has been used in the treatment of PTSD, particularly in war veterans. One study found that it was more effective than bibliotherapy (reading a self-help book, see page 43).

### Social Phobia

Exposure treatment for Social Phobia is generally done in groups, where participants have the opportunity to expose themselves to difficult situations like meeting new people or public speaking. Several studies have found that group exposure treatments for Social Phobia do work, although one study has found that CBT is more effective. One study found that virtual reality exposure therapy worked as well as real life exposure. There have been no studies comparing virtual reality exposure therapy to no treatment.

### Panic Disorder and Agoraphobia

Exposure to body sensations of anxiety has been tested in one study and found to be more helpful than no treatment for Panic Disorder. In vivo exposure and virtual reality exposure have also been found to be effective in a small number of studies. Panic Disorder can also be treated by a type of exposure therapy called 'applied relaxation', which is similar to systematic desensitisation. Two studies have shown that applied relaxation is better than no treatment at reducing Panic Disorder symptoms. Two studies have compared applied relaxation to CBT and found that both produced strong improvements. One study found that CBT was more effective than applied relaxation.

### Specific Phobias

There is strong evidence that in vivo exposure and virtual reality exposure work for Specific Phobias. Several good-quality studies have shown that in vivo exposure is better than no treatment. It is also as effective as other types of treatment including CBT and imaginal exposure (see page 31). Virtual reality exposure therapy has been used to treat various types of phobias, particularly fear of heights and flying. Studies have been carried out comparing it to no treatment, to other forms of exposure therapy and to relaxation training. A pooling of data from these studies found that it works better than no treatment and at least as well as real life exposure. Exposure is one of the best treatments available for these problems.

### OCD

OCD is treated with a type of exposure called 'exposure and response prevention'. This involves exposing the person to anxiety-producing thoughts or situations and then preventing them from using rituals or compulsions to reduce the anxiety. For example, a person might be asked to get dirt on his/her hands and then not wash them, even though the person is worried about being infected. There is strong evidence from a number of good-quality studies that this approach works.

## ARE THERE ANY RISKS?

Confronting fearful situations can be extremely distressing and is best done with the support of a health professional. If exposure is not done carefully, it can make a person's anxiety worse.

## RECOMMENDATION

There is strong evidence that behaviour (exposure) therapies work for PTSD, OCD and Specific Phobias. There is moderate support that they work with Social Phobia, Panic Disorder and Agoraphobia.

# Biofeedback

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

In biofeedback, people are trained to recognise and control body functions that they are not normally aware of. These include blood pressure, heart rate, skin temperature, sweat gland activity, muscle tension, breathing and brain activity.

## HOW IS IT MEANT TO WORK?

Many body functions change during times of stress. In biofeedback, machines are used to feed back information about these changes to people. As biofeedback helps people to control these responses to stress, it may also help to reduce anxiety.

## DOES IT WORK?

### GAD

One study compared muscle biofeedback and two types of brain-wave biofeedback with 'fake' meditation and with no treatment. Thirty-eight people with GAD received two, one-hour sessions weekly for four weeks. People in the muscle biofeedback group and one of the brain-wave groups had lower anxiety symptoms. Improvements were maintained six weeks after treatment.

### PTSD and ASD

One study looked at brain-wave biofeedback compared with no biofeedback in 29 Vietnam veterans receiving hospital treatment for PTSD. Participants received 30, three-minute sessions of biofeedback. PTSD symptoms were lower in the biofeedback group and they also needed less medication. People in this group were also less likely to suffer a relapse.

### OCD

Biofeedback has not yet been properly evaluated in well-designed studies. There are only reports of treatments with individual cases of OCD.

### Other anxiety disorders

There is no evidence on whether biofeedback works for Social Phobia, Panic Disorder or Specific Phobias.

## RECOMMENDATION

We do not yet know if biofeedback works for anxiety disorders.

## Cognitive Behaviour Therapy (CBT)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD |  | Panic Disorder and Agoraphobia |  |
| PTSD and ASD |  | Specific Phobias |  |
| Social Phobia |  | OCD |  |

### WHAT IS IT?

In CBT, people work with a therapist to look at patterns of thinking (cognition) and acting (behaviour) that are making them more likely to have problems with anxiety, or are keeping them from improving once they become anxious. Once these patterns are recognised, then the person can make changes to replace these patterns with ones that reduce anxiety and improve coping. It can be conducted in individual meetings with a therapist, or in groups. Treatment length can vary, but is usually conducted over four to 24 weekly sessions. CBT is often combined with Behaviour Therapy (see page 27).

### HOW IS IT MEANT TO WORK?

CBT is thought to work by helping people to recognise patterns in their thinking and behaviour that make them more vulnerable to anxiety. For example, thinking that is focused on threats and dangers is often linked with anxiety. In CBT, the person works to change these patterns to use more realistic and problem-solving thinking. As well, anxiety is often increased when a person actively avoids things of which he/she is afraid. Learning to face up to situations that are anxiety-provoking is also often helpful.

### DOES IT WORK?

CBT has been assessed in a large number of high-quality studies. It has been applied to all the anxiety disorders covered in this book and has been found to be effective. A statistical pooling of data from all these studies showed that CBT is one of the best treatments available for anxiety disorders.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

CBT is a highly recommended treatment for all anxiety disorders.

## Dance and Movement Therapy (DMT)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

DMT combines expressive dancing with discussion of a person's life difficulties. A DMT session usually involves a warm-up and a period of expressive dancing or movement. This is followed by discussion of the person's feeling and thoughts about the experience and how it relates to his/her life situation.

### HOW IS IT MEANT TO WORK?

DMT is based on the idea that the body and mind interact. It is thought that a change in the way someone moves will have an effect on their patterns of feeling and thinking. It is also assumed that dancing and movement may help to improve the relationship between the person and the therapist, and may help the person to express feelings of which he/she isn't otherwise aware. Learning to move in new ways may help people to discover new ways of expressing themselves and to solve problems.

### DOES IT WORK?

DMT has not yet been properly evaluated in well-designed studies. There are only reports of treatments with individual cases.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

We do not yet know if DMT works for anxiety disorders.

# Eye Movement Desensitisation and Reprocessing (EMDR)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD |  | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

EMDR was developed to treat symptoms resulting from disturbing or traumatic experiences. It involves recalling these life experiences for short periods (15-30 seconds) while also moving the eyes back and forth. Sometimes, another task, such as hand tapping or listening to tones, is used instead of eye movements.

## HOW IS IT MEANT TO WORK?

There are two theories about how EMDR works. One says that eye movements specifically help the person to deal with traumatic memories at a biological and psychological level. The other says that the eye movements do not have a special role in dealing with the trauma. Rather, they simply help people to expose themselves to disturbing memories (see Behaviour Therapy, page 27), which is really responsible for the improvements.

## DOES IT WORK?

### PTSD and ASD

There have been many good-quality studies of EMDR for PTSD. A pooling together of data from these studies showed that it is one of the most effective treatments for these conditions. It is much better than no treatment and as effective as Cognitive Behaviour Therapy (see page 29) and Behaviour Therapy (see page 27).

### Other anxiety disorders

There is no evidence on whether EMDR works for GAD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

## ARE THERE ANY RISKS?

Confronting traumatic memories can be extremely distressing for some people and may best be done with the support of a health professional.

## RECOMMENDATION

EMDR is a recommended treatment for PTSD. There is not enough evidence to say whether it works for other anxiety disorders.

# Family therapy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

Family therapy involves a number of different treatment approaches that all treat family relationships as important for mental health. Usually, the whole family (or at least some family members) will attend treatment sessions, rather than just the person with the anxiety disorder. The therapist helps the family members to change their pattern of communication, so that their relationships are more supportive and there is less conflict. Family therapy approaches are most often used when a child or adolescent has the anxiety disorder.

## HOW IS IT MEANT TO WORK?

Family therapists take the view that, even if the problem mainly involves one family member, involving the whole family in the solution will be the most helpful approach. This is especially true when a child or adolescent is affected. This is because relationships play a large role in how we feel about ourselves and our ability to cope with fears. When family relationships are supportive and honest, this will often help to resolve problems and improve the ability of family members to cope with anxiety.

## DOES IT WORK?

There have been no studies testing whether family therapy that focuses on family relationships reduces anxiety. However, there have been many studies showing the benefits of involving the family to help with Cognitive Behaviour Therapy (see page 29), for anxiety disorders in children.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

There is not enough evidence to say whether or not family therapy works. However, involving the family to help with CBT is effective for children with anxiety disorders.

## Flooding (aka 'implosion therapy')

Flooding involves intensive, rather than gradual, exposure to situations that a person fears. The exposure can be in real life or using mental images. This is a type of Behaviour Therapy and is covered on page 27.

## Hypnosis

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Hypnosis involves a therapist helping the person to get into a hypnotic state. This is an altered state of mind in which the person can experience very vivid mental imagery. Time may pass more slowly or more quickly than usual and people often notice things that are passing through their mind that they might not otherwise notice. People might also find that they are able to ignore or forget about certain painful or unpleasant emotional experiences, including physical pain.

### HOW IS IT MEANT TO WORK?

Hypnosis is usually used along with another type of treatment, such as psychodynamic psychotherapy (see page 34) or Cognitive Behaviour Therapy (CBT, see page 29). This means that there are many different types of hypnosis treatment. However, all of the treatments use hypnosis to help the person to make important changes, such as resolving emotional conflicts, focusing on strengths, becoming more active, tolerating anxious feelings or changing ways of thinking. It is believed that these changes are easier to make when the person is in a hypnotic state.

### DOES IT WORK?

Most of the studies that have looked at hypnosis for anxiety disorders report case studies (descriptions of treatment with an individual person).

**PTSD and ASD**

There is one good-quality study suggesting that adding hypnosis to CBT for ASD might make CBT more effective.

**Other anxiety disorders**

There is no evidence on whether hypnosis works for GAD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough evidence to say whether hypnosis works. While there is some evidence that hypnosis may enhance the benefits of CBT for ASD, this needs to be confirmed in other studies.

## Imaginal exposure

In imaginal exposure, the person is asked to imagine a feared object or situation rather than experiencing it in real life. This is a type of Behaviour Therapy and is covered on page 27.

# Interpersonal Psychotherapy (IPT)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

IPT was originally designed to treat depression. It focuses on problems in personal relationships and on building skills to deal with these problems. IPT is based on the idea that these interpersonal problems are a significant part of the cause of emotional problems. It focuses on personal relationships, rather than what is going on in the person's mind (e.g. thoughts and feelings). Treatment length can vary, with IPT usually conducted over four to 24 weekly sessions.

## HOW IS IT MEANT TO WORK?

IPT is thought to work by helping people to recognise patterns in their relationships with others that make them more vulnerable to emotional problems like depression and anxiety. In this treatment, the person and therapist focus on specific interpersonal problems, such as grief over lost relationships, different expectations in relationships between the person and others, giving up old roles to take on new ones, and improving skills for dealing with other people. By helping the person to overcome these problems, IPT aims to help the person to control his/her anxiety.

## DOES IT WORK?

### PTSD and ASD

One study has been done in women with PTSD and found that IPT was more effective than no treatment.

### Social Phobia

IPT has been compared to Cognitive Behaviour Therapy (see page 29) and supportive therapy (see page 37) and found to work about as well as these two therapies. However, it has not been compared to no treatment.

### Panic Disorder and Agoraphobia

There has been one study of IPT for Panic Disorder. Although most of the people in this study improved, there was no comparison group, so it is hard to say whether they might have improved anyway without the IPT.

### Other anxiety disorders

There is no evidence on whether IPT works for GAD, Specific Phobias or OCD.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

While there is some evidence that IPT works for PTSD and Social Phobia, more studies are needed. There is not enough evidence to say whether or not it works for other anxiety disorders.

# In vivo exposure

In vivo exposure involves confronting a feared situation, usually in a gradual way. This is a type of Behaviour Therapy and is covered on page 27.

# Mindfulness Based Stress Reduction (MBSR)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

MBSR involves learning a type of meditation called 'mindfulness meditation'. This type of meditation teaches people to focus on the present moment. People just notice whatever they are experiencing, including pleasant and unpleasant experiences, without trying to change them. At first, this approach is used to focus on physical sensations (like breathing). MBSR also includes gentle yoga. It is generally delivered in groups. MBSR is sometimes combined with Cognitive Behaviour Therapy (CBT, see page 29) and is known as Mindfulness Based Cognitive Therapy (MBCT).

## HOW IS IT MEANT TO WORK?

MBSR helps people to change their state of mind so that they can experience what is happening right now. People with anxiety disorders often worry about future events. Focusing on the present stops their minds wandering off into thoughts about the future or the past. This is thought to be helpful in preventing anxiety. It may also help to prevent people from behaving in unhelpful ways as they try to avoid unpleasant thoughts and feelings. Yoga may also have some physical health benefits.

## DOES IT WORK?

One study examined the effect of MBSR on a group of 22 people diagnosed with either GAD or Social Phobia. Twenty people had reduced anxiety after the course and for three months afterwards. The number of people having panic attacks was also reduced. Three years later, the researchers contacted 18 of the people in the study and assessed their anxiety levels. They found that the benefits were maintained and many of the people were still meditating. However, there was no comparison with a group that did not recieve treatment.

Another study examined the effect of MBSR on a group of people, 17 of whom had experienced one or more anxiety disorders. These people were compared with another group who did not take part in the MBSR course. In MBSR, participants' anxiety levels were lower after the course. Most of the benefits appeared to be due to reductions in dwelling on negative thoughts.

### GAD

In one small study, 11 people with GAD participated in an eight-week MBCT course. They met once a week for two hours and also practised mindfulness meditation at home. All participants were less anxious at the end of the course. However, there was no comparison group in this study, so we don't know whether MBCT was more helpful than no treatment.

### Social Phobia

MBSR has been compared to group CBT in 53 people with Social Phobia. Participants took part in either an eight-week MBSR course or 12 weeks of group CBT. People in both groups improved, but people in the CBT group had lower Social Phobia symptoms. People in the CBT group were also less likely to experience the return of Social Phobia.

### Other anxiety disorders

There is no evidence on whether MBSR works for PTSD, Panic Disorder, Specific Phobias or OCD.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

More studies are needed before we can say that MBSR is effective for anxiety disorders.

## Neurolinguistic Programming (NLP)

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

NLP was developed in the 1970s. It was based on observing people who were thought to be expert therapists. NLP tries to teach people to use language in a similar way to these people. In this way, they may also be effective therapists.

### HOW IS IT MEANT TO WORK?

NLP emphasises changing the language we use. This may then change the way we see ourselves and the things that happen to us. In NLP, a therapist uses specific patterns of communication with a person. This may include matching the person's preferred sensory mode – vision, hearing or touch. The aim is to change negative and self-defeating perceptions into positive ones. This helps to change the way people interpret their world. In this way, NLP aims to reduce anxiety.

### DOES IT WORK?

**Specific Phobias**

In one study, NLP was used to treat patients with claustrophobia who had to undergo a brain scan in an enclosed scanner. In this study, 50 people who had refused an MRI because of claustrophobia had an NLP session. After the session, 38 people were then able to have the MRI. These patients were also less anxious. However, since there was no comparison group, it is not possible to say how effective the NLP was.

**Other anxiety disorders**

There is no evidence on whether NLP works for GAD, PTSD, Social Phobia, Panic Disorder or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough evidence to say whether NLP is effective for anxiety disorders.

## Psychoanalysis

Psychoanalysis focuses on the unconscious patterns in the mind and the roles these play in psychological problems. Unconscious patterns include thoughts and feelings of which a person is not aware. There are many different types of psychoanalysis. In traditional psychoanalysis, a person may see a therapist three to five times per week and the therapy may last for a number of years. Often, people lie on a couch during psychoanalytic sessions. Psychoanalysis is a particular type of psychodynamic psychotherapy and is covered below.

## Psychodynamic psychotherapy

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | 👍 | Panic Disorder and Agoraphobia | 👍 |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Psychodynamic psychotherapy focuses on the unconscious patterns in the mind and the roles these play in psychological problems. Unconscious patterns include thoughts and feelings of which a person is not aware. Short-term psychodynamic psychotherapy usually takes about 20 to 30 weeks. Long-term psychodynamic psychotherapy can take more than a year and, in some cases, it takes many years. Psychoanalysis is a type of long-term psychodynamic psychotherapy. In psychoanalysis, the person may lie on a couch and talk about whatever is going though his/her mind. However, most often in psychodynamic psychotherapy, the person and therapist sit and talk to each other 'face to face', in a similar way to other types of psychological therapy.

### HOW IS IT MEANT TO WORK?

In psychodynamic psychotherapy, therapists work with the person's thoughts, images and feelings. The therapist's relationship with the person is also used to understand emotional problems of which the person is not aware. These are often issues related to experiences early in life such as during childhood. By making the person more aware of these 'unconscious' conflicts, he/she can deal with them. This can help to resolve issues that can cause anxiety.

## DOES IT WORK?

### GAD

Several studies have tested the effectiveness of brief psychodynamic psychotherapy in treating GAD. Most of these suggest that it is helpful. However, the studies have mostly not been good quality. Some used groups of people with a range of anxiety disorders. Others have not used large enough numbers of people or comparison (control) groups.

Psychodynamic psychotherapy has also been compared with Cognitive Behavioural Therapy (CBT) in two studies. In one study, the results showed that while both types of therapy improved symptoms, CBT was more effective. In this study, having eight to 10 sessions of therapy was as effective as 16 to 20 sessions.

A second good-quality study also compared brief psychodynamic psychotherapy and CBT. It found that both types of therapy helped anxiety symptoms, although CBT was more effective in reducing worry and depression. Another study compared psychodynamic psychotherapy alone, medication alone and combined treatment. All treatments were equally effective.

### PTSD and ASD

One study compared psychodynamic psychotherapy, systematic desensitisation, hypnotherapy and no treatment. Results showed that all three treatments were more effective than no treatment. Another study looked at the effect of psychodynamic psychotherapy in Vietnam veterans. Twenty-three people completed the treatment, which averaged 56 sessions. All 23 people improved in some aspects of PTSD. Another study examined the effect of 12 sessions of psychodynamic psychotherapy in victims of violent crime. Eight people completed the treatment and all but one had good results. However, these two studies had no control groups.

### Social Phobia

One study looked at the effects of psychodynamic psychotherapy on Social Phobia. Forty-two people received medication and education about the disorder. In addition, participants received either psychodynamic psychotherapy, relaxation training (see page 54) or imaginal exposure (see page 31). Psychodynamic psychotherapy was more effective than relaxation, but less effective than imaginal exposure.

### Panic Disorder and Agoraphobia

Several case studies and lower-quality studies have shown benefits of psychodynamic psychotherapy in people with Panic Disorder. In one better-quality study, researchers compared psychodynamic psychotherapy and relaxation training in 49 people. Both treatments were given twice a week for 12 weeks. People in the psychodynamic psychotherapy group had fewer panic attacks than those in the relaxation group. They also felt that their lives were less affected by the disorder than those in the relaxation group.

Another study compared treatment with medication and 15 sessions of psychodynamic psychotherapy to treatment with medication alone. After nine months, participants in both groups were free of panic attacks and stopped taking the medication. Results showed that those in the psychodynamic psychotherapy group were less likely to start having panic attacks again.

### Other anxiety disorders

There is no evidence on whether psychodynamic psychotherapy works for Specific Phobias or OCD. There has been one study pooling the results of studies of long-term psychodynamic psychotherapy. This showed that it may be more helpful than short-term treatment for people with complex mental health problems.

## ARE THERE ANY RISKS?

No major risks are known. However, the long-term therapy can be expensive and time consuming. It might be important to consider whether a short-term treatment might be just as effective, if not more so.

## RECOMMENDATION

Both short- and long-term types of psychodynamic psychotherapy appear to work for GAD. However, some larger studies should be done so we can be more confident of this. It is not yet known whether psychodynamic psychotherapy is effective in treating PTSD, Panic Disorder or Social Phobia.

# Rational Emotive Therapy (RET)

In RET, people work with a therapist to look at unreasonable beliefs that may stop them achieving their goals and lead to anxiety. They then work to replace these with more reasonable beliefs. This is done by challenging beliefs though philosophical discussions with the therapist and experimenting with new types of behaviour. This is a type of Cognitive Behaviour Therapy and is covered on page 29.

## Relationship therapy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Relationship therapy aims to help an anxious person by improving his/her relationship with his/her partner. Both partners come for a series of counselling sessions over a period of eight to 24 weeks.

### HOW IS IT MEANT TO WORK?

Relationship therapy has three main aims. The first is to reduce negative interactions between partners, such as arguments, criticisms and abuse. The second aim is to increase supportive interactions, such as praise, empathy, forgiveness and problem solving. The third is to make sure that the partner is not doing anything to keep the anxious person from overcoming his/her problems. By changing the couple's behaviour in a positive way, it is believed that their satisfaction with their relationship will improve, and this will help the partner who is anxious.

### DOES IT WORK?

There have been no studies testing whether relationship therapy that focuses on relationships works for anxiety disorders. However, there have been a large number of studies on involving partners to assist with Cognitive Behaviour Therapy (CBT, see page 29) or Behaviour Therapy (see page 27). This involves the partner assisting directly with the treatment program and appears to be an effective approach.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough evidence to say whether or not relationship therapy works for anxiety disorders.

## Social skills training

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Social skills training is mainly used for Social Phobia. It involves learning how to interact in social situations with the help of a therapist. Sometimes, social skills training is used on its own. However, it is more often used as part of a broader Cognitive Behaviour Therapy (CBT, see page 29) package.

### HOW IS IT MEANT TO WORK?

Some people with Social Phobia may not know how to act in various social situations. Social skills training teaches them these skills. Other people may have the social skills, but be afraid to use them. For these people, social skills training gives them a chance to practise using their skills in a non-threatening situation.

### DOES IT WORK?

**Social Phobia**

No studies have compared social skills training with no treatment. However, several studies have compared it to other psychological therapies. Two studies found that social skills training worked as well as CBT, but a third study found it did not work as well. There have also been a number of studies that looked at whether there was benefit in adding social skills training to CBT. Two studies found that it did not add anything, but a third study found that it did.

**Other anxiety disorders**

There is no evidence on whether social skills training works for GAD, PTSD, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough good evidence to say whether social skills training works for Social Phobia.

## Supportive therapy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Supportive therapy is a type of psychological therapy that aims to help the person to function better by providing personal support. In general, the therapist does not ask the person to change; rather the therapist acts as a support person, allowing the person to reflect on his/her life situation in an environment where he/she is accepted.

### HOW IS IT MEANT TO WORK?

Supportive therapists believe that for some people with long-term problems, the most helpful approach is to provide them with a reliable, accepting counselling relationship. This helps them cope with the challenges of day-to-day life and is especially useful for dealing with long-term problems that are difficult to change. The relationship of support and acceptance with the person's therapist is critical to helping the person to cope better, even if the person cannot change many of the problems he/she is facing.

### DOES IT WORK?

#### GAD

Several studies have compared supportive therapy to Cognitive Behaviour Therapy (CBT, see page 29) and found that it did not work as well. There are no studies comparing supportive therapy to no treatment.

#### PTSD and ASD

Many studies have compared supportive therapy to CBT. These studies found that it did not work as well for either ASD or PTSD. One study compared supportive therapy with no treatment for PTSD. This study found that supportive therapy worked better than no treatment.

#### Social Phobia

Several studies have compared supportive therapy to CBT and found that it did not work as well. One study compared it to Interpersonal Psychotherapy (IPT, see page 32) and found no difference in effects. There are no studies comparing supportive therapy to no treatment.

#### Panic Disorder and Agoraphobia

Two studies have found that supportive therapy did not work as well as CBT. There are no studies comparing supportive therapy to no treatment.

#### Specific Phobias

One study has been done on school phobia in children. This found that supportive therapy was as effective as CBT. There are no studies comparing supportive therapy to no treatment.

#### OCD

There is no evidence on whether supportive therapy works for OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough evidence to say whether supportive therapy works for anxiety disorders. However, it does not work as well as CBT for most anxiety disorders.

## Systematic desensitisation

Systematic desensitisation involves gradually exposing a person to fearful mental images and thoughts or to actual situations, while the person has relaxed using relaxation training. This is a type of Behaviour Therapy and is covered on page 27.

# Complementary and Lifestyle Interventions

## Acupuncture

| | Our rating | | Our rating |
|---|---|---|---|
| GAD |  | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Acupuncture is a technique of inserting fine needles into specific points on the body. The needles are usually rotated by hand. They can also have an electric current applied to them. A laser beam can be used instead of needles. Acupuncturists' contact details can be found in the Yellow Pages. Professional associations also keep a list of accredited members. These include the Australian Acupuncture Chinese Medicine Association, the Chinese Medicine Registration Board, the Australian Natural Therapists Association, and the Australian Traditional Medicine Society. Acupuncture is not covered by Medicare, but may be available as an extra with private health insurance.

### HOW IS IT MEANT TO WORK?

This is not clear. Traditional Chinese medicine says it works by correcting the flow of energy in the body. According to Western medicine, it may stimulate nerves. This results in the release of neurotransmitters (chemical messengers) in the brain.

### DOES IT WORK?

#### GAD

Five studies have evaluated acupuncture for GAD in adults. These compared acupuncture with sham (fake) acupuncture, Behaviour Therapy (BT), or different drugs. Generally, positive results for acupuncture were found. However, the studies were not high in scientific quality.

#### PTSD and ASD

One study has been carried out in 84 adults with PTSD. One group received a one-hour session of acupuncture twice a week. Another group received a two-hour session of Cognitive Behaviour Therapy (CBT) once a week. A comparison group received no treatment. The study lasted for 12 weeks. At the end of the study, symptoms had improved in the acupuncture and CBT groups, but not in the control group. These improvements were maintained three months later.

### OCD

One study has been carried out in 60 people with OCD. Treatment consisted of an antidepressant, or an antidepressant plus daily acupuncture sessions. The study lasted for eight weeks. Most people improved, but the antidepressant plus acupuncture treatment was more effective.

### Other anxiety disorders

There is no evidence on whether acupuncture works for Social Phobia, Panic Disorder or Specific Phobias.

## ARE THERE ANY RISKS?

Acupuncture is not free of risk, but is relatively safe when practised by an accredited professional. Minor bleeding and bruising may occur.

## RECOMMENDATION

Acupuncture appears to be effective for GAD. There is not enough good evidence to say whether acupuncture works for other anxiety disorders.

# Alcohol

| | Our rating | | Our rating |
|---|---|---|---|
| GAD |  | Panic Disorder and Agoraphobia |  |
| PTSD and ASD |  | Specific Phobias |  |
| Social Phobia |  | OCD |  |

## WHAT IS IT?

Some people with anxiety disorders drink alcohol to reduce anxiety.

## HOW IS IT MEANT TO WORK?

Alcohol could work in a similar way to the anti-anxiety drug diazepam. It could also work by reducing attention in anxious situations or because the drinker believes it will help.

## DOES IT WORK?

Several studies have been carried out in people with anxiety disorders, particularly Panic Disorder and Social Phobia. These studies gave people alcohol or a placebo (non-alcoholic) drink. They were then put in an anxious situation. Many of these studies show alcohol reduces anxiety more than the non-alcohlic drink. However, not all studies had this finding.

## ARE THERE ANY RISKS?

Although alcohol may decrease anxiety for a short while, repeated use can worsen anxiety. This can occur through changes in the brain, by disrupting the learning processes that teach a person not to be anxious, or by disrupting social or work life. Alcohol abuse can lead to liver and brain damage.

## RECOMMENDATION

Alcohol should not be used to cope with anxiety because with repeated use it may worsen anxiety. Repeated use can cause dependence and long-term use can cause severe health problems.

## Aromatherapy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Aromatherapy is the use of essential oils for healing. Essential oils are highly concentrated extracts of plants. They can be diluted in carrier oils and absorbed through the skin, or heated and vaporised into the air. They are not taken by mouth.

### HOW IS IT MEANT TO WORK?

This is not known. Mood could be affected by the pleasant odour or by memories and emotions that are triggered by the smell. Alternatively, the oil's chemical components may have drug-like effects.

### DOES IT WORK?

One study has been carried out in six adults with anxiety and depression. They received an hour-long aromatherapy massage weekly for six weeks. Choice of essential oils was specific to each adult. Anxiety improved immediately after the massages, as well as over the six weeks. However, there was no comparison group that did not receive treatment.

### ARE THERE ANY RISKS?

Essential oils should not be used undiluted as they can irritate the skin. Some oils may interact with conventional medicine. Some essential oils are not recommended for use during pregnancy.

### RECOMMENDATION

There is not enough good evidence to say whether aromatherapy works.

## Ashwagandha (*Withania somnifera*)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Ashwagandha is a herb that originated in India. It is used to treat a number of health problems, including stress and anxiety.

### HOW IS IT MEANT TO WORK?

This is not understood. It is thought that ashwagandha might act like the anti-anxiety medication diazepam (see page 12).

### DOES IT WORK?

One study has been carried out in 39 patients with a range of anxiety disorders. One group took a daily dose of 500mg ashwagandha and one group took a placebo (dummy pills). After six weeks, people in the ashwagandha group had lower symptoms of anxiety.

### ARE THERE ANY RISKS?

No risks were found in the study above.

### RECOMMENDATION

While there is some initial positive evidence, more studies are needed to say whether ashwagandha works.

# Autogenic training

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

Autogenic training is a relaxation method. It involves regular practice of simple mental exercises in body awareness. These exercises involve concentrating on breathing, heartbeat, and warmth and heaviness of body parts.

## HOW IS IT MEANT TO WORK?

Autogenic training aims to improve a person's ability to relax by retraining the mind to calm itself.

## DOES IT WORK?

### GAD

One small study in adults with GAD compared autogenic training with either anti-anxiety drugs or breathing training. Training sessions were three times a week for six weeks, followed by a session once a month for four months. All treatments led to decreases in anxiety symptoms. However, improvement was greater in the autogenic training and breathing training groups compared with the drug group.

Another study compared autogenic training to progressive relaxation training in adults with phobia or GAD. Participants had six, weekly 30-minute training sessions plus daily practice at home with an audio tape. Many stopped treatment before the end of the study. Autogenic training was better than relaxation training in reducing anxiety. However, there was no comparison with a group that did not receive any treatment.

### PTSD and ASD

There has been one case report of autogenic training successfully treating nightmares caused by PTSD. However, no scientific studies have been carried out.

### Social Phobia

One study compared the effects of adding autogenic training to Cognitive Behaviour Therapy (CBT, see page 29) for Social Phobia. One group received CBT plus autogenic training. Another group received CBT only. More people recovered in the group that received autogenic training.

### Panic Disorder and Agoraphobia

One small study has compared autogenic training with hypnosis. Adults with Panic Disorder had group sessions of autogenic training or hypnosis for six weeks. Both groups benefited and improvements lasted for three months. However, there was no comparison with a group that did not receive treatment. There are also reports of autogenic training combined with Behaviour Therapy successfully treating Panic Disorder.

### Specific Phobias

There is no evidence on whether autogenic training works for Specific Phobias, although one study has looked at autogenic training for GAD and phobias (see GAD, opposite).

### OCD

One small study has been carried out on adults with OCD. Autogenic training was given with a dummy pill and compared with two treatments: behaviour therapy plus dummy pill and autogenic training plus an antidepressant (see page 14). The autogenic training and dummy pill treatment was less effective than the other two treatments.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

The evidence for autogenic training for anxiety disorders is not clear. Better quality studies are needed before firm conclusions can be made.

## Ayurveda

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Ayurveda is the traditional healing system of India. Ayurveda translates as 'knowledge of living'. It aims to improve health and vitality through nutrition, lifestyle and herbal medicines.

### HOW IS IT MEANT TO WORK?

Ayurvedic medicines are a traditional treatment. Treatments are derived from over thousands of years of use in India.

### DOES IT WORK?

**GAD**

A traditional Ayurvedic herbal medicine was compared with a placebo (dummy pill) in 10 people with GAD. The medicine contained *Withania somnifera*, *Tinospora cordifolia*, *Bacopa monniera*, muskroot, licorice aloeweed, pearl pisti and ginger. After three months of treatment, the medicine group had lower anxiety than the placebo group.

**Other anxiety disorders**

There is no evidence on whether Ayurveda works for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

No side-effects were reported in the above study.

### RECOMMENDATION

There is not enough evidence to say whether or not Ayurveda works.

## Bach flower remedies

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Bach (pronounced 'batch') flower remedies are a system of highly-diluted flower extracts. A popular combination of five remedies is sold as Rescue Remedy.

### HOW IS IT MEANT TO WORK?

Bach flower remedies are believed to contain small amounts of the plant's life force energy, which heals emotional imbalances.

### DOES IT WORK?

One study gave Rescue Remedy or water and alcohol drops to people with anxiety disorders. Participants were told to take the drops when they felt anxious over a three-day period. There was no difference in effect on anxiety between the Rescue Remedy and the water and alcohol drops.

### ARE THERE ANY RISKS?

Bach flower remedies are thought to be safe because they are highly diluted.

### RECOMMENDATION

There is not enough good evidence to say whether Bach flower remedies work.

# Bibliotherapy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | 👍👍 |
| PTSD and ASD | ? | Specific Phobias | 👍 |
| Social Phobia | 👍 | OCD | ? |

## WHAT IS IT?

Bibliotherapy is a form of self-help that uses books or other written material. The books provide information and homework exercises that readers works through on their own. Some of the books are based on psychological therapies, such as Cognitive Behaviour Therapy (CBT, see page 29). Self-help books can be bought and read on their own without any contact with a health professional. However, they are also sometimes used as a treatment given by a therapist or GP.

## HOW IS IT MEANT TO WORK?

Books based on psychological therapies such as CBT work the same way as when the treatment is given by a therapist.

## DOES IT WORK?

### GAD

One good-quality study has evaluated bibliotherapy for GAD. Adults with GAD worked through a self-help booklet for four weeks or received no treatment. The booklet taught problem-solving techniques and had 28 worksheets. The study found that the bibliotherapy treatment was more effective than no treatment. Improvements from the booklet also lasted for at least three months.

### PTSD and ASD

One good-quality study has looked at bibliotherapy for PTSD. Adults who had recently had a car accident received three months of CBT, a self-help booklet based on CBT (*Understanding your reactions to trauma*), or no treatment. The study showed that therapy was better than the booklet, and that the booklet was no better than no treatment.

### Social Phobia

Several studies of bibliotherapy for Social Phobia have been carried out. Pooling results from these studies shows that it is more effective than no treatment, but less effective than face-to-face therapy.

### Panic Disorder and Agoraphobia

Eight studies of bibliotherapy for Panic Disorder have been carried out. Pooling results from these studies shows that it is more effective than no treatment. Results also suggest that it is as effective as face-to-face therapy.

### Specific Phobias

Several studies have been carried out in adults with Specific Phobias. Pooling the results from these studies shows that bibliotherapy is more effective than no treatment, however results may not last long. Results also show that it is less effective than face-to-face therapy.

### OCD

One study has been carried out of the self-help book, *Stop Obsessing!* Adults with OCD who had not improved with previous medication worked through the book for six weeks, or received equivalent psychological therapy from a therapist. Both groups improved, however the face-to-face therapy was more effective than the book.

## ARE THERE ANY RISKS?

Readers should be wary of books that claim to be easy cures or that are not based on effective therapies such as CBT. In addition, readers could feel worse if they do not apply the treatment correctly or give up early.

## RECOMMENDATION

Bibliotherapy is effective for Panic Disorder, Specific Phobias and Social Phobia. However, it is generally not as effective as face-to-face therapy. There is not enough evidence to say whether it is effective for GAD, OCD and PTSD.

## Breathing training

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Breathing training teaches correct breathing habits to people with anxiety disorders. It is also known as 'breathing retraining'. It is mainly used to treat panic attacks or for control of hyperventilation.

### HOW IS IT MEANT TO WORK?

People with anxiety disorders are thought to have abnormal breathing patterns. They may breathe faster and deeper than necessary, particularly during a panic attack and have high levels of carbon dioxide in the blood. This may increase anxiety. As breathing training helps to correct these breathing habits, it may also help to reduce anxiety. Breathing training may also help people feel as if they have more control of their anxiety. Breathing training can be used by itself or in combination with other treatments.

### DOES IT WORK?

**Panic Disorder and Agoraphobia**

Several studies have looked at the effect of breathing training in Panic Disorder. The studies that looked at breathing training alone did show some benefit. However, these studies did not use control (no-treatment) groups and it is not possible to draw conclusions. Some other studies have compared breathing training with other psychological treatments. The better-quality studies suggested that breathing training was not as effective as psychological treatments such as CBT.

**Other anxiety disorders**

There is no evidence on whether breathing training works for GAD, PTSD, Social Phobia, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough evidence to say whether breathing training is effective in treating anxiety disorders.

## Caffeine reduction or avoidance

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Caffeine is a nervous system stimulant. It can be found in coffee, tea, cola, and chocolate.

### HOW IS IT MEANT TO WORK?

Caffeine may cause anxiety because it blocks the action of a substance in the brain that calms the body. Consuming large amounts of caffeine can cause similar symptoms to anxiety (e.g. restlessness, nervousness). Hence, reducing or going without caffeine could be helpful for those with anxiety disorders.

### DOES IT WORK?

Several studies have shown that consuming caffeine after a caffeine-free period briefly increases anxiety in those with Panic Disorder, GAD, or Social Phobia. However, reducing caffeine has not been properly evaluated in well-designed studies. There are only reports of treatments with a single person (case studies) in which reducing caffeine has lowered anxiety levels.

There is no evidence on whether caffeine reduction or avoidance works for PTSD, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

Symptoms of caffeine withdrawal include headache, fatigue, decreased energy and alertness, depressed mood, problems concentrating and feeling irritable. These symptoms may last for two to nine days.

### RECOMMENDATION

There is not enough good evidence to say whether reducing or avoiding caffeine works.

# Computer-aided psychological therapy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | 👍👍 |
| PTSD and ASD | 👍 | Specific Phobias | 👍 |
| Social Phobia | 👍👍 | OCD | ? |

## WHAT IS IT?

Computer-aided psychological therapy (CAP) consists of structured sessions of Cognitive Behaviour Therapy (CBT, see page 29) or Behaviour Therapy (see page 27) delivered through a computer. People work through the computer program on their own, rather than visiting a therapist. Examples include FearFighter, OCFighter, Anxiety Online, and Interapy.

## HOW IS IT MEANT TO WORK?

It works the same way as therapy given face-to-face by a therapist.

## DOES IT WORK?

### GAD

There are reports of an internet-based CAP (What? Me Worry!?!) successfully treating three adults with GAD. However, no scientific studies have been carried out.

### PTSD and ASD

Three good-quality studies have been carried out of CAP for PTSD (e.g. Interapy). All were in adults and took place over the internet. Therapists gave feedback on practice exercises in two of the studies, but one study did not involve contact with therapists. All three studies showed that CAP was more effective than no treatment.

### Social Phobia

Six good-quality studies have been carried out of CAP for Social Phobia (e.g. the Shyness Programme). Most of these were web-based programs with practice exercises. All studies were in adults and did not involve contact with therapists. Results consistently showed that CAP was more effective than no treatment.

### Panic Disorder and Agoraphobia

There is a number of good-quality studies of CAP for Panic Disorder (e.g. Panic Online). Most of these studies took place over the internet with two to 10 modules and practice exercises. Most had some form of therapist contact such as weekly feedback on the practice exercises. Pooling the results from these studies showed that CAP was more effective than comparison conditions (e.g. no treatment or information about panic). It was also as effective as face-to-face therapy.

### Specific Phobias

Several studies of CAP for Specific Phobias have been carried out (e.g. spider phobia or flight phobia). These studies involved three to six sessions of exposure to the feared object or situation on a computer. Most of these studies showed that CAP was more effective than no treatment or control treatments such as relaxation. The CAP treatment was also as effective as face-to-face therapy.

### OCD

One good-quality study has been carried out of CAP for OCD in adults and adolescents. This study compared the program BT Steps (now known as OCFighter) with face-to-face therapy and relaxation training. BT Steps is a computer-driven telephone system that teaches exposure and ritual prevention. Participants had 17 weeks of access to the system and received nine telephone calls from therapists. This study found that CAP was more effective than relaxation training, but not as effective as face-to-face therapy.

## ARE THERE ANY RISKS?

CAP is relatively safe.

## RECOMMENDATION

CAP is effective for Panic Disorder, Specific Phobias, Social Phobia, and PTSD. There is less support for effectivemess in OCD and GAD. Better results are achieved with greater therapist contact.

# Exercise

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

The two main types of exercise are aerobic (exercises the heart and lungs, such as in jogging) and anaerobic (strengthens muscles, such as in weight training).

## HOW IS IT MEANT TO WORK?

This is unclear, but it can be helpful for mild anxiety in people without anxiety disorders. It may work by changing brain chemistry, improving sleep, improving coping ability, or as a distraction from worries. Exercise can cause physical symptoms similar to panic attacks (e.g. shortness of breath). This can be helpful for Panic Disorder because the symptoms are experienced in a controlled way.

## DOES IT WORK?

### PTSD and ASD

Three small poor-quality studies have evaluated aerobic exercise for PTSD. Two studies were in adolescents and one was in adults. All three found exercise was beneficial for PTSD. None of the studies had a comparison group that received no treatment, so it is hard to draw conclusions.

### Panic Disorder and Agoraphobia

One good-quality study has been carried out of exercise for Panic Disorder. It compared 10 weeks of regular aerobic exercise (running) with an antidepressant drug or placebo (dummy pills) in 46 adults with Panic Disorder. Exercise was more effective than placebo, but less effective than the drug.

### OCD

One small study reported improvements in OCD symptoms after an aerobic exercise program. However, a third of participants found the exercise too hard and stopped treatment. Another small study found that adding a 12-week aerobic exercise program to treatment with drugs or therapy improved OCD symptoms. Neither of these studies had a comparison group, so it is hard to draw conclusions.

### Other anxiety disorders

There is no evidence on whether exercise works for GAD, Social Phobia, Specific Phobias or OCD.

## ARE THERE ANY RISKS?

There is a risk of injury when exercising. Anyone considering a major change in exercise patterns is advised to consult their doctor.

## RECOMMENDATION

Most of the studies of exercise for anxiety disorders have been of poor quality. It appears excercise may be helpful, but better-quality studies are needed to be sure.

## Foods rich in tryptophan

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Tryptophan is a building block of protein. Foods rich in tryptophan are protein-based foods such as meat and dairy.

### HOW IS IT MEANT TO WORK?

Tryptophan is a building block of serotonin, a brain chemical that has a role in reducing anxiety. It is thought that one way of increasing levels of tryptophan in the brain is to consume foods rich in tryptophan along with high glycemic index (GI) carbohydrates.

### DOES IT WORK?

**Social Phobia**

One small study has evaluated de-oiled pumpkin seed (a rich source of tryptophan) as a treatment for Social Phobia. Adults consumed one of two bars and then completed an anxiety-producing task. One bar contained pumpkin seed and sugar, and the other contained the same amount of sugar, but no pumpkin seed. Results showed some benefit of the pumpkin seed bar, but results were not conclusive.

**Other anxiety disorders**

There is no evidence on whether foods rich in tryptophan work for GAD, PTSD, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough good evidence to say whether foods rich in tryptophan work for anxiety disorders.

## Ginkgo (*Ginkgo biloba*)

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Extracts of the leaves of the ginkgo tree are available as a supplement.

### HOW IS IT MEANT TO WORK?

This is not understood. It is thought it may play a role in suppressing the body's response to stress.

### DOES IT WORK?

**GAD**

One study has been carried out on 107 adults with GAD or other anxiety problems. They took daily doses of 480mg ginkgo, 240mg ginkgo, or placebo (dummy pills) for four weeks. Ginkgo improved anxiety more than placebo and the higher dose of ginkgo was better than the lower dose.

**Other anxiety disorders**

There is no evidence on whether ginkgo works for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

No risks were found in the study above.

### RECOMMENDATION

There is not enough good evidence to say whether ginkgo works.

## Holy basil (*Ocimum sanctum* or *Ocimum tenuiflorum*)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Holy basil (also known as Tulsi) is a plant native to tropical Asia. It is not the same as sweet basil (*Ocimum basilicum*). Teas made from the plant are available to buy.

### HOW IS IT MEANT TO WORK?

Holy basil is used traditionally in ancient Indian medicine. It is thought to help people adapt to stress.

### DOES IT WORK?

**GAD**

One small study has evaluated holy basil for GAD. An alcohol extract of 1000mg of holy basil leaves per day was given to 35 adults for two months. Results showed anxiety levels improved overall, but there was no comparison group.

**Other anxiety disorders**

There is no evidence on whether holy basil works for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough good evidence to say whether holy basil works.

## Homeopathy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Homeopathy uses very small doses of various substances to stimulate self healing. Substances are selected that produce symptoms similar to those of the illness, when they are used undiluted in a healthy person. Treatments are also based on the person's symptoms rather than the diagnosis. This means that two people with the same illness may receive different treatments. Treatments are prepared by diluting substances with water or alcohol and shaking. This process is then repeated many times until there is little or none of the substance left. Homeopathic treatments are available by visiting a practitioner or buying over the counter.

### HOW IS IT MEANT TO WORK?

Homeopathy is based on the principle of 'like cures like'. The diluting and shaking process is thought to remove any harmful effects of the substance, while the water retains the 'memory' of the substance.

### DOES IT WORK?

**GAD**

One study has been done of adults with GAD. Adults received a homeopathic treatment for their specific symptoms or a placebo (dummy pill). After 10 weeks, anxiety symptoms improved in both groups. However, the study was not large enough to tell whether homeopathy was better than a placebo.

**Other anxiety disorders**

There is no evidence on whether homeopathy works for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

Negative reactions are usually quite rare, mild and short-lived. Examples are a short-lived worsening of symptoms and reappearance of old symptoms.

### RECOMMENDATION

There is not enough good evidence to say whether homeopathy works for anxiety disorders.

# Inositol

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

Inositol is a compound similar to glucose. The average adult consumes about 1g daily through diet. Supplements are also available at health food shops.

## HOW IS IT MEANT TO WORK?

This is unclear, however it may be because inositol helps produce substances that send signals within brain cells.

## DOES IT WORK?

### PTSD and ASD

One small study has evaluated inositol for PTSD. Daily doses of 12g inositol or placebo (dummy pills) were given to 12 adults for four weeks. Inositol was not more helpful than placebo.

### Panic Disorder and Agoraphobia

One small study found daily doses of 12g inositol better than placebo (dummy pills) over four weeks. Another small study compared inositol with an antidepressant (see page 14). It found inositol was as helpful as the drug after one month.

### OCD

Inositol has been tested for OCD in a study with 13 adults. Daily doses of 18g over six weeks were better than placebo (dummy pills) in reducing OCD symptoms. A different study found it did not improve OCD symptoms when taken in addition to antidepressant drugs.

### Other anxiety disorders

There is no evidence on whether inositol works for GAD, Social Phobia, or Specific Phobias.

## ARE THERE ANY RISKS?

Few side-effects have been reported.

## RECOMMENDATION

Few good studies have been carried out on inositol. More studies are needed to say whether inositol works.

# Juggling therapy

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

Juggling therapy involves learning to juggle up to three small beanbags with the hands.

## HOW IS IT MEANT TO WORK?

It has been proposed that the rapid eye movements involved in juggling contribute to changes in emotional memory processing. It may act in a similar way to Eye Movement Desensitisation and Reprocessing (EMDR, see page 30).

## DOES IT WORK?

One study was carried out in 17 females with Panic Disorder, PTSD, OCD or GAD. All of the participants were treated with medication and psychological therapies for six months. In addition, half were taught juggling skills for three months. Anxiety symptoms improved more in the juggling group.

### Other anxiety disorders

There is no evidence on whether juggling therapy works for Social Phobia or Specific Phobias.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

There is not enough evidence to say whether juggling therapy works.

## Kampo

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Kampo is Japanese herbal therapy. It was developed from traditional Chinese medicine. Kampo medicines contain combinations of herbs, fungi, minerals and insects.

### HOW IS IT MEANT TO WORK?

Kampo medicines are a traditional treatment. Treatments are derived from over a thousand years of use in Japan.

### DOES IT WORK?

**Panic Disorder and Agoraphobia**

There are five reports of cases where Kampo medicines were used successfully in adults with Panic Disorder. However, no scientific study has been carried out with an untreated comparison group.

**Other anxiety disorders**

There is no evidence on whether Kampo works for GAD, PTSD, Social Phobia, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough good evidence to say whether Kampo works or not.

## Kava *(Piper methysticum)*

| Our rating | | Our rating | |
|---|---|---|---|
| GAD | 👎 | Panic Disorder and Agoraphobia | 👎 |
| PTSD and ASD | 👎 | Specific Phobias | 👎 |
| Social Phobia | 👎 | OCD | 👎 |

### WHAT IS IT?

Kava is a herb from the South Pacific. It has been used as a social drink and in ceremonial rituals for hundreds of years. Because of safety concerns, kava is a prohibited import in Australia except under very specific conditions.

### HOW IS IT MEANT TO WORK?

Chemicals from the root are thought to affect brain chemistry.

### DOES IT WORK?

Kava has been compared with a placebo (dummy pill) in several good-quality studies. These were in adults with a variety of anxiety disorders and daily doses ranged from 150mg to 300mg. Pooling the results from these studies showed that kava was more effective than a placebo.

### ARE THERE ANY RISKS?

Kava use may be linked with liver damage. Frequent use in high doses also causes a skin rash.

### RECOMMENDATION

Kava appears to be helpful for anxiety disorders. However, it cannot be recommended because of concerns about its safety.

## Massage

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Massage involves the manipulation of soft body tissues using the hands or a mechanical device. Massage is often done by a trained professional. One of the aims of massage is to relieve tension in the body.

### HOW IS IT MEANT TO WORK?

This is not known. However, it is possible that massage reduces stress hormones or reduces the body's physiological arousal.

### DOES IT WORK?

**GAD**

A small study of adults with GAD found that massage reduced anxiety on the day of the massage. However, longer-term effects were not found.

**PTSD and ASD**

One study of children with severe Post-Traumatic Stress Disorder (PTSD) gave regular massages over a month. These children were compared to a group that watched fun videos while sitting on an adult's lap for the same amount of time. The children given massages had greater reduction in anxiety than the comparison group.

**Other anxiety disorders**

There is no evidence on whether massage works for Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough evidence to say whether massage works for anxiety disorders.

## Meditation

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

There are many different types of meditation. However, they all train people to focus their attention and awareness. Some types of meditation involve focusing attention on a silently repeated word or on the breath. An example is transcendental meditation. Others involve observing thoughts without judgment. An example is mindfulness meditation, or vipassana. Although meditation is often done for spiritual or religious reasons, this is not always the case. Some meditation methods have been used within Western psychological treatments. An example is Mindfulness Based Stress Reduction (MBSR, see page 33).

### HOW IS IT MEANT TO WORK?

Meditation may reduce anxiety by aiding relaxation. Also, mindfulness meditation might help people to distance themselves from negative thoughts.

### DOES IT WORK?

**GAD**

There have been two studies looking at GAD and meditation. One compared transcendental meditation with muscle biofeedback and relaxation therapy. No difference was found between the groups. However, the study did not have a comparison group receiving no treatment. The other study involved people with either GAD or Panic Disorder. Meditation combined with exercise, relaxation and hypnosis was found to be more effective than education about anxiety disorders. However, it is unclear whether meditation or other components led to the benefit.

**Social Phobia**

There has been one study comparing a stress-reduction program based on mindfulness meditation with Cognitive Behaviour Therapy (CBT, see page 29). Meditation was found to be less effective.

**Panic Disorder and Agoraphobia**

See section above on GAD.

### OCD

There has been one study comparing mindfulness meditation with Kundalini Yoga. No difference was found between the groups. However, this study did not have a comparison group receiving no treatment.

### Other anxiety disorders

There is no evidence on whether meditation works for PTSD or Specific Phobias.

## ARE THERE ANY RISKS?

In rare cases, meditation can bring on a psychotic state. Caution is needed in people who have had a psychotic disorder.

## RECOMMENDATION

There is not enough good evidence to say whether or not meditation works.

# Omega-3 fatty acids (fish oil)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

Omega-3 fatty acids are types of polyunsaturated fats. The two main types are eicosapentanoic acid (EPA) and docosahexanoic acid (DHA). EPA and DHA are found in fish oil or can be made in the body from the oil found in foods like flaxseed, walnuts and canola oil. Omega-3 supplements containing EPA and DHA are available from health food shops and pharmacies.

## HOW IS IT MEANT TO WORK?

This is not known. One possibility is that omega-3 affect the outer wall of brain cells, making it easier to send messages between and within brain cells.

## DOES IT WORK?

### OCD

One small study has compared omega-3 with a placebo (paraffin oil) in people who were also taking antidepressants. No difference in improvement was found.

### Other anxiety disorders

There is no evidence on whether omega-3 fatty acids work for GAD, PTSD, Social Phobia, Panic Disorder or Specific Phobias.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

There is not enough evidence to say whether omega-3 works.

## Painkillers

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Painkillers are sold over-the-counter without prescription for the temporary relief of pain. They include aspirin, paracetamol and ibuprofen. Some people use these painkillers to help with anxiety and depression.

### HOW IS IT MEANT TO WORK?

This is unclear. It is thought that proteins produced during inflammation may play a role in anxiety disorders. Some painkillers act to reduce inflammation.

### DOES IT WORK?

**Panic Disorder and Agoraphobia**

One study with 32 people compared ibuprofen with an anti-anxiety drug (see page 12). The group given ibuprofen did not improve as much as those on the anti-anxiety drug. However, there was no comparison group given a placebo (dummy pill).

**Other anxiety disorders**

There is no evidence on whether painkillers work for GAD, PTSD, Social Phobia or OCD.

### ARE THERE ANY RISKS?

Over-the-counter painkillers are not meant to be treatments for anxiety disorders. There is always a risk in using medications for purposes for which they are not designed.

### RECOMMENDATION

There is not enough evidence to say whether or not various types of painkillers help anxiety disorders.

## Passionflower

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Passionflower (*Passiflora incarnata*) is a plant native to the Americas. It is used as a traditional remedy for anxiety and insomnia.

### HOW IS IT MEANT TO WORK?

This is not understood.

### DOES IT WORK?

**GAD**

Two studies have compared passionflower with anti-anxiety drugs (see page 12) over a four-week period. Both studies found equal improvement with both treatments. However, there was no comparison group receiving placebos (dummy pills).

**Other anxiety disorders**

There is no evidence on whether passionflower works for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There has been a report that passionflower caused heart abnormalities, nausea and drowsiness.

### RECOMMENDATION

There is not enough good evidence to say whether passionflower works.

# Relaxation training

| | Our rating | | Our rating |
|---|---|---|---|
| GAD |  | Panic Disorder and Agoraphobia |  |
| PTSD and ASD |  | Specific Phobias |  |
| Social Phobia |  | OCD | ? |

## WHAT IS IT?

There are several different types of relaxation training. The most common one is progressive muscle relaxation. This teaches a person to relax by tensing and relaxing specific groups of muscles. Another type of relaxation training involves thinking of relaxing scenes or places. Relaxation training can be learned from a professional or done as self-help. Recorded instructions are available for free on the internet. They can also be bought on CDs.

## HOW IS IT MEANT TO WORK?

People with anxiety disorders are thought to have tense muscles. As relaxation training helps to relax muscles, it may also help to reduce anxious thoughts and behaviours. Relaxation training may also help people feel as if they have more control of their anxiety.

## DOES IT WORK?

### GAD

Researchers have pooled the results of studies on relaxation training with GAD to get a clearer idea of the effects. Relaxation training has been shown to be better than no treatment. It has also been shown to be as effective as psychological therapies, mainly Cognitive Behaviour Therapy (CBT, see page 29).

### PTSD and ASD

Six studies have looked at the effects of relaxation training on PTSD. These showed that relaxation training is better than no treatment. However, it is less effective than psychological therapies, including CBT and exposure therapy (Behaviour Therapy, see page 27).

### Social Phobia

Four studies have compared relaxation with other treatments for Social Phobia. Relaxation training was shown to be better than no treatment. It was also shown to be less effective than psychological therapies, including CBT (see page 29).

### Panic Disorder and Agoraphobia

Pooling together the results of studies on relaxation and Panic Disorder showed that relaxation training was better than no treatment. Results also showed relaxation training to be as effective as drug treatments and psychological therapies, including CBT.

### Specific Phobias

Relaxation training has been studied as a treatment for different phobias. It is as effective as other behavioural and drug treatments for dental phobia and test anxiety. It is less effective than other behavioural treatments for snake and spider phobias.

### OCD

Four studies have compared relaxation training with different types of Behaviour Therapy (see page 27) in people with OCD. It was not found to be as effective as these in any of the studies.

## ARE THERE ANY RISKS?

There are no known risks.

## RECOMMENDATION

Relaxation training appears to work for GAD, Panic Disorder, PTSD, Social Phobia and some Specific Phobias. It is not as effective as psychological therapies for PTSD, Social Phobia and OCD.

# *Rhodiola rosea* (Golden Root)

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

*Rhodiola rosea* is a plant that grows in cold regions of the world, such as the Arctic and high mountains. In some parts of the world, it has been used as a traditional remedy to cope with stress. Extracts of the plant have been marketed under the brand Arctic Root.

## HOW IS IT MEANT TO WORK?

This is a traditional remedy that is supposed to increase the body's resistance to stress. However, the mechanism by which it might work is not understood.

## DOES IT WORK?

### GAD

One study looked at the effects of *Rhodiola rosea* in 10 people with GAD. They were given a daily dose of 340mg for 10 weeks. After this time, their anxiety symptoms were reduced. However, the study was small and there was no comparison with placebos (dummy pills).

### Other anxiety disorders

There is no evidence on whether *Rhodiola rosea* works for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

## ARE THERE ANY RISKS?

The study above reported only mild side-effects including dizziness and dry mouth.

## RECOMMENDATION

There is not enough evidence to say whether *Rhodiola rosea* works.

# Smoking cigarettes

| | Our rating | | Our rating |
|---|---|---|---|
| GAD |  | Panic Disorder and Agoraphobia |  |
| PTSD and ASD |  | Specific Phobias |  |
| Social Phobia |  | OCD |  |

## WHAT IS IT?

People with anxiety disorders are more likely to smoke cigarettes, with OCD being an exception. One explanation for this is that they smoke to relieve symptoms of anxiety.

## HOW IS IT MEANT TO WORK?

The nicotine in cigarettes might have an anti-anxiety effect. Nicotine affects the levels of several neurotransmitters (chemical messengers) involved in anxiety.

## DOES IT WORK?

### PTSD and ASD

One study looked at anxiety in people with PTSD when they were listening to a description of a traumatic event. Smoking was found to reduce subjective feelings of anxiety, but at the same time, it increased the physical signs of anxiety.

### Specific Phobias

A study of women with rat phobia found that smoking did not reduce anxiety when they were near a rat.

### Other anxiety disorders

There is no evidence on whether smoking cigarettes works for GAD, Social Phobia, Panic Disorder or OCD.

## ARE THERE ANY RISKS?

Smoking can increase risk for some anxiety disorders, in particular Panic Disorder. Smoking is also a major risk factor for a range of chronic physical diseases, including stroke, heart disease and cancer. These physical diseases increase risk for anxiety.

## RECOMMENDATION

There is no good evidence that smoking helps anxiety disorders and there is strong evidence it increases health problems.

# St John's wort *(Hypericum perforatum)*

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

## WHAT IS IT?

St John's wort is a small flowering plant that has been used as a traditional herbal remedy for depression. The plant gets its name because it flowers around the feast day of St John the Baptist. In Australia, St John's wort extracts are widely available in health food shops and supermarkets.

## HOW IS IT MEANT TO WORK?

The most important active compounds in St John's wort are believed to be hypericin and hyperforin, but other compounds may also play a role. How it works is not entirely clear. However, it might increase the supply of certain neurotransmitters (chemical messengers) in the brain that are thought to be affected in anxiety. These are serotonin, norepinephrine and dopamine.

## DOES IT WORK?

### Social Phobia

One study has been carried out in 40 adults with Social Phobia. One group took St John's wort twice a day and one group took a placebo (dummy pills). The minimum daily dose was 600mg St John's wort and each person could increase the dose up to 1800mg if they wanted to. The study lasted for 12 weeks. St John's wort did not have any effect on the symptoms of Social Phobia.

### OCD

A similar study was carried out in 60 adults with OCD. One group took St John's wort twice a day and one group took a placebo (dummy pills). The minimum daily dose was 600mg St John's wort and each person could increase the dose up to 1800mg if they wanted to. The study lasted for 12 weeks. St John's wort did not have any effect on the symptoms of OCD.

### Other anxiety disorders

There is no evidence on whether St John's wort works for GAD, PTSD, Panic Disorder or Specific Phobias.

## ARE THERE ANY RISKS?

When taken alone, St John's wort has very few side-effects. However, St John's wort interacts with many prescription medications, either affecting how these medications work or producing serious side-effects. According to the Therapeutic Goods Administration, people taking any of the following medications should not start using St John's wort:

- HIV protease inhibitors (indinavir, nelfinavir, ritonavir, saquinavir)
- HIV non-nucleoside reverse transcriptase inhibitors (efavirenz, nevirapine, delavirdine)
- Cyclosporin, tacrolimus
- Warfarin
- Digoxin
- Theophylline
- Anti-convulsants (carbamazepine, phenobarbitone, phenytoin)
- Oral contraceptives ('the pill')
- SSRI antidepressants and related drugs (citalopram, fluoxetine, fluvoxamine, paroxetine, sertraline, nefazodone)
- Triptans (sumatriptan, naratriptan, rizatriptan, zolmitriptan)

Anyone who is taking any other medications and wishes to use St John's wort is advised to check with their doctor first.

## RECOMMENDATION

Initial evidence suggests that St John's wort does not appear to be effective for OCD or Social Phobia. However, more research is needed.

## Sympathyl

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Sympathyl is a herbal medicine made in France. It contains California poppy (*Escholtzia californica*), hawthorn (*Crataegus oxyacantha*) and magnesium.

### HOW IS IT MEANT TO WORK?

This is not understood. Hawthorn and California poppy are thought to have anti-anxiety properties. Magnesium deficiency can cause psychological problems.

### DOES IT WORK?

**GAD**

One study has been carried out in 264 adults with GAD. One group took two Sympathyl tablets twice a day and one group took placebo (dummy pills) for three months. Each tablet contained 75mg hawthorn, 20mg California poppy and 75mg magnesium. More people in the Sympathyl group responded to treatment and people in the Sympathyl group also had lower symptoms of anxiety overall.

**Other anxiety disorders**

There is no evidence on whether Sympathyl works for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

No risks were found in the study above.

### RECOMMENDATION

While there is some initial positive evidence, more studies are needed to say whether Sympathyl works.

## Valerian *(Valeriana officinalis)*

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Valerian is a herb. It is often used to treat sleeping difficulties and is also used for treating anxiety.

### HOW IS IT MEANT TO WORK?

This is not well understood. It is thought that valerian might act like the anti-anxiety medication diazepam (see page 12).

### DOES IT WORK?

**GAD**

One study has been carried out in 36 adults with GAD. The study compared the effects of valerian, an anti-anxiety drug (see page 12) and a placebo (dummy pill). The results showed no difference between valerian and the placebo. There was also no difference between valerian and the anti-anxiety drug when the anxiety symptoms were rated by a doctor. When the people in the study rated their own symptoms, more benefit was found with the anti-anxiety drug.

**Other anxiety disorders**

There is no evidence on whether valerian works for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

Valerian is generally recognised as safe.

### RECOMMENDATION

There is not enough good evidence to say whether valerian works.

## Water-based treatments

| | Our rating | | Our rating |
|---|---|---|---|
| GAD | ? | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Water-based treatments (e.g. hydrotherapy, crenotherapy) are treatments involving water, mud and steam. Different methods of application include spa baths, saunas, mud bandages, water massage, and jet sprays.

### HOW IS IT MEANT TO WORK?

Water-based treatments are thought to work because they are relaxing. Mineral water-based treatments might also work by replenishing the body's supply of important elements such as selenium, calcium and copper.

### DOES IT WORK?

One study has evaluated the effects of spa baths on anxiety. Fourteen adults with a range of anxiety disorders each spent 15 minutes in an individual spa bath. Results showed that anxiety was lower after the bath than before the bath. However, the study did not test how long the results lasted.

#### GAD

One study was carried out in adults with GAD. It compared eight weeks of treatment with spa baths, water massage and spa showers with an antidepressant (see page 14). The study found the spa treatment was better than the drug in reducing anxiety symptoms.

#### Other anxiety disorders

There is no evidence on whether water-based treatments work specifically for PTSD, Social Phobia, Panic Disorder, Specific Phobias or OCD.

### ARE THERE ANY RISKS?

There are no known risks.

### RECOMMENDATION

There is not enough good evidence to say whether water-based treatments work.

## Yoga

| | Our rating | | Our rating |
|---|---|---|---|
| GAD |  | Panic Disorder and Agoraphobia | ? |
| PTSD and ASD | ? | Specific Phobias | ? |
| Social Phobia | ? | OCD | ? |

### WHAT IS IT?

Yoga is an ancient part of Indian culture. Most yoga practised in Western countries is Hatha yoga. This type of yoga exercises the body and mind using physical postures, breathing techniques and meditation.

### HOW IS IT MEANT TO WORK?

Yoga is thought to reduce stress and improve relaxation. It may also increase feelings of mastery from learning difficult postures or improve body image from greater bodily awareness and control. It may also help to distract people from negative thoughts.

### DOES IT WORK?

#### GAD

Four studies compared yoga with no treatment or other treatments in people with GAD. These used a variety of types of yoga. Overall, the results were positive. Yoga produced more improvement than no treatment. However, the studies were not well-designed, making it difficult to form conclusions.

#### OCD

One study compared yoga with mindfulness meditation (MBSR, see page 33) and relaxation in 22 people. Both groups had one-hour weekly treatments with an instructor and did daily practice. After three months, the people in the yoga group had lower anxiety symptoms than the people in the meditation group.

#### Other anxiety disorders

There is no evidence on whether yoga works for PTSD, Social Phobia, Panic Disorder or Specific Phobias.

### ARE THERE ANY RISKS?

To reduce the risk of injury, yoga should be practised in a class with a qualified instructor.

### RECOMMENDATION

Yoga may be helpful for GAD, but more good-quality research is needed.

# Interventions reviewed but where no evidence was found

American ginseng (*Panax quinquefolius*)

Animal-assisted therapy

Astragalus (*Astragalus membranaceous*)

Barley avoidance

Berocca

Biotin

Black cohosh (*Actaea racemosa* or *Cimicfuga racemosa*)

Borage (*Borago officinalis*)

Brahmi (*Bacopa monniera*)

California poppy (*Eschsholtzia californica*)

Catnip (*Nepeta cataria*)

Cat's claw (*Uncaria tomentosa*)

Chamomile (*Anthemis nobilis*)

Chaste tree berry (*Vitex agnus castus*)

Chinese medicinal mushrooms (*Reishi* or *Lingzhi, Ganoderma Lucidum*)

Choline

Chromium

Coenzyme Q10

Cowslip (*Primula veris*)

Dairy avoidance

Damiana (*Turnera diffusa*)

Dandelion (*Taraxacum officinale*)

Flax seeds (linseed) (*Linum usitatissimum*)

y-aminobutyric acid (GABA)

Ginger (*Zingiber officinale*)

Ginseng (*Panax ginseng*)

Gotu kola (*Centella asiatica*)

Hawthorn (*Crataegus laevigata*)

Hops (*Humulus lupulus*)

Humour

Hyssop (*Hyssopus officinalis*)

Ketamine

Ketogenic diet

Lecithin

Lemon balm (*Melissa officinalis*)

Lemongrass leaves (*Cymbopogon citratus*)

L-glutamine

Licorice (*Glycyrrhiza glabra*)

L-tyrosine

Magnesium

Marijuana

Melatonin

Milk thistle (*Silybum marianum*)

Mistletoe (*Viscum album*)

Motherwort (*Leonurus cardiaca*)

Music therapy

Nettles (*Urtica dioca*)

Oats (*Avena sativa*)

Para-aminobenzoic acid (PABA)

Peppermint (*Mentha piperita*)

Phenylalanine

Pilates

Pleasant activities

Potassium

Prayer

Qigong

Recreational dance

Reflexology

Rehmannia (*Rehmannia glutinosa*)

S-adenosyl methionine (*SAMe*)

Schizandra (*Schizandra chinensis*)

Sedariston

Selenium

Siberian ginseng (*Eleutherococcus senticosus*)

Skullcap (*Scutellaria lateriflora*)

Sleep

Sleep deprivation

Spirulina (*Arthrospira platensis*)

St Ignatius bean (*Ignatia amara*)

Sugar avoidance

Tai chi

Taurine

Tension Tamer

Tissue salts

Vervain (*Verbena officinalis*)

Vitamins

Wild yam (*Dioscorea villosa*)

Wood betony (*Stachys officinalis* or *Betonica officinalis*)

Worry Free

Yeast

Zinc

Zizyphus

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## MEDICAL INTERVENTIONS


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# A summary of what works for anxiety disorders


## Generalised Anxiety Disorder (GAD)

### Medical Interventions

- Anti-anxiety drugs (short-term use – up to four weeks) 👍👍
- Anti-convulsant drugs 👍👍
- Antidepressant drugs 👍👍👍
- Antipsychotic drugs 👍
- Azapirone drugs 👍

### Psychological and Counselling Interventions

- Cognitive Behaviour Therapy (CBT) 👍👍👍
- Psychodynamic psychotherapy 👍

### Complementary and Lifestyle Interventions

- Acupuncture 👍
- Relaxation training 👍👍
- Yoga 👍

## Post-Traumatic Stress Disorder (PTSD)

### Medical Interventions

- Antidepressant drugs 👍👍👍
- Transcranial Magnetic Stimulation (TMS) 👍

### Psychological and Counselling Interventions

- Behaviour Therapy (aka 'exposure therapy') 👍👍👍
- Cognitive Behaviour Therapy (CBT) 👍👍👍
- Eye Movement Desensitisation and Reprocessing (EMDR) 👍👍👍

### Complementary and Lifestyle Interventions

- Computer–aided psychological therapy 👍
- Relaxation training 👍

## Social Phobia

### Medical Interventions

- Anti-anxiety drugs (short-term use – up to four weeks) 👍👍
- Anti-convulsant drugs 👍
- Antidepressant drugs 👍👍👍

### Psychological and Counselling Interventions

- Behaviour Therapy (aka 'exposure therapy') 👍👍
- Cognitive Behaviour Therapy (CBT) 👍👍👍

### Complementary and Lifestyle Interventions

- Bibliotherapy 👍
- Computer–aided psychological therapy 👍👍
- Relaxation training 👍

## Panic Disorder and Agoraphobia

### Medical Interventions

- Anti-anxiety drugs (short-term use – up to four weeks) 👍👍
- Antidepressant drugs 👍👍👍

### Psychological and Counselling Interventions

- Behaviour Therapy (aka 'exposure therapy') 👍👍
- Cognitive Behaviour Therapy (CBT) 👍👍👍
- Psychodynamic psychotherapy 👍

### Complementary and Lifestyle Interventions

- Bibliotherapy 👍👍
- Computer–aided psychological therapy 👍👍
- Relaxation training 👍👍

## Specific Phobias

### Psychological and Counselling Interventions

- Applied muscle tension (for blood and injury phobia) 👍
- Behaviour Therapy (aka 'exposure therapy') 👍👍👍
- Cognitive Behaviour Therapy (CBT) 👍👍👍

### Complementary and Lifestyle Interventions

- Bibliotherapy 👍
- Computer–aided psychological therapy 👍
- Relaxation training 👍

## Obsessive Compulsive Disorder (OCD)

### Medical Interventions

- Antidepressant drugs 👍👍👍

### Psychological and Counselling Interventions

- Behaviour Therapy (aka 'exposure therapy') 👍👍👍
- Cognitive Behaviour Therapy (CBT) 👍👍👍



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