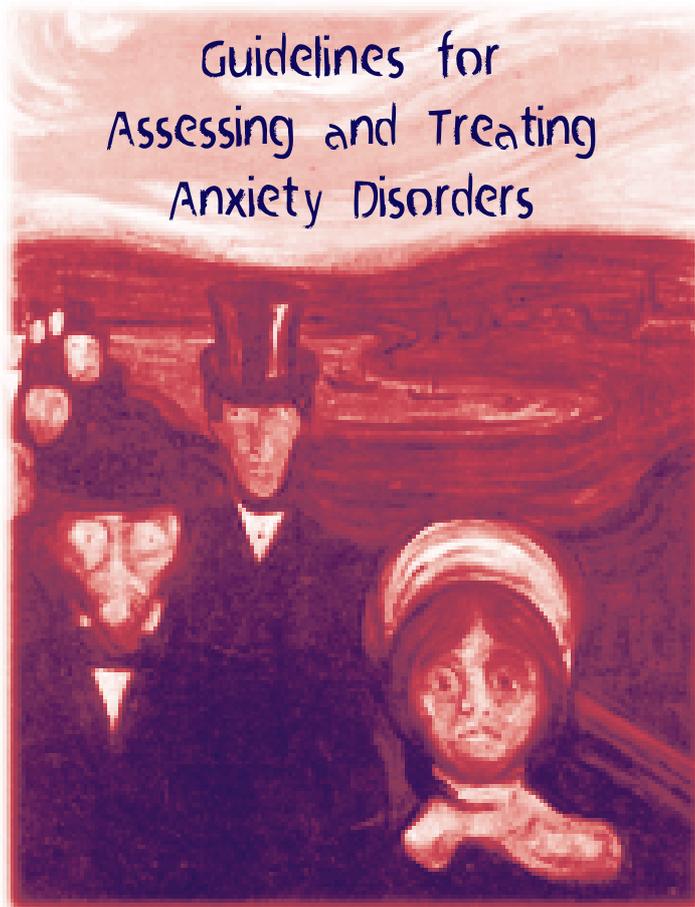


Guidelines for Assessing and Treating Anxiety Disorders



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**National Health Committee
November 1998**

ISBN 0-478-10479-0

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FROM THE NATIONAL HEALTH COMMITTEE

Mental disorders are associated with significant physical and social disability and increased mortality. A WHO analysis of the global disease burden shows mental disorders make up five of the 10 leading causes of disability world-wide, and that the proportion of the global disease burden attributable to mental disorder is likely to increase 50 percent between now and 2020. New Zealand is no exception.

The *Guidelines for Assessing and Treating Anxiety* follow on from the *Guidelines for the Treatment and Management of Depression* released by the National Health Committee in September 1996, and are a further step to encourage primary health care professionals to become more informed and involved in the diagnosis and management of mental health disorders. The Committee believes that mental health care and treatment should not be separated out from health services generally, and wherever possible early intervention should be a preferred strategy.

Anxiety disorders, along with depression and substance misuse, comprise a group of disabling conditions whose presentation is often assumed to be normal. They frequently escape the notice of primary health professionals. The anxiety disorders include panic, obsessive compulsive behaviour, generalised anxiety, acute and post traumatic stress, and a range of phobias. Most of these conditions respond well to treatment and the guideline provides both psychotherapeutic and pharmacological approaches.

Although treating common mental disorders costs money, it is an investment likely to lessen the considerable burden of illness on the community. Many of those believing they need professional help for psychological problems do not seek it because of their attitudes and beliefs about mental health — needing to be strong enough to cope alone, for instance. Because most people have regular contact with primary care health services, the anxious or depressed patient is likely to see their GP even though psychological problems may not be the main reason for the consultation.

Early recognition of these disorders facilitates early intervention. This reduces distress, disability and burden of illness, and has the potential to reduce the downstream need for secondary mental health services. The National Health Committee is keen to see these guidelines owned by the practitioners who will implement them. We recommend phasing in the guidelines and establishing a framework for making primary mental health care widely available. Such a framework should be tested as an evaluated pilot in an integrated care setting.

The Committee wishes to acknowledge and thank the working party and all those who contributed to this project. Special thanks go to Dr John Bushnell for his untiring efforts to bring this project to conclusion.

We believe these guidelines are a sound framework for better primary care management of anxiety. This better management of all three primary mental health disorders will lead in turn to better access and equity in the delivery of precious health care resources.

ABOUT THESE GUIDELINES

Help for primary practitioners

These guidelines are intended to help primary health practitioners (particularly, but not only, GPs and practice nurses) recognise, assess and treat anxiety disorders. They outline anxiety disorder treatments, but do not assume these will always be available in a primary care setting — although improved mental health training for primary health care workers may improve availability.

The guidelines aim to provide enough background information to allow informed referral to specialist services. Some sections, therefore — such as those on children with anxiety disorders — are deliberately brief. In these cases primary health professionals refer to, or consult, child mental health specialists. The guidelines go into greater detail about the psychological treatments which could be implemented in a primary care context.

The guidelines are the second stage of a primary mental health package commissioned by the National Health Committee. The final package will include detailed documents on recognising, assessing and treating depression, anxiety and substance use disorders in primary care. Each will have summary documents for quick reference and to alert the primary practitioner to a possible psychological component in a patient's presenting problems. All three will be available on the Guidelines website (<http://www.nzgg.org.nz>)

Evidence-based

The guidelines are explicitly evidence-based (see Appendix 1 for details of methodology), and their recommendations focus on clinical processes likely to enhance recognition of disorders and facilitate the best psychological and pharmacological treatment. Where evidence is not graded, statements are made on the basis of consensus expert opinion.

There is good evidence that some psychological interventions effectively treat anxiety disorders but these can be difficult to access outside the private sector. Psycho-pharmacological interventions are often poorly prescribed in primary care (inappropriate medications, insufficient dose, inadequate duration of treatment), so any implementation strategy must be multi-faceted.

Available evidence on treatment of anxiety disorders may not always be relevant to primary care services because:

- 1 most treatment data come from specialist (secondary or tertiary) mental health services
- 2 problems presenting in primary care are likely to differ as to patterns of comorbidity and severity from those presenting in secondary services
- 3 no primary care data describe the prevalence of these disorders in New Zealand, or evaluate the effectiveness of primary intervention strategies
- 4 evidence from other western countries may be extrapolated to Pakeha New Zealanders, but our knowledge of how to integrate psychological theory and practice with Maori cultural and spiritual beliefs is rudimentary.

Difficulties detecting mental disorder

Recognising and managing common mental illnesses may be difficult during brief consultations in busy primary health care clinics. Several elements can affect the detection and management of a mental disorder in primary care.

Service delivery

- too little time
- remuneration rewarding procedures rather than time spent talking
- availability of secondary mental health services.

Practitioner characteristics

- skills
- attitudes
- knowledge
- interviewing style
- personality factors.

Relevance of diagnostic systems

- Practitioners may disagree about the relevance of mental disorder categories in primary health care, especially if the disorder accompanies a physical disorder

Patient characteristics

- rates of recognition are lower when disorder is more chronic or less obvious
- limited disclosure of distress
- preference for describing physical symptoms
- negative attitudes towards acknowledging emotional distress
- denial of problems, especially in relation to substance use.

Implementation calls for strategies aimed at all the above elements.

Implementing the guidelines

Potential barriers to implementation are:

- **Inequitable access to psychological therapies**

Mental health services are the main source of psychological therapy for people with psychological disorders. Primary care access to treatment is limited to those who can pay, those eligible under ACC sensitive claims, and those who gain access through relatively rare and under-resourced primary care mental health services.

- **Lack of psychological therapy resources (especially for evidence-based treatments such as Cognitive-Behaviour Therapy)**

New Zealand does not have the psychological therapy resources available to respond to the demand generated by increased recognition.

More staff skilled in providing psychological therapies are urgently needed. Although generic counselling skills are part of most mental health professionals' training, access to specific in-depth training in proven treatments — such as Cognitive-Behaviour Therapy — is limited.

Cognitive-Behaviour Therapy is a brief, focused intervention effective in treating anxiety disorders. Several initiatives are seeing mental health professionals within mental health services trained in this therapy. Evidence suggests that GPs and practice nurses can provide psychological therapies, including Cognitive-Behaviour Therapy, after good quality training and with appropriate supervision and support.

- **The stigma of mental disorder.**

New Zealand's youth suicide rates often hit the headlines, but the stigma associated with mental disorder remains a barrier to those seeking help and services. Public opinion surveys show that in most parts of the world people regard mental illness as permanent and untreatable. Here, too, attitudes are a major reason people do not seek help for psychological distress when they need it.

Recent initiatives to reduce this stigma need to be supported by ongoing efforts to increase public awareness, change public attitudes and integrate mental health into our health cultures.

- **Māori often believe the services delivered in most mental health and primary care settings fail to meet their needs.**

Mental health and primary care professionals need better training in meeting Māori needs. This may mean adjusting models to accommodate Māori spiritual beliefs and philosophy.

- **Lack of adequate research**

Research into primary mental health care is needed to supplement evidence from overseas studies in secondary and tertiary care.

Any strategy to overcome these barriers needs the involvement of consumers, consumer advocacy groups, health professionals (especially GPs and practice nurses), community agencies, professional associations, Hospital Health Services and community services, the Health Funding Authority and the Ministry of Health.

WHAT IS ANXIETY?

James is a student about to sit his final exam. As he goes into the exam room, his hands begin to sweat, his heart to pound. He has a 'dull ache' in his stomach and feels slightly sick. James worries he won't be able to remember the material he has studied.

Anxiety is a normal, inevitable part of everyday life. Everybody at some time in their life will feel frightened, 'stressed out' or 'uptight.' In many situations it is appropriate to react with anxiety - it is a naturally healthy coping reaction to a threatening or dangerous situation.

Anxiety is an umbrella term for physical, mental and behavioural changes which automatically occur in the face of threat. People feel apprehensive and 'on edge,' and may worry. They may also find it difficult to concentrate on anything other than the threat.

Their brain signals the release of hormones which trigger activation of the sympathetic nervous system and what is commonly referred to as the fight-or-flight response. This response generates the physical resources to attack or run away from the threat:

- blood clotting ability increases, preparing for possible injury
- heart-rate speeds up and blood pressure rises
- sweating increases to help cool the body
- blood is diverted to the muscles, which tense, ready for action
- digestion slows
- saliva production decreases, causing a dry mouth
- breathing rate speeds up - nostrils and air passages in lungs open wider to take in air more quickly
- liver releases sugar to provide quick energy
- sphincter muscles contract to close bowel and bladder openings
- immune responses decrease (useful in the short-term to allow massive response to immediate threat, but potentially harmful over a long period).

This fight-or-flight response is useful in the short-term - especially if the threat requires a physical response - since it allows us to respond quickly and mobilise our physical resources. But in today's world most threats cannot be dealt with by fighting or running away. Threats in human society (e.g. of redundancy) are often long-lasting and beyond the power of the

individual to resolve, and may result in states of chronic anxiety.

When does anxiety become a problem?

Anxiety can become a problem in situations where there is no real threat, or when anxiety continues long after a threat has passed. Feeling anxious over a long time can result in tiredness, being easily startled, difficulties concentrating or falling and staying asleep, and feeling 'stressed out.'

Many life situations will trigger anxiety, e.g. financial difficulties, abusive relationships. In these cases anxiety can be a response to an unmanageable situation and will often dissipate after environmental factors have been modified or alleviated. However some people may continue to feel anxious even after stress has been alleviated.

Features distinguishing normal from abnormal anxiety

Anxiety may be regarded as a problem needing treatment when:

- it is of greater intensity and/or duration than one would normally expect, given the circumstances of its onset
- it leads to impairment or disability in occupational, social or interpersonal functioning
- the person avoids certain situations or objects in an attempt to diminish their anxiety, so their daily activities are disrupted by avoidance
- its symptoms include obsessions, compulsions, and 'flashbacks' of trauma
- the level of anxiety is inappropriate in the context of family, societal and cultural behaviour and expectations.

Individuals with anxiety disorders have specific recurring fears which they recognise as irrational, but which are nonetheless compelling and intrusive. Anxiety may be connected with specific situations or events (situational/phobic anxiety), or occur seemingly 'out of the blue' (free-floating anxiety). It can also be a result of exposure to trauma or prolonged stress.

Untreated anxiety disorders can become chronic, causing significant disability and distress. Often the course of the anxiety disorder will wax and wane, being especially severe at times of stress.

CAUSES AND RISK FACTORS

Anxiety disorders are usually the result of interaction among several factors including:

- genetics
- family background and upbringing
- conditioning*
- recent stress
- personal beliefs and attitudes
- the ability to express feelings (14).

Evidence suggests that, despite some variations, mental disorders share common risk factors.

In general, risk factors for anxiety disorders include:

Genetic variables

- family history of anxiety and depression (this has been specifically linked to the development of panic disorder and agoraphobia)

Gender

- anxiety disorders affect women twice as often as men; women are more at risk of developing generalised anxiety disorder (GAD), panic, and specific phobias; the rate of social phobia and obsessive-compulsive disorder (OCD) is approximately the same for men and women

Family upbringing/childhood variables

- being raised by a parent with a mental illness (not necessarily an anxiety disorder)
- difficult childhood circumstances, e.g. parents who communicate an overly cautious world view
- parents who are overly critical or set excessively high standards
- emotional insecurity during childhood
- parents who suppress the child's self assertiveness
- unaffectionate parents
- shyness, lack of assertiveness, timidity
- a tendency to be a 'worrier'

Life stressors

- socio-economic deprivation
- poor physical health
- high levels of responsibility e.g. excessive caregiving burden, executive stress
- involuntary unemployment
- previous history of anxiety
- cumulative stress over time, including significant life changes
- significant personal loss, including significant illness of a partner
- experiencing trauma
- poor social support

* Conditioning is often involved in the acquisition of specific phobias eg. someone bitten by a dog may develop a fear of dogs. People can also develop phobias as a product of social learning. This occurs when they begin fearing something by observing or being told about the reaction of others to it, but in the absence of directly experiencing the object or event themselves.

Recognising anxiety disorders

Everyday anxiety or stress enables us to function effectively and maximise our potential. However in any 12-month period about one person in eight in the general population will experience persistent anxiety sufficient to inhibit appropriate emotional, behavioural and social functioning. Anxiety disorders usually begin early in life. A quarter of people with an anxiety disorder will have an illness course that is chronic and disabling. Symptoms fluctuate according to stress. They tend to be more common among females and in those of low socio-economic status.

Anxiety disorders are typically associated with high use of health services, since many medical consultations and tests may be carried out before anxiety is diagnosed (96,95). Some disorders result in significant functional impairment, others may cause distress but have little impact on daily functioning.

Significantly more women than men have phobic disorders. But there are no significant gender differences for specific or social phobia, obsessive-compulsive disorder (OCD), or post traumatic stress disorder (PTSD) (2,94). Generalised anxiety disorder (GAD) is one of the most common anxiety disorders, affecting two to eight percent of the population (51).

The anxiety disorders

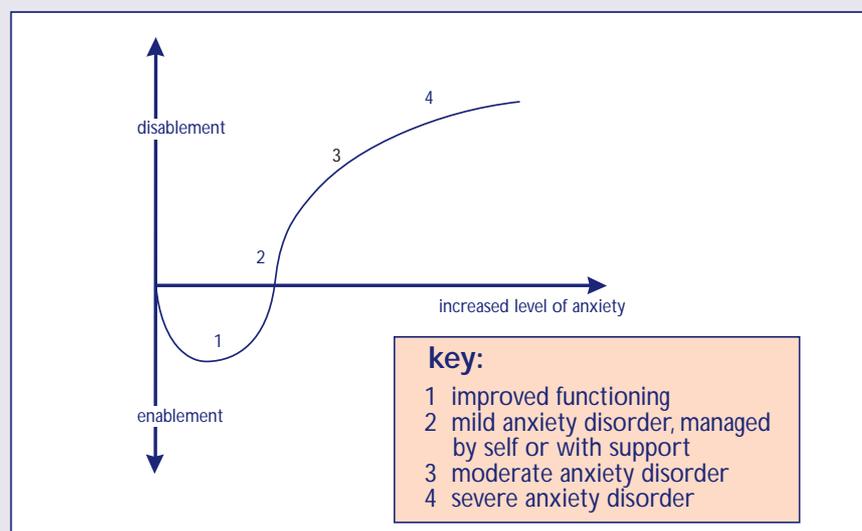
The following section considers clinical features typically associated with each anxiety disorder. The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) distinguishes between:

- panic disorder (with or without agoraphobia)
- specific phobia
- social phobia
- obsessive-compulsive disorder (OCD)
- generalised anxiety disorder (GAD)
- post traumatic stress disorder (PTSD)
- acute stress disorder
- adjustment disorder.

1. Panic disorder (with and without agoraphobia)

A young woman has been having two or three episodes a week when she feels dizzy, has pains in her chest and her heart pounds. These spells can last up to 10 minutes and seemingly come 'out of the blue.' She has been so frightened by them she has presented twice to accident and emergency services. On both occasions, after a careful examination, she was sent home. She is frightened that something might be wrong with her heart and that it hasn't been detected yet.

The anxiety continuum



Panic disorder is characterised by sudden episodes of acute apprehension or fear occurring without any apparent cause (free-floating). Panic feelings usually last only five to 10 minutes, but can return in 'waves' for periods of up to two hours.

A diagnosis of panic disorder (with or without agoraphobia) means the person has experienced (for at least one month) recurrent and unexpected panic attacks. These are associated with persistent worry about additional attacks, worry about the implications of attacks or their consequences (e.g. losing control, having a heart attack, 'going crazy'), and a significant change in behaviour related to attacks

Panic disorder is diagnosed when these criteria are met but anxiety is not due to the direct physiological effects of a substance or a general medical condition. Panic disorder with agoraphobia is diagnosed when the person also meets the additional diagnostic criteria of agoraphobia (See 1.2 agoraphobia)

1.1 Panic attacks and panic disorder

A panic attack is a discrete period of intense fear or discomfort coming on abruptly and peaking within 10 minutes, in which four or more of the following symptoms are present:

- palpitations, pounding heart or accelerated heart-rate
- sweating
- trembling or shaking
- sensations of shortness of breath or smothering
- feelings of choking
- chest pain or discomfort
- nausea or abdominal distress
- feeling dizzy, unsteady, light-headed or faint
- derealisation (feelings of unreality) or depersonalisation (feeling detached from oneself)
- fear of losing control or going crazy
- fear of dying
- numbness or tingling sensations
- chills or hot flushes.

During a panic attack people will usually try to escape from their situation in the hope of the panic ceasing. Panic attacks may sometimes lead to agoraphobic avoidance of situations in which escape may be difficult or embarrassing, or help unavailable.

Not everyone who experiences a panic attack will develop a panic disorder. Occasional panic attacks occur during periods of high stress

or in the context of other mental disorders. Panic attacks frequent enough to warrant a diagnosis of panic disorder can develop at any age, although most commonly they do so in adolescence through to the early thirties.

Because panic disorder often resembles general medical conditions like cardiac and gastrointestinal disorders, people with panic disorder are often subjected to extensive medical investigations (111). They may be labelled hypochondriacs, and diagnosis further delayed. Existing prevalence figures may underestimate true rates because those with anxiety disorders/panic attacks may be misdiagnosed as suffering from chronic medical conditions.

The usual course for panic disorder is chronic, but fluctuating in severity. Some people have episodic outbreaks with years of intermittent remissions, while others have continually severe symptoms. Often the first panic attack is preceded by a number of precursive anxiety symptoms, including generalised anxiety, depression, and hypochondriacal fears (35,36).

Panic disorder is often accompanied by other disorders such as depression and substance abuse and, if untreated, can become disabling.

People who have panic attacks may develop secondary phobias of places/situations where the panic occurred. About a third of those with panic disorder develop agoraphobia and begin avoiding any situations from which they fear they will be unable to escape or get help if they have an attack.

Agoraphobia can develop at any time, but usually does so within the first year of experiencing recurrent panic attacks. In some people, a decrease in panic attacks results in a corresponding decrease in agoraphobic symptoms. Agoraphobia can also become a chronic condition that persists regardless of the presence or absence of panic attacks. In the latter case, the anticipatory fear of having a panic attack can be enough to maintain agoraphobic avoidance. However, early treatment of panic disorder can halt progression to agoraphobia.

Panic disorder without agoraphobia is diagnosed twice as often, and with agoraphobia, three times as often, in women as in men. It is associated with a lifetime prevalence of 1.5 to 3.5 percent. Approximately a third to a half of individuals diagnosed with panic disorder in a community sample will also have agoraphobia

(this rate is higher among clinical samples). Likewise, in secondary care clinical settings, 95 percent of people presenting with agoraphobia also have a history of panic (2).

Follow-up studies of individuals with panic disorder treated in tertiary care settings suggest that at six to 10 years post treatment, 30 percent are without symptoms, 40 to 50 percent are improved but still experience some panic symptoms, and 20 to 30 percent have symptoms the same or slightly worse.

Hyperventilation syndrome

Rapid shallow breathing can sometimes lower the level of carbon dioxide in the bloodstream, giving rise to symptoms similar to those of a panic attack, including dizziness, rapid heartbeat, shortness of breath, light-headedness, tingling in hands or feet, and chest pains. These may be interpreted catastrophically, e.g. 'I'm having a heart attack.' Over-breathing may be a symptom in any anxiety disorder. Consequently, it may be necessary to manage hyperventilation as part - but not the only part - of the treatment for anxiety.

Signs of over-breathing include panting or rapid breathing, sighing, yawning or gasping, and autonomic symptoms such as dizziness and increased heart-rate. Over-breathing can become habitual. Generally this is not enough to bring on a panic attack, but it does result in the person always feeling a little 'on edge.' If such people are put in a stressful situation and increase their breathing even slightly, this can trigger a panic attack (4).

It is important to encourage people to monitor their breathing rate for one minute at intervals throughout the day. The average person needs only 10 to 12 breaths per minute at rest. (Appendix 5 has a daily record form for this purpose.)

The diaphragmatic (abdominal) breathing technique is an effective treatment for hyperventilation as it restores the balance of carbon dioxide in the blood stream, and counters the fight-or-flight response. It has the added benefit of relaxation. (Appendix 6 has instructions on teaching slow breathing.)

The technique should be taught to anyone experiencing panic attacks (although not all people who panic hyperventilate, and not all those who hyperventilate have an anxiety disorder). People should be encouraged to use the technique whenever they notice their anxiety levels rising (including anticipating an anxiety-provoking situation). They should also practice it at least twice a day, even when not anxious, to lower general arousal, remind them what it is like to feel relaxed, and increase their skill.

1.2 Agoraphobia

A woman in her mid-thirties presents in a visibly distressed state. Inquiry reveals it was difficult for her to get to the appointment because she doesn't like being away from home. When she goes outside her 'safety zone' she becomes increasingly anxious, worried she might panic, or that something bad might happen that she can't get away from. Going out in her own car isn't so bad, but she doesn't like being anywhere where she can't get home quickly. She avoids situations where escape might be blocked e.g. crowded theatres, and admits she has been going out less and less.

A person experiencing agoraphobia feels anxious about situations from which escape might be difficult (or embarrassing), or in which help might be unavailable. Difficult situations often include being at home alone, being in a crowd, travelling alone in a car. In response to these fears, the person avoids any situation in which they might have a panic attack, endures it with marked distress, or requires a companion to face it.

Agoraphobia usually develops after an individual has experienced a panic attack or panic symptoms and it continues as a way of avoiding panic inducing situations.

2. Specific phobia

A man presents for advice. He wants to travel overseas with his partner, but keeps delaying their departure date. He confides that he is frightened of heights, and bridges in particular (in case they collapse). He and his partner are booked to travel by train and he is terrified of having a panic attack and 'losing face' in front of his partner should they cross a bridge.

Specific phobia is associated with a marked fear of a specific object or situation, that the person themselves recognises is excessive and irrational. Exposure to the feared stimulus causes extreme distress, which may cause a situationally bound panic attack, or fainting (in the case of blood phobia).

Common fears are of animals, insects, lightning, blood, injections, injury, bridges, closed spaces.* The avoidance, anxious anticipation or distress in the feared situation interferes with the person's normal routine and general functioning.

Although fears are common in the general population, they rarely result in impairment or distress sufficient to warrant a diagnosis of specific phobia. Specific phobias are also common in the general population, but not to the point of significant impairment. Lifetime prevalence rates have been estimated as 10 to 11.3 percent of the general population.

Age of onset typically varies according to the type of specific phobia. Situational phobias have a bimodal onset, with a peak at childhood and a second peak in the mid- twenties. The natural environment type, e.g. heights, usually begins in childhood, as do blood, injury, injection, and animal phobias. Phobias evolving from a traumatic event or panic attack tend to be acute in development and do not have a characteristic age of onset.

Many phobias which develop in childhood are overcome before adulthood. However, phobias persisting into adulthood are less likely to spontaneously remit (only around 20 percent of cases) (2).

Often people can easily avoid the feared stimulus and so do not present for treatment. However, specific phobias can generally be successfully treated with cognitive behavioural intervention involving education, relaxation and exposure-based therapies.

3. Social phobia (social anxiety disorder)

A 19-year-old man tells you his problems 'all began' when he had to go along to a training course organised by the Employment Service. On the morning of the first day he was so apprehensive he felt sick and did not attend. Further questioning indicates that he was worried he would be out of place, and others would see he was nervous and think badly of him. His history indicates he has felt nervous around people for some time. This has prevented him from joining clubs and playing sports. Eating in front of people is especially hard. He has few friends and although he would like to have more, 'it's just so hard to meet people.'

Social phobia is a marked and persistent fear of social or performance settings in which the person feels exposed to the scrutiny of others. They fear they will act in an embarrassing way or show anxiety symptoms, and others will judge them.# Exposure to feared social settings triggers anxiety including situationally bound panic attacks. Although the sufferer recognises these fears as irrational they are compelling and intrusive. They interfere with normal functioning to the extent that the person will avoid certain situations or endure them with intense anxiety. Anticipatory anxiety before social events is also common.

Situations commonly feared by individuals with social phobia include:

- eating in public
- speaking in public
- using public toilets
- being in social situations where they may say or do foolish things
- being in situations where they may blush or appear anxious.

Community based studies indicate a lifetime prevalence of social phobia ranging from three to 13 percent. These rates vary according to the threshold used to determine distress and impairment. Social phobia is more common among young people (18 to 29 years), those with less education, the single, and those of lower socio-economic status (115). While community based samples indicate greater prevalence among women, clinical samples include an equal or greater proportion of men.

* The DSM-IV also describes 'other' phobias, which may include phobic avoidance of situations which might lead to contracting an illness, or in children, of costumed characters eg. clowns

Performance anxiety, stage-fright and shyness in social situations involving unfamiliar people are common and do not warrant a diagnosis of social phobia unless normal functioning is disrupted.

Most people with social phobia are not treated for their illness. Of those who are, mean age of presentation for treatment is 30 to 41 years (52).

Social phobia is a chronic disorder which may fluctuate over time. Typically, onset is in the mid-teens, and with a history of social inhibition or shyness. Onset may follow a stressful or humiliating experience, or be more insidious. Social phobia is usually of chronic duration, although the degree of impairment may fluctuate with life stressors and demands (52).

People with social phobia are more likely to present with co-morbid agoraphobia (19.2 percent), alcohol abuse (23.6 percent) and depression (44.2 percent) than non anxious controls (7.8 percent, 8.6 percent and 24.5 percent respectively) (145). They are also more likely to have co-existing eating disorders. Generally the social phobia precedes the onset of the eating disorder (52).

Social phobia is difficult to treat. The usual aim is to improve confidence in feared social settings so the person can cope. Removal of all anxiety symptoms is unlikely e.g. someone who fears talking in front of others will probably not go on to become an accomplished public speaker, but may learn to give presentations with a manageable level of anxiety.

4. Obsessive-compulsive disorder (OCD)

A young man presents feeling desperate. He has just left his job as a mechanic because he couldn't cope with it. He repeatedly had to go back and check his workmanship, terrified someone might be hurt through his negligence. When driving, he has to constantly check in his rear-view mirror that he hasn't hit anyone. At home he has to repeatedly check his flat doors and windows to ensure they're properly closed. Sometimes he is late for work because he can't satisfy himself his flat is secure. This checking is taking more and more time. He's worried he will lose his job because he's so often late and gets so little work done because of his checking.

OCD is characterised by obsessions and/or compulsions* severe enough to be time-consuming i.e. their performance takes more than an hour a day (2), and causing marked distress or significant impairment. At some point the sufferer recognises their obsessions/compulsions are excessive or irrational but feels powerless to resist.

Obsessions are defined in the DSM-IV as:

- recurrent and persistent thoughts, impulses or images which are intrusive and inappropriate, and cause marked anxiety or distress
- thoughts, impulses or images which are not simply excessive worries about real-life problems
- an attempt by the sufferer to ignore or suppress such thoughts, impulses or images, or neutralise them with some other thought or activity
- recognition that the obsessional thoughts, impulses or images are a product of the sufferer's mind (and not imposed from outside, as in thought insertion).

Compulsions are defined as:

- repetitive behaviours, (e.g. hand-washing, ordering, checking), or mental activities, (e.g. counting, silently repeating words), which the person feels driven to perform in response to either an obsession or to rigidly applied rules
- behaviours or mental acts designed to prevent or reduce distress, or prevent a dreaded event or situation, but which are not realistically connected with what they are designed to neutralise or prevent, or are clearly excessive.

Although the repetitive behaviours are intended to alleviate anxiety, relief is usually short-lived, and they must be repeated many times. Rituals often begin to lose their power to relieve anxiety so people develop increasingly complex rituals, or take hours to perform them perfectly. OCD may also lead to avoiding situations or objects e.g. not leaving home for fear of encountering animal faeces.

OCD is one of the least common anxiety disorders, with a lifetime prevalence of around 2.5 percent. It is equally common in men and women.

OCD can develop at any age, but typical onset is in adolescence and early adulthood. Modal age of onset is earlier in males than females - half those with OCD develop it before

Obsessive and compulsive symptoms are likely (though not necessarily) to be related eg. someone with an obsession about becoming contaminated engages in compulsive cleaning.

the age of 15 (96). Onset of symptoms is usually gradual, with severity fluctuating over time. Symptoms are typically exacerbated by stress. Because people with OCD usually hide their symptoms, many do not seek help until five to 10 years after onset (54).

Symptoms usually fall into one of several categories: checking, cleaning, counting and needing symmetry rituals, obsessional thoughts and obsessional slowness.* Checking and cleaning rituals are the most common manifestations of OCD. Obsessional thoughts are typically aggressive, sexual or religious, and upsetting and repulsive to the individual. Multiple symptoms are common.

Approximately 90 percent of people with OCD can expect a moderate to marked improvement of their symptoms with optimal treatment. Complete recovery is rare. The content of obsessions or the nature of compulsions do not predict treatment outcome (54).

5. Generalised anxiety disorder (GAD)[#]

A middle-aged woman presents with a cluster of somatic complaints: difficulty getting to sleep, butterflies in the stomach and muscle tension. She admits she has always been a 'worrier.' Recently she was contemplating leaving a job she was unsatisfied with, but found she kept ruminating on everything that could go wrong, resulting in her not changing jobs. She finds making decisions difficult, and that worries go 'round and round' in her head and are difficult to distract herself from. She tends to expect the worst, and 'makes mountains out of mole-hills'.

Generalised anxiety is characterised by excessive worry and apprehension, occurring more days than not for at least six months. This is accompanied by at least three additional symptoms in the categories of:

- motor tension e.g. muscle tension, trembling, restlessness, fatigue

- autonomic hyperactivity[‡] e.g. shortness of breath, rapid heart beat, dry mouth, cold hands, dizziness (but not to the degree of qualifying as panic symptoms)
- vigilance and scanning e.g. feeling 'keyed up' all the time, difficulty concentrating, startling easily, insomnia or irritability (14).

Adults with GAD often worry about minor matters or routine life circumstances in a way they feel is excessive and at times out of control. The focus may shift from specific concerns to general worry, and people may feel they 'worry constantly'.

GAD has a five percent lifetime prevalence rate among the general population. In the community, approximately two-thirds of people with GAD are women.

Many individuals with GAD report feeling anxious and nervous all their lives. The disorder usually begins gradually in childhood and adolescence, and symptoms often diminish with age. The course of the disorder is chronic but fluctuating, often worsening under stress. Approximately one in four individuals with GAD have periods of remission^f.

6. Post traumatic stress disorder (PTSD)

A young woman comes to your clinic asking for sleeping tablets. She is having recurrent horrifying nightmares about a car accident she was in a year ago, and wakes up in a cold sweat. She is afraid to go to sleep. She can no longer drive her car as she has intense flashbacks every time she tries. The sound of screeching brakes triggers intense panic, as does any smell of burning. She says of her experience, 'I just can't put it behind me.'

The essential feature of PTSD is development of psychological symptoms after direct or indirect** exposure to an extreme stressor outside the normal range of human experience. Symptoms can occur soon after the event (e.g. sexual abuse, car accident, robbery), but may also be delayed, not beginning until months later.

* Obsessional slowness is a less common subtype of OCD. People with primary obsessional slowness spend hours performing everyday tasks like eating. They tend not to experience obsessional thoughts, and their performance is not ritualistic.

Includes over-anxious disorder of childhood

‡ This refers to the central nervous system's autonomic system involved in activation of the fight-or-flight response.

f Remission means a period of three months or more in which the person is without anxiety symptoms.

** In some cases, the person need not have been directly exposed to the trauma to develop a traumatic reaction eg. a parent of a child killed in a car accident repeatedly visualises what happened.

For PTSD to be diagnosed, the person must have been exposed to a traumatic event in which both of the following were present:

- the person experienced, witnessed or was confronted with an event or events involving actual or threatened death or serious injury, or a threat to the physical integrity of themselves or others
- their response includes intense fear, helplessness, or horror.

The traumatic event is persistently re-experienced in one (or more) of the following ways:

- recurrent, intrusive, distressing memories of the event
- recurrent distressing dreams of the event
- acting or feeling as if the event were recurring, including illusions, hallucinations and dissociated flash-back episodes
- intense psychological distress at exposure (internally or externally) to cues symbolising or resembling an aspect of the event
- physiological reaction to (internal or external) exposure to cues symbolising or resembling an aspect of the traumatic event.

The person persistently avoids stimuli associated with the trauma, and their emotional responsiveness may be numbed. This is indicated by three (or more) of the following:

- efforts to avoid thoughts, feelings* or conversations associated with the trauma
- avoiding situations which trigger memories of the trauma
- inability to recall important aspects of the trauma
- markedly diminished interest or participation in activities
- feelings of detachment and estrangement from others
- restricted range of affect, e.g. unable to have loving feelings
- sense of a foreshortened future, e.g. no expectation of a career, marriage, normal life span.

The person is also likely to complain of persistent symptoms of physiological arousal, including difficulty falling or staying asleep, irritability, difficulty concentrating, hypervigilance, and exaggerated startle response.

Community based samples indicate a prevalence of PTSD from one to four percent. These rates vary according to methods of testing and populations studied. However, among people who have been recently exposed to psychological trauma (e.g. victims of violent crimes, refugees), prevalence rates range from three to 58 percent, indicating PTSD is a significant mental health problem among some groups.

PTSD can occur at any age including childhood. Symptoms may be mild or severe – people may become either easily irritated or have violent outbursts. Ordinary events recall the trauma and trigger flashbacks or intrusive images.

The severity, duration and proximity of exposure to a traumatic event are the most important factors in the probability of developing the disorder. If the stressor is extreme, a person may develop PTSD without having any features predisposing them to anxiety. If the stressor is prolonged and experienced at an early age, it can have profound and lasting effects on a child's emotional, social and cognitive development (99).

Symptoms of PTSD usually begin within three months of the trauma. The course of the illness varies; some recover within six months, others' symptoms last much longer. In some cases the illness does not fully develop until years after the event, although the person will often describe some PTSD symptoms such as a phobia for situations like the one in which the trauma occurred.

People with PTSD will often be permanently affected by the personal meaning they attribute to the trauma (e.g. someone who suffered childhood abuse may feel guilt and blame, believing they are not a valuable person or it would not have happened to them, or becoming distrustful of others). They may have, among other symptoms, impaired self-esteem, poorer social functioning, difficulties in establishing or maintaining personal relationships, and be at significantly higher risk of suicide (96).

7. Acute stress disorder

A man presents with symptoms which started after he was involved in a serious car accident. He reports that since the accident a week ago, he has been plagued by nightmares. He can't drive his car because it triggers flashbacks to the incident. Last week he went past the scene of the accident, began to panic and had to escape. He feels irritable due to lack of sleep and is finding it hard to concentrate. Even ads on television remind him of the accident and induce flashbacks and panic.

Acute stress reaction is a transient disorder developed in response to a traumatic event. Its essential features mimic those of PTSD except that symptoms appear, at most, four weeks after the trauma, and last a maximum of another four weeks. The person must be suffering significant distress or impairment of general functioning to warrant the diagnosis.

It is common for individuals to experience symptoms for days, even weeks, after a traumatic event. Describing the following symptoms to patients can help reduce their sense of isolation and anxiety. Most commonly reported reactions include:

- anxiety or fear of being alone or in other frightening situations, of danger to self or loved ones, or of a similar event happening again
- avoidance of situations or thoughts reminiscent of the traumatic event
- being easily startled by loud noises or sudden movements
- flashbacks, when images of the traumatic event suddenly come to mind
- physical symptoms, e.g. muscle tension, trembling or shaking
- lack of interest in usual activities, including loss of appetite or sexual interest
- sadness or feelings of loss or loneliness
- shock or disbelief at what happened, feeling numb or unreal, feeling isolated or detached
- sleep problems
- problems with concentration and memory
- preoccupation with the trauma
- guilt and self-doubt for actions or lack of them during the trauma, or for being better off than others
- anger, asking 'why me?'

Not everyone will experience these reactions, and they should wear off in a matter of weeks. If the person continues to experience them a month after the event, a diagnosis of PTSD should be considered. (See Appendix 12 on advising the patient what to do immediately after the event, and strategies for managing the following days.)

8. Adjustment disorder

A 55-year-old woman presents, having been made redundant. She is worried that at her age she won't be able to find more work. She is wondering what to do with her time, as she has always defined herself through her work. She feels unable to think ahead, and hasn't taken any steps to find work or other meaningful activities. She has become depressed and anxious about her future, but spends her time 'moping about the house.' She responds irritably to well-meaning suggestions from her family.

Adjustment disorders (manifested as either depression and/or anxiety) are characterised by a short period of emotional and behavioural disturbance in response to a significant life change or stress.

An adjustment disorder is only diagnosed, however, if distress exceeds expected levels, given the cause, or if it causes significant impairment in social or occupational functioning. For diagnosis, symptoms must resolve within six months (although symptoms may persist if they are a response to a chronic stressor). If symptoms do persist, consideration should be given to alternative diagnoses including (most commonly) depression, GAD and panic disorder.

Typical stressors or life events include business difficulties, redundancy, re-entry culture shock (e.g. getting out of jail, leaving hospital, returning to the home country after a long period of absence), or family life-cycle changes (e.g. marriage, birth of a baby, children going to school, leaving home, retirement). Grief over death of a loved one is not usually diagnosed as an adjustment disorder unless it fails to wane over time, and causes significant impairment in social and occupational functioning.

Common symptoms associated with this disorder can include:

- depressed mood
- tearfulness and feelings of hopelessness
- anxiety or worry
- feeling unable to cope with life now, or plan ahead
- insomnia
- physical symptoms, e.g. headaches, chest pain, palpitations
- interference with daily routines
- aggressive or antisocial behaviour (more common among adolescents)
- reverting to bed-wetting, thumb-sucking or other regressive behaviours is common in children.(50-51)

Anxiety disorders - essential features

(adapted from Hunt et al., 1995. Refer to Appendix 3 for examples of specific questions to ask.)

Disorder	Symptoms and specific concerns
Panic disorder (with or without agoraphobia)	Recurrent and unexpected panic attacks (often misinterpreted, e.g. as heart attacks), followed by persistent concern about a further attack or about its implications, e.g. that they are going to die.
• Agoraphobia (including agoraphobia without a history of panic disorder)*	Anxiety about being in a situation from which escape may be difficult or embarrassing, or in which help may be unavailable should a panic attack or panic-like symptoms occur. This anxiety leads to avoidance of situations where panic (or panic-like symptoms) might occur, e.g. crowded places, travelling alone.
Specific phobia	Persistent irrational fear and avoidance of a specific object or situation, e.g. heights, enclosed spaces, animals, blood.
Social phobia	Anxiety about being scrutinised or evaluated by others. The anxiety usually leads to avoidance of certain social situations such as eating or speaking in front of others.
Generalised anxiety disorder (GAD)	Excessive and persistent worry about aspects of life including family, health, job or finances.
Obsessive compulsive disorder (OCD)	Upsetting and intrusive obsessional thoughts that are difficult to control such as contamination or hurting their family. Obsessional thoughts often lead to uncontrollable compulsive rituals (e.g. cleaning, checking, counting), although some people carry out compulsive rituals in the absence of any obvious obsessions.
Post traumatic stress disorder (PTSD)	Long-lasting anxiety or memories about a severe traumatic event. May experience nightmares, flashbacks, anxiety, and avoidance of cues that recall the traumatic event.
Acute stress reaction	Short-term reaction (days) to a traumatic event – anxiety, avoidance, easily startled, flashbacks, muscle tension.
Adjustment disorder	Anxiety, insomnia, tearfulness, depressed mood occurring in response to a significant life change or stress (four weeks to six months).

* For a diagnosis of agoraphobia without a history of panic disorder, fear focuses on the occurrence of panic-like symptoms which, while not resulting in a full-blown panic attack, are nonetheless incapacitating or embarrassing to the person experiencing them.

ASSESSMENT

Although there are no good New Zealand data, international research shows more than a quarter of patients in western countries presenting for primary care have a mental disorder (44,48,9,57). GPs fail to recognise a mental health problem in about half these people (76,114, 97,55), although some patients are treated in the absence of an explicit diagnosis (97,53,118).

RECOMMENDED BEST PRACTICE:

The key to assessment is a careful, detailed history, based on respectful, reflective probing, and listening skills. This should take into account cultural, gender and other psychosocial issues impacting on the person's life for a fuller discussion of these).

Anxious people often over-emphasise physical complaints (particularly in panic disorder) and minimise psychological symptoms, unless inquiry is specific and detailed (111).

Look for the following symptoms which suggest an anxiety disorder:

- expecting the worst, excessive worry
- phobic avoidance of feared situations
- unexplained somatic complaints, e.g. heart palpitations, headaches, fainting, dizziness
- hyperventilation
- muscular tension, especially in shoulders, neck and jaw
- feeling 'stressed out,' 'keyed up'
- easily startled
- depersonalisation
- derealisation
- catastrophic thinking, e.g. 'the world is a dirty place,' 'something bad is going to happen'
- rituals to reduce anxiety.

Inquiry into development of these symptoms should cover:

- their nature, frequency, e.g. daily or weekly panic attacks, and intensity
- rate of onset - gradual or rapid, or resulting from a trauma, as in PTSD or an acute stress reaction

- duration of symptoms - 'normal' reaction to stress (e.g. grief, or an acute stress reaction); someone with symptoms long after it might be expected to have resolved may have an adjustment disorder
- recent stressful life events and lack of social supports - stress should not be used to 'explain away' anxiety disorders, but stress may sometimes precipitate anxiety disorders
- situations triggering or exacerbating symptoms, including the one in which fear first emerged
- how much anxiety is due to anticipation of that situation
- the person's autonomic arousal level when anticipating or faced with the feared situation or object
- how much avoidance and ritualised behaviour is occurring
- how much others are involved – family and others often become involved in avoidance or ritualised behaviour in order to lessen the anxious person's distress.(125)
- history of anxiety disorders (including anxiety in childhood)
- family history of anxiety disorders
- chronic or severe physical illness
- concurrent substance abuse or withdrawal from substances.

Some disorders will be chronic and the person may have had symptoms for several years before seeking help. People tend to shape their lives around avoiding stressors and their anxiety-related behaviours are often reinforced by those close to them.

Assessing the risk of suicide and likelihood of harm

The risk of suicide is not greatly increased by anxiety disorder (10,11). The risk of suicide is, however, increased by the presence of personality disorder, co-morbid affective disorders and substance abuse disorders, beyond what is typically associated with any of these disorders alone. Anxiety disorder has a cumulative effect on the risk of suicide when associated with other disorders (42,49).

Deliberate self-harm is often associated with anxiety. It is injury without any intention of dying, e.g. cutting and burning.* It can be seen as an unhelpful way of trying to cope with painful emotions like anxiety or fear since, for a short time, self-injury may reduce tension and relieve emotional pain.

RECOMMENDED BEST PRACTICE:

If a person seriously self-harms, or repeatedly injures themselves, it is important to seek specialist help from the local community mental health team.

Assessing psychosocial variables

Thorough assessment of anxiety symptoms should cover any psychosocial factors which might have precipitated symptoms or be perpetuating them, or which might support their treatment. Consider the following factors:

- home situation, parents, siblings
- alcohol and substance abuse
- breach of trust by a trusted person, e.g. sexual abuse
- gay-lesbian issues (see page 31 for further discussion)
- cultural aspects
- employment, general financial issues.

Assessing cultural issues

People from different cultures may explain their experiences differently. The more the health professional can appreciate the individual's cultural perspective, the better the therapeutic relationship.

RECOMMENDED BEST PRACTICE:

Where a health professional's view of anxiety differs markedly from that of the person seeking help, they should make contact with, or refer the person to, a more culturally appropriate service. This obviously applies in the case of different cultural backgrounds, but also when religious beliefs and values differ. The health professional should offer to arrange the referral and be supportive of it.

Once the referral is made, the health professional should continue to be available and supportive. Scarcity of specialist cultural treatment services means most people are likely to be referred back to their primary healthcare professional for ongoing monitoring and treatment. Joint responsibility for treatment should be arranged where possible.

Family, religious organisations and community leaders can be helpful when dealing with an unfamiliar culture and/or religion. It may also be appropriate to consult a local cultural adviser. But particular attention should be paid to the individual's own beliefs and values, and confidentiality always maintained when getting input from other sources.

Spiritual beliefs

Intense emotional experiences may accompany contemplation of spiritual matters. Many people perceive spiritual struggle as the main factor complicating their depression or anxiety. Their beliefs should be seen in the context of their social, religious and cultural environment and if need be, a trusted member of the person's faith or cultural group should be consulted.

* Deliberate self-harm is also different from self-mutilation, which can be thought of as a deliberate act to alter the person's appearance eg. amputation. Self-mutilation is much less common, often motivated by psychotic states and needing urgent psychiatric intervention.

DIAGNOSING ANXIETY DISORDERS

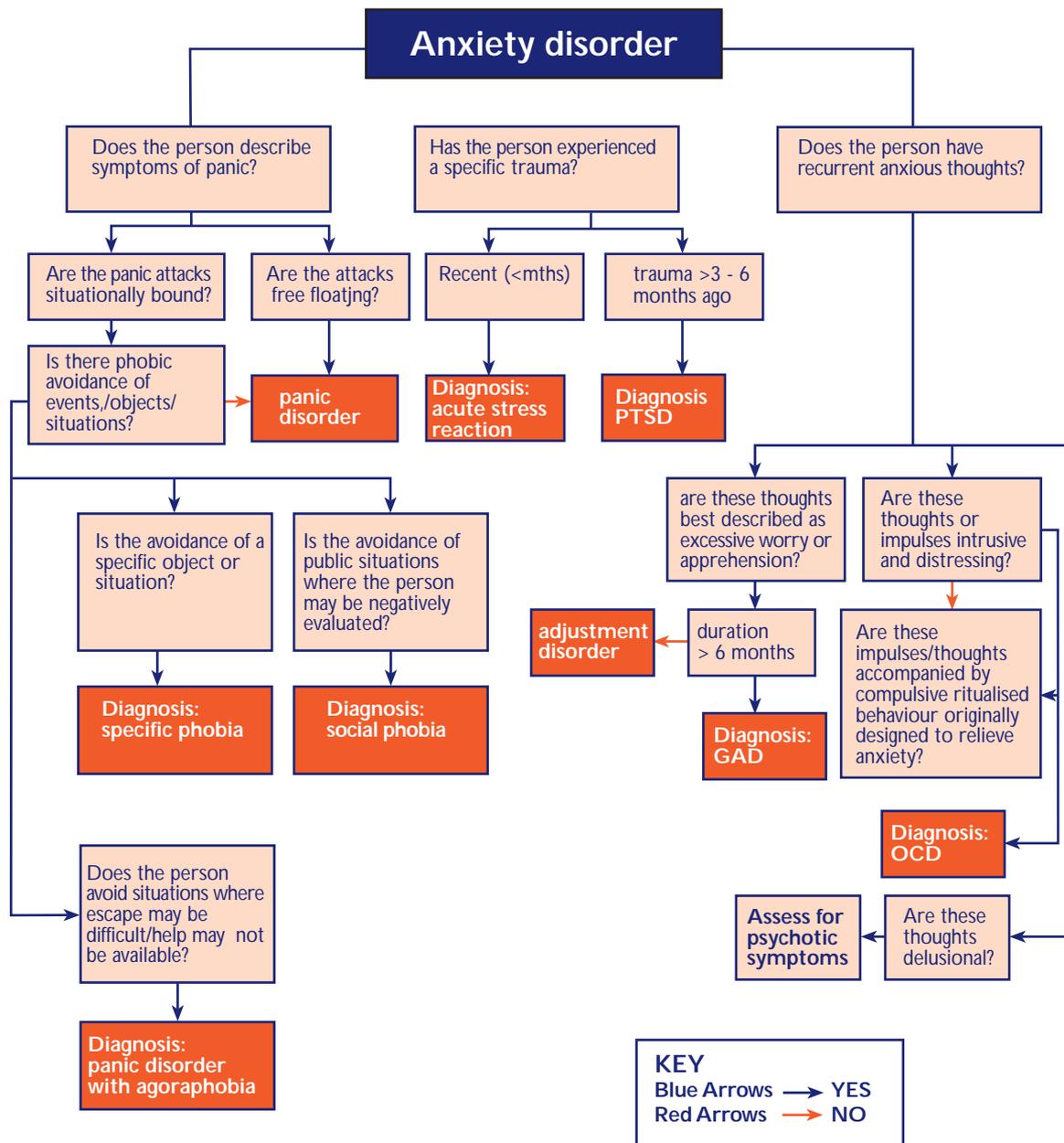
Once symptoms of anxiety are diagnosed, diagnosis of the specific (or combination) anxiety disorder should follow. (Appendix 3 lists questions that may help elicit anxiety symptoms.)

Assessing severity

No standardised scales rating severity of anxiety symptoms have been validated in the primary care setting. However self-monitoring scales, indicative of the person's subjective distress, may be used.

Self-monitoring scales also measure the frequency and duration of symptoms like panic, and the situations in which they occur. They indicate the degree of impairment the individual is experiencing, and provide insight into anxiety-triggering situations. They can also be useful later as a treatment outcome measure. (Appendix 4 has an example of a self-monitoring form.)

Differentiating anxiety disorders



Differentiating anxiety from other mental health disorders

The primary practitioner should be alert, in the initial assessment, to disorders commonly co-occurring or presenting similarly to anxiety disorders. In particular, the assessment should determine (or eliminate) the presence of depression, substance abuse or the early stages of psychosis.

The following section addresses these disorders and others in descending order of likely presentation.

Substance abuse

Studies have shown a high rate of anxiety disorders with alcohol abuse and conversely, a high rate of alcohol abuse among people with anxiety disorders (71). In particular, agoraphobia, panic disorder and social phobia are associated with alcohol use and dependence.

There is a commonly held belief that people with anxiety disorders use substances to help control their anxiety, i.e. self-medicate. Alcohol, for instance, may make it easier for a socially phobic person to interact in social situations. However, a recent literature review of studies of inpatient and outpatient groups presenting with either anxiety or alcohol abuse disorders (68) indicates the self-medication hypothesis alone is simplistic.

Some substances (particularly alcohol and cannabis) may reduce anxiety. They may also, under some circumstances, increase it (68), and stimulants such as cocaine, amphetamines and caffeine, may provoke panic attacks.

Increased anxiety can be associated with prolonged drinking, ingestion of large quantities of alcohol, and withdrawal from habitual drinking. Chronic and acute effects of alcohol abuse on the body may produce symptoms mimicking anxiety states, or trigger anxiety reaction by sensitising people to their somatic responses. The negative social, legal and interpersonal consequences of long-term substance abuse may also substantially increase stress, worry and anxiety (68).

Differentiating anxiety and substance abuse

It is important to suspect concurrent substance use disorders in anxiety disorders when there is:

- a high intake of alcohol or marijuana
- a pattern of substance use to relieve anxiety
- a history of benzodiazepine or barbiturate abuse

- a family or personal history of alcohol or drug problems
- poor compliance with treatment for anxiety
- poor results from treatment for anxiety and depression.

RECOMMENDED BEST PRACTICE

Assessment should differentiate between substance-induced anxiety (principally alcohol withdrawal) and anxiety disorders per se. Intoxication with other substances such as cannabis should also be assessed (checking for poly-drug abuse).

Anxiety and related autonomic arousal symptoms mirror alcohol withdrawal syndrome. Distinguishing between alcohol withdrawal and both GAD and panic disorder can be difficult.* The health professional should try to establish the course of each disorder, and which came first. A detailed history of anxiety symptoms should be taken, followed by questions about:

- whether symptoms are chronic, e.g. as in the case of GAD, or related to periods of reduced alcohol intake; it is important to establish when the last drink was and what the usual intake is
- physical features, e.g. tremors indicating withdrawal
- whether the person is alcohol dependent
- whether the person has a history of alcohol withdrawal, including seizures or delirium tremens
- use of other stimulant drugs, including caffeine and nicotine, which can create symptoms of autonomic arousal mirroring anxiety
- the social context which might be maintaining the person's substance use.

RECOMMENDED BEST PRACTICE

It is important to be aware that if a person with anxiety also has substance use problems and depression, they are more at risk of suicide or self-harm.

Where there are marked anxiety features not adequately explained by substance withdrawal or heavy consumption, the ideal approach is detoxification and observation for six alcohol/substance-free weeks. If anxiety symptoms persist, they will probably be due to an anxiety disorder (40). (For further details see treatment section)

Depressive disorders

Major depression often occurs in people with anxiety disorders. An estimated 40 percent of patients with an anxiety disorder will also meet the criteria for a depressive disorder (20).

In about a third of individuals with both disorders, depression precedes onset of panic disorder. In the remaining two-thirds, the depression is concurrent with or follows the onset of panic disorder. Co-morbid disorders are associated with poorer recovery rates, poorer outcomes and greater psychosocial impairment. (For further discussion see page 46)

RECOMMENDED BEST PRACTICE

People should be routinely assessed for concurrent depressive symptoms when anxiety symptoms are present (and vice versa). Patients may perceive anxiety as more acceptable and prefer to describe its somatic symptoms rather than admit to feelings of depression.

Distinguishing anxiety and depressive disorders

Predominant mood: depressed patients are persistently 'blue' or 'down,' although at times they may be agitated or anxious. A patient with an anxiety disorder is fearful or anxious but usually not persistently so.

Age of onset: primary anxiety disorders most frequently occur in young adults, rarely coming on after the age of 40. Although depression occurs in young adults, first episodes occur across a broader age-range than anxiety disorders. If an older person presents with primary anxiety, suspect secondary causes, e.g. depression, or organic causes, e.g. strokes.

Psychosocial effects: depression tends to impair a person's functioning in all spheres of life, whereas impairments due to anxiety disorders may be more circumscribed.

Cognitive content: anxiety cognitions centre around themes of 'what if,' catastrophising and anticipating negative consequences. Depressive cognitions feature a negative view of the self, the world and the future - 'I'm no good, the world is an unsafe place, my luck will never change.' (see table on page 26)

Psychotic disorder/delusional disorder

Schizophrenia typically develops in the late teens to mid-thirties, and is often accompanied by periods of intense anxiety. In the early stages, a person may display a series of prodromal or precursive symptoms (relatively mild/sub-threshold symptoms, where they are described as behaving 'oddly' or not being 'themselves') long before developing overt psychosis. The person may express beliefs which are unusual but not delusional in intensity. They may report some perceptual disturbance, and their behaviour may be out of place, but not grossly disorganised.

Negative symptoms* such as apathy, withdrawal, and lack of motivation and initiative, are also common in this phase and usually the first sign something is wrong. The person has difficulty concentrating, suffers memory impairment and motivational difficulties, is less talkative and increasingly withdrawn. This disorder may also be accompanied by significant levels of anxiety.

Occasionally symptoms of obsession resemble those of psychotic or delusional beliefs. Generally speaking, however, people with OCD recognise their beliefs as irrational (or can be persuaded of it), whereas those with psychotic delusions do not.

RECOMMENDED BEST PRACTICE

Whenever the diagnosis is unclear, the person is in their late teens and has failed to respond to treatment for anxiety/depression, the primary health professional should consider referral to secondary care services.

Other disorders

The following may resemble an anxiety disorder, or affect its course:

- eating disorder, including anorexia nervosa and bulimia nervosa
- personality disorder
- somatisation disorder
- impulse control disorder
- hypochondriasis
- body dysmorphic disorder.

Eating disorders: Eating disorders have been shown to be associated with a range of anxiety disorders. Sixty-four percent of women in treatment for eating disorder also have an anxiety disorder, whose onset in most was after that of the eating disorder (17).

* Symptoms characteristic of psychotic disorders fall into positive and negative categories. Positive symptoms are those representing an excess of normal mental functioning, including inferential thinking (delusions), perception (hallucinations), communication (disorganised speech) and behaviour. Negative symptoms include a restricted range and intensity of emotional expression (affective flattening) in the fluency and productivity of thought and speech, and in the initiation of goal-directed behaviour (DSM-IV).

Anorexia nervosa may mimic social phobia and OCD. Individuals may be humiliated by eating in public, fear being negatively evaluated by others, and exhibit obsessions and compulsive rituals relating to food. Diagnostic criteria for anorexia nervosa highlight 'an intense fear of gaining weight or becoming fat, even though underweight'. Likewise, the bingeing and purging that typify bulimia nervosa may resemble compulsive rituals. However, an additional diagnosis of OCD or social phobia should only be made if the person's preoccupations/fears/rituals are not confined to eating.

Personality disorders: Some personality disorders may mimic the symptoms of anxiety (they also commonly co-occur). Obsessive compulsive personality disorder* begins in early adulthood and involves preoccupation with orderliness, perfection and control rather than discrete obsessions or compulsive behaviours.

Other personality disorders commonly co-occurring or mimicking anxiety disorders are avoidant personality disorder (hypersensitivity to criticism, feelings of inadequacy, avoidance of situations in which a person might be humiliated or rejected), and dependent personality disorder (feelings of inadequacy, a need to be 'taken care of').

Schizoid personality disorder may look like social phobia, but in the former, social situations are avoided because of a lack of interest in relating to other people rather than from anxiety about being negatively evaluated.

Somatisation disorder: To warrant a diagnosis of somatisation disorder, a person must present with multiple physical symptoms for which there is no physical basis or which cannot be fully explained by medical conditions. Symptoms impair social, occupational or other functioning. Somatisation disorder is differentiated from anxiety disorder by the fact that physical symptoms are the primary complaint.

Impulse control disorder: In impulse control disorders# the individual is preoccupied with a target behaviour (e.g. gambling, pyromania), and needs to repeat it with increasing intensity to achieve the same excitement or release tension. But the behaviour is not performed according to rigid rules or in response to an obsession.

Hypochondriasis: This differs from anxiety-based fears about illness, e.g. OCD based on a fear of contamination with specific phobic avoidance of situations where the person may contract an illness. People with anxiety are preoccupied by the fear of contracting an illness, whereas those with hypochondriasis believe they already have one.

Body dysmorphic disorder: People with body dysmorphic disorder are preoccupied with a perceived defect in their appearance. It is either imagined, or a slight physical anomaly is exaggerated and the person's concern excessive, e.g. believing a largish nose is grotesque. This preoccupation causes significant distress. OCD is diagnosed only when the obsessions and/or compulsions are unrestricted to matters of appearance.

In summary, when considering other psychiatric disorders that may be associated with anxiety, it is important for the primary health professional to remember that:

- other mental health syndromes may produce anxiety
- anxiety may produce other emotional and social problems
- anxiety may co-occur with a disorder such as depression or substance use disorder.

Conditions or medications possibly causing anxiety symptoms

As well as psychiatric illnesses, some general conditions and medications may cause symptoms similar to those of anxiety.

RECOMMENDED BEST PRACTICE

In anyone experiencing the onset of unexplained anxiety, a careful medical history should be taken and a physical examination and routine investigations should not be overlooked.

Having said that, the primary health professional should be aware that people with anxiety disorders are typically over-medicalised. This results in costly and unnecessary tests, and inadequate treatment of the disorder. This is particularly true of those with panic symptoms, who tend to present with physical symptoms, and visit their doctors frequently (when, presumably, panic attacks are misinterpreted as heart attacks) (96).

* Obsessive compulsive personality disorder is differentiated from OCD by being a pervasive personality style, rather than being experienced as upsetting and intrusive.

These include: intermittent explosive disorder (episodes of being unable to resist aggressive impulses resulting in assault, destruction of property etc); kleptomania (impulsive stealing of unneeded or valueless items); pyromania (fire-setting for pleasure or tension relief); pathological gambling; trichotillomania (recurrent hair pulling for pleasure or tension release, resulting in significant hair loss).

General medical conditions which may aggravate or mimic anxiety symptoms

Physical Condition	Examples
Endocrine conditions	hyperthyroidism and hypothyroidism, hypoglycemia, adrenal insufficiency hyperadrenocorticism, pheochromocytoma, menopause
Cardiovascular conditions	congestive heart failure, pulmonary embolism, arrhythmia, mitral valve prolapse
Respiratory conditions	asthma, chronic obstructive pulmonary disease, pneumonia, ventilation rate
Metabolic conditions	diabetes, porphyria
Central nervous system/ neurological conditions	neoplasms, encephalitis, vestibular dysfunction, temporal lobe epilepsy, migraines
Occupational chemical exposure	lead poisoning
Gastrointestinal disorders	peptic ulcers, irritable bowel
Haematological conditions	vitamin B12 deficiency, anaemia
Genito-urinary conditions	urinary tract infection (in elderly)
Other conditions	chronic fatigue
Other serious/ terminal illnesses	cancer
Medication induced	Many classes of drugs have anxiety type side-effects (e.g. SSRI's are associated with an increase in anxiety in first two weeks). A cautious medication history should be taken.
Drug related	For example, excessive stimulant intake (including: caffeine and nicotine), excessive alcohol consumption, and withdrawal symptoms

Basic screening tests to identify medical conditions might include:

- haematological studies
- creatinine electrolytes and calcium
- thyroid function tests
- ECG, if cardiac symptoms are prominent.

The presence of any of the above conditions does not exclude a diagnosis of anxiety disorder.

RECOMMENDED BEST PRACTICE

When a medical condition is the suspected cause of anxiety symptoms, treatment should be initiated for the medical disorder. Once this has been stabilised, treatment of any remaining anxiety symptoms should be considered.

Menstrual disturbance may signal psychological distress, e.g. amenorrhea (abnormal absence of menstruation) may indicate an eating disturbance, stress or anxiety. Palpitations and

other symptoms of panic are among the many presenting symptoms of menopause. Often the woman presents with these symptoms, concerned they are indicative of heart problems.

It is important to inquire about other perimenopausal symptoms when assessing women in their forties to fifties (with latitude at either end of the age-range). Many women are unaware of perimenopausal symptoms apart from hot flushes, and sometimes knowing what these are is enough to allay concern.

Differentiating between anxiety and/or depression

All the following symptoms may occur in anxiety or depression. However, clusters of symptoms are more commonly associated with one disorder.

	Symptoms more common to anxiety disorders	Symptoms more common to depression	Symptoms common to both anxiety and depression
bodily	<ul style="list-style-type: none"> • difficulty falling asleep • tremor or palpitations • sweating • hot or cold flushes • faintness, dizziness • muscle tension • nausea • breathlessness 	<ul style="list-style-type: none"> • early morning waking or oversleeping • diurnal variation • chronic or recurrent nagging pain • agitation or slowed behaviour • loss of libido 	<ul style="list-style-type: none"> • sleep disturbance • appetite change • non specific bodily complaints • fatigue • restlessness • headaches • dry mouth
feelings	<ul style="list-style-type: none"> • depersonalisation • derealisation • helplessness • “stressed out, keyed up” • apprehension 	<ul style="list-style-type: none"> • sadness, despair • guilt, hopelessness • lack of motivation • lack of pleasure, ‘flatness’ • loss of interest in usual activities, apathy 	<ul style="list-style-type: none"> • irritability • feelings of impending doom, anxious • dependent • loss of enjoyment • tearful • rapid mood swings
thoughts	<ul style="list-style-type: none"> • expecting the worst • catastrophic thinking 	<ul style="list-style-type: none"> • slowed speech, thought processes and response times • suicidal thoughts 	<ul style="list-style-type: none"> • difficulty with concentration • excessive worry • indecision
behaviour	<ul style="list-style-type: none"> • phobic avoidance of feared situations • easily startled • anxiety reducing rituals • hyperventilation 	<ul style="list-style-type: none"> • reduced mobility • downcast expression • limited behaviour due to apathy/ lack of energy • decreased socialising 	<ul style="list-style-type: none"> • decreased daily activities • dissatisfaction with life • derealisation (feelings of unreality) • depersonalisation (feeling detached from oneself)

ASSESSMENT ISSUES FOR SPECIAL POPULATIONS

Older people

RECOMMENDED BEST PRACTICE

Where anxiety is a problem for the first time in an elderly person's life, referral to a specialist geriatric/ psychogeriatric unit for clarification of diagnosis and treatment should be considered sooner rather than later.

Illness in older people may have a non-specific presentation and deteriorate rapidly if not treated as early as possible. Frail older people tend to have multiple disorders, including psychological and physical complaints. Benzodiazepine use should be initiated with caution and with awareness of the dangers of over-prescribing and multiple prescription.

Adjustment reactions due to multiple losses and grief are common among the elderly, especially those who are poorer, socially isolated or living alone, physically disabled, or recently widowed.

Children and adolescents

Rachel is a nine-year-old whose parents divorced about a year ago. She lives with her mother, they've had to move into a new house, and Rachel is going to a new school. Rachel's mother says Rachel is performing below previous levels at school and, despite having been there a year, hasn't made any friends. On school days Rachel often complains of tummy aches, which go away in the weekend. Rachel's mother is concerned that Rachel is still having so many difficulties at her new school.

Anxiety in children is normal at specific stages of their development. From around seven months through to the pre-school years, for instance, children may show intense distress when separated from primary attachment figures. Young children will often also have short-lived fears that they tend to grow out of, e.g. of imaginary creatures, the dark, animals.

Anxieties may become problematic when they continue beyond the developmentally appropriate time (e.g. a 13-year-old distressed when separated from his or her parents), and/or they begin to interfere with daily activities, such as attending school (109).

Epidemiological studies of the prevalence of anxiety disorders in children are only just emerging in the literature. An estimated six percent of children and young adolescents have diagnosable anxiety disorders (31), with 14 percent having a lifetime history of anxiety (60). This may be an underestimate as studies do not include traditionally 'adult' diagnoses, such as OCD and PTSD.

Anxious children are often quiet, compliant and easy to please, and their difficulties may be missed. In all children, age inappropriate behaviour (both younger or older than expected for the child's chronological years) may indicate psychological and/or family distress.

Symptoms indicating a child or adolescent may be experiencing anxiety include:

- symptoms common in younger children
- panic or tantrums at separation from parents (which is not age appropriate)
- disturbed eating patterns
- secondary enuresis and encopresis - symptoms of anxiety, but likely to themselves generate anxiety*
- constant thoughts and fear about the safety of self and parents
- being easily startled or distressed
- refusal to go to school, decreased achievement
- 'clinginess'
- isolation from peers
- frequent stomach aches, headaches and other physical complaints
- difficulty completing work because of frequent false starts, rubbing out errors etc.
- persistent nightmares.

Symptoms more common to adolescence are:

- substance abuse
- frequent truancy
- risk-taking behaviour, 'acting out'
- decline in academic performance

* Secondary enuresis and encopresis is soiling (urine and faeces respectively) occurring in a previously toilet-trained child. It does not refer to occasional 'accidents' that are not deliberate. Deliberate soiling and smearing are more likely to be symptoms of conduct disorder or oppositional defiance disorder.

- inability/fear of engaging in developmentally appropriate social relationships.

A child or adolescent may experience any anxiety disorder traditionally ascribed to adults, e.g. OCD. However, the disorder may manifest differently, particularly as children typically do not recognise their fear as excessive or inappropriate, and may be unable to identify its cause (2). Most childhood anxiety disorders do not persist into adulthood, although adults with anxiety disorders often report a history of childhood anxiety (96).

Children may be the symptom bearers of family disruption. Whenever a child presents with symptoms of psychological distress, it is important to understand family dynamics. This is especially important if the child seems to have responsibilities beyond what is age and culturally appropriate, e.g. an eight-year-old responsible for feeding younger siblings and getting them to school.

Presentation of anxiety disorders in children and adolescents

Transient social anxiety/avoidance is common in early childhood. Young children may be excessively timid in strange social settings, refuse to participate in group play and try to stay close to familiar adults. If this persists, preventing the child from making friends and relating in an age appropriate way to peers or people outside their family, the child may be experiencing social phobia.

Children with GAD (formerly over-anxious disorder of childhood) may only manifest one symptom for a diagnosis. They have a number of concerns, but worry particularly about general competency and performance e.g. at school. They may be excessively concerned about punctuality and conformity. They are also likely to be perfectionist, redoing many tasks to get them 'just right.' They are typically attention seeking and needy of approval.

After a trauma, PTSD may manifest in younger children as distressing dreams (dreams of the event itself, as well as dreams of monsters, and threats to self and others), and repetitive play. Children may also exhibit somatic symptoms like stomach aches and headaches.

It is developmentally normal for children to develop rituals around the age of two, which subside at age eight to nine. Children often want things to be done 'just so', and daily

events such as bedtime, will often have associated rituals (70). Rituals associated with OCD typically vary in content (reflecting significant themes in adult OCD: cleaning, counting, checking) and usually have a later onset. Clinical symptoms manifested in childhood obsessive compulsive disorder are essentially the same as those in adults.

The essential feature of separation anxiety disorder - a specific anxiety of childhood - is excessive anxiety about separation from home or attachment figures, beyond what is developmentally appropriate. Somatic complaints, e.g. headaches, stomach aches, are common when separation occurs or is anticipated. The child may have nightmares featuring fears of separation, or of disaster befalling the attachment figure.

Anxiety may manifest as clinginess and school refusal. Additional fears are common and may reach phobic intensity, e.g. of dogs, of the dark (64). Depressed mood is also often present (various estimates of co-morbidity range from 28 to 42 percent of children with an anxiety disorder having concurrent depressive disorder) (64).

Co-morbidity

An anxious child may present with attention difficulties. A thorough assessment should include any history of attention deficit hyperactivity disorder (ADHD). Problems with attention (e.g. distractibility, inability to focus, fidgeting), are common to both anxiety and ADHD. Some children diagnosed with ADHD may also have problems with anxiety (either separately or in combination with ADHD) (108).

Assessment

Young children may be unable to report the focus of their fears, although increasing age (and cognitive development) allows them to do so. Wherever possible, assessment should take place within the context of the family, and it is important to seek additional information from adults, such as parents and teachers. A comprehensive assessment should incorporate individual interviews, parent reports, teacher reports and family assessments.

RECOMMENDED BEST PRACTICE

School refusal is a common indicator of anxiety. But children may refuse to go to school for a number of reasons - they may be experiencing separation anxiety, or there may be something in the school environment that makes them fearful, e.g. being bullied. Reasons for a child refusing school should be carefully explored, and the Specialist Education Service involved. This is important, as prolonged school refusal and anxiety when attending, may delay academic and social development.

Peer acceptance is important in adolescence. An adolescent may experience anxiety as they develop, learn to accept their own sexuality and interact socially. If they feel unaccepted, they may suffer low self-esteem. They may try dieting, or acting out (including bullying), or become increasingly introverted. Any assessment of a child - and an adolescent in particular - should take account of interaction with peers.

Referral

Social, emotional and cognitive development may be delayed in children with chronic anxiety disorders, due to avoidance of social situations or school, or through associated acting out (82).

Research indicates that childhood anxiety symptoms predict development of anxiety in adolescence and adulthood (80). It is important that all pre-pubertal children and adolescents with anxiety disorders (other than unintrusive simple phobias or age appropriate anxiety) are referred to a specialist child and family mental health worker(s) for assessment.

Māori

Culture is an important determinant in the manifestation of illness (123). Cultural heritage continues to shape Māori people's ideas and attitudes, particularly during illness (26), even though modern Māori live in diverse social situations (28). Explanations of illness based on possible breaches of protocol such as tapu, continue to be relevant for many Māori and have implications for New Zealand health workers (27).

RECOMMENDED BEST PRACTICE:

Any health professional clinically assessing Māori people should be aware of the following:

- it is inappropriate to ask immediate personal questions without first establishing rapport, e.g. where is your family from?
- direct eye contact when discussing sensitive personal matters may be uncomfortable and embarrassing for some
- the person might like family or support people with them at the consultation (47)
- family or support people who reply to questions are not necessarily dominating, but taking the role of spokesperson.

Ignoring these elements during an assessment may inhibit rapport and reduce the chances of productive collaboration with Māori patients.

Signs of anxiety disorders among Māori

A 30-year-old Māori woman arrives at your office with a member of her family. She says nothing to you - what little she does say is quietly directed to her relative. The relative says the woman has not been 'herself' lately, and often becomes fearful due to 'visits' by deceased relatives. The two have only recently moved to the area and would like your help to find a traditional Māori healer from their tribe who lives locally.

A 26-year-old Māori man wants a referral to the local alcohol and drug service following a recent 'scrap' with his partner. He reports feeling 'stink' about the incident and numerous others where he lost his temper after heavy drinking sessions with his mates. When queried, he says the problem became particularly severe after losing his job three months ago. He had worked for the same firm since leaving high school and 'freaked out' after losing his job and being unable to stop worrying about his family's future.

A young professional Māori woman seeks help for symptoms of anxiety -sweating, trembling and shaking, heart palpitations, feelings of dizziness and derealisation - after taking up a new position in a government agency. She tells you these symptoms are a result of her being a spokesperson on Māori issues at work, and that she feels particularly uncomfortable in situations where she's expected to speak Māori. She explains that her knowledge of the language and her Māori heritage are not what they 'should' be.

Anxiety in Māori people may include symptoms other than those listed above (pages 18 and 26). It will take careful and respectful probing by the health professional to identify them. These additional indicators of anxiety are:

- suggestions of spiritual influence, e.g. anxiety at having breached cultural protocol such as laws of tapu
- preoccupation with deceased relative(s)
- physical complaints with no apparent cause
- issues of perceived personal or historical injustice, or issues relating to cultural identity which may be associated with one or both of the following:
 - irritability, uncharacteristic aggression
 - unresolved grief and sense of disenfranchisement, causing preoccupation and agitation, both of which may be complicated by uncharacteristically reckless behaviour or displays of bravado, e.g. bouts of aggression, substance binges.

Problematic use of alcohol and drugs - in an effort to cope or self-medicate - may be associated with anxiety in Māori people. Māori have a different pattern of alcohol use than non-Māori, suggesting that fewer Māori drink regularly and those who do drink, do so less often. On the occasions they do drink, Māori consume nearly twice as much as non Māori (103).

Māori have a higher death and injury rate from alcohol-related road accidents (83). Drug and alcohol disorders are a major cause of Māori psychiatric admissions (102,129). Binge drinking and drug use may require additional clinical attention.

Another possible response to anxiety by Māori is aggressive or violent behaviour,

adversely affecting relationships and social functioning. This is more likely if drugs and/or alcohol are a problem. Violent behaviour may bring its own problems among peers (e.g. fighting, reckless driving), or at home (e.g. domestic violence). Such reactions are particularly evident in Māori males, who put their own safety as well as that of others at risk. The possibility of self-harm should be considered.

RECOMMENDED BEST PRACTICE

Primary health care practitioners should be sensitive to the role that issues of personal identity can play in anxiety. Māori people may, through life circumstances, suddenly become aware of their lack of knowledge of cultural or familial history, and their sense of self as Māori.

Any suggestion of such an identity problem calls for specialist Māori input. Serious consideration should be given to involving Māori health workers and/or community elders well-versed in Māori mental health and spiritual issues. Help may come from specialist Māori mental health teams, Māori community health workers or Māori health units at the local hospital. Community based Māori agencies such as iwi based or urban authority providers may also be able to help.

Responsibility for the person's care should be respectfully negotiated between parties, include the person themselves and, should they want it, their whanau.

Pacific cultures

Pacific people coming to New Zealand must make many adjustments and it is unwise to make assumptions about the extent to which a family is adhering to traditional ways and values. There may be less extended family support. Both parents may go out to work and have less time for the children, who are exposed to another culture with different standards of respect for parents, elders and family in general. This may cause family conflict.

Patterns of illness from the culture of origin may persist, even in second generation immigrants. These may include belief that the illness is spiritual, related to cultural issues, and/or related to ancestors.

Stress or conflict may be difficult to resolve at a psychological level, and may present as physical illness, e.g. fainting, or 'seizures,' allowing avoidance of work or difficult situations. These symptoms are particularly common among young women. Patients and their families may find it easier to look for physical rather than psychological resolution of a problem. This means more time may have to be spent explaining the psychological causes of symptoms to both patient and family.

Pacific people see the health worker(s) as an authority figure, and find it difficult to challenge their views. The patient may seem compliant during the interview but seek other forms of therapy later. Direct open questioning about sexuality may cause embarrassment. There may be less eye contact and spontaneous speech than with a Palagi (European) patient, and accompanying older relatives and associates may speak for the patient.

People with intellectual disabilities (mental retardation)

People with intellectual disabilities may be unable to express their thoughts and feelings clearly, making it more difficult to diagnose mental disorder. They are also often 'brought along' to the doctor by someone who presents the 'problem' from her/his own perspective. Distinguishing what the carer perceives as problem behaviours from a psychiatric illness is often difficult (112).

It is important for health professionals to bear in mind that people with intellectual disabilities are more sensitive to all types of stress (112), and may be more vulnerable to post-traumatic stress disorders (126). Phobias are the most common anxiety disorder in people with intellectual disability.

Sexual orientation and gender identity

Gay and lesbian people often face stresses arising from lack of acceptance of their sexual orientation by family and society. This can affect their self-acceptance and self-esteem.

RECOMMENDED BEST PRACTICE

'Coming out' can be particularly stressful, especially if the person feels they must hide their sexual orientation for fear of disapproval or rejection. In this case, the health professional should offer value-free information, along with support and reassurance about conflicting feelings. Referral to, or information about, appropriate support services should be offered.

Any sign of confusion about gender identity should be sensitively explored. A person's gender identity may be at variance with their biological identity, and associated with anxiety, depression and substance abuse (85).

Some Pacific Islands cultures accept differences in gender identity. In Samoa, Fa'afafine (ways of women) describes males who, through their upbringing, have become essentially female. But while accepted in Samoa, Fa'afafine who move to New Zealand may experience significant stress as a result of not being accepted in New Zealand society.

Refugees

A refugee is defined by the UN as a person who 'owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country; or who not having a nationality and being outside the country of his former habitual residence as a result of such events, is unable or, owing to such fear, is unwilling to return to it' (138).

People resettling in other countries as refugees may have experienced physical and/or mental trauma or torture. Most refugees have lost or been separated from family and friends. They often have multiple medical and psychological needs, as well as resettlement difficulties with housing, employment, income support, learning a new language and adjustment to a new culture.

These practical needs are usually the most urgent, and psychological factors may not emerge until they have been resolved (81). Many cultures have only limited acknowledgement of Western mental health

problems. Presentation with physical symptoms is more common, but stigma is high and confidentiality crucial.

The most common psychological disorders presenting in refugees are anxiety disorders (especially PTSD) and depression. However, psychosis, suicidality, substance abuse and domestic violence are also common. The latter may occur when families must adjust to new gender roles, e.g. the woman being the primary income earner (81).

RECOMMENDED BEST PRACTICE

Any assessment of a refugee should take into account psychosocial factors, physical problems and psychological issues. Since many cultures have an understanding of mental health that differs from the Western medical model, it is useful to talk about mental health symptoms in more generic terms of stress and hardship.

Refugees may be reluctant to reveal their experiences or feelings because of:

- language barriers
- a desire to forget the past
- suspicion of authority figures -especially if they have been ill-treated by authority figures in the past
- shame
- fear that revealing any health problems may jeopardise their residency status. (121)

The following strategies (50 -51) may be useful when caring for refugees who have been traumatised and possibly tortured:

- suggest the person bring a companion/ support person to the appointment
- arrange an interpreter acceptable to the individual - the Telephone Interpreting Service may help if there are no local resources, and is available 24 hours a day, seven days a week by calling (04) 384 2849. It has trained interpreters in over 60 languages and is confidential. Using family members, especially children, to interpret should be rigorously avoided since it confuses family roles and can lead to distorted interpretations
- identify the individual's complaints, country of origin, date of migration, and residency status (asylum seekers, refugees, or those on special humanitarian programmes are likely to have been tortured or traumatised)

- include explicit discussion of confidentiality, and what influence if any you, as the primary health practitioner, have over the patient's residency application; refugees often seek support for family reunification applications from many sources
- avoid sounding interrogatory, and preface all inquiries by explaining simply and clearly the reason for them
- arrange for an empathic and informed doctor to physically examine the individual if appropriate - the doctor should explain the purpose of each part of the examination and take special care with any invasive techniques or potentially threatening instruments; telling the individual they are welcome to have a support person present/ nearby may be reassuring
- assist the individual to find help with social welfare, housing, education, language tuition, legal needs.

Since the refugee's previous experiences may have disempowered them, the doctor's position of authority may prompt memories of the oppression they have escaped. The refugee may not take confidentiality for granted, and so delay getting help for physical and psychological difficulties.

It may be useful to communicate with/refer the person to one of two specialist refugee services in this country:

- Refugee as Survivors Centre - Auckland region ph (09) 377 8185, 09 377 8186
- Refugee as Survivors Centre - Wellington region ph (04) 384 7279

These services are free of charge, confidential, and can make referrals to ESOL services, interpreters, legal advice, social support, mental health and advocacy services. If these services are unavailable and the person begins opening up about their traumatic experiences, refer to a clinician experienced in the treatment of PTSD.

Abuse

The separate discussion of physical and sexual abuse should not be taken to mean these never occur together. Anxiety symptoms may be a reaction to current abuse or to past experiences. Health professionals should ask direct questions about emotional, physical and sexual abuse when patients present with anxiety.

Physical abuse/domestic violence

People in abusive relationships often cover up the abuse and its associated physical and emotional trauma. Sixteen percent of women in a Dunedin study reported physical abuse as adults (87). The victim may be ashamed of being in a battering relationship and believe they deserve to be abused.

Prolonged exposure to abuse is associated with depression, helplessness, low self-esteem, denial and despair (79), making the person reluctant to disclose the abuse or leave the relationship. Although the standard term for this is 'battered woman's syndrome,' it may also be applied to children who are victims of physical abuse.

Violence and other forms of abuse are often undetected at primary health care level. Health professionals should not be reluctant to ask directly, in a supportive, non judgmental manner, about suspicious bruising in a depressed or anxious person.

With someone experiencing abuse it is important to:

- use reflective listening skills to encourage disclosure
- look for discrepancies between what is said and what is seen when examining injuries
- validate the person's experience and perspective on the abuse
- review safety issues associated with disclosure, and negotiate future action
- inform about Women's Refuge, marae based services and specialist support groups
- inform about the police and the Domestic Violence Act.

People perpetrating abuse may also present with symptoms of anxiety, substance abuse and depression, particularly leading up to violence or following a separation prompted by it. With someone perpetrating abuse it is important to:

- speak frankly about the abuse and its effects on family members
- take care not to support justifications and rationalisations for violence, e.g. anger, drunkenness, provocation
- consider referral to local 'stopping violence' group programmes where available; where unavailable, consider referral for individual counselling
- address any substance abuse difficulties directly.

RECOMMENDED BEST PRACTICE

When violence has occurred, the safety of victims and any children takes precedence over other interventions. Anxiety in either victim or perpetrator should be treated as severe and is best referred to community mental health services. Victims should be told about what the police can do, and about refuges.

It may sometimes be necessary, after discussion with the patient to breach confidentiality, if the health professional comes to know of intended harm to the patient or others. Breaches of confidentiality should be carried out according to the Medical Council's guidelines.

Sexual abuse

Sexual assaults and abuse can precipitate PTSD. Acute symptoms may be the result of recent or past abuse, or triggered by events such as television shows or magazine articles about abuse.

The primary health professional should pay special attention to the person's safety. Urgent referral to an ACC-registered sexual abuse counsellor, specialist services such as Rape Crisis or Help centre, or specialist mental health services may be indicated. Any possible conflict between safety and confidentiality should be explored. In the case of an acute breakdown, assess whether the person needs time away from work or other responsibilities.

Adults who experienced childhood and/or adolescent abuse may present with somatic symptoms, as well as anxiety, depression and alcohol and/or drug misuse. Relationship difficulties may be a result of abuse, with people fearing intimacy, having difficulty disclosing feelings, or becoming trapped in abusive relationships.

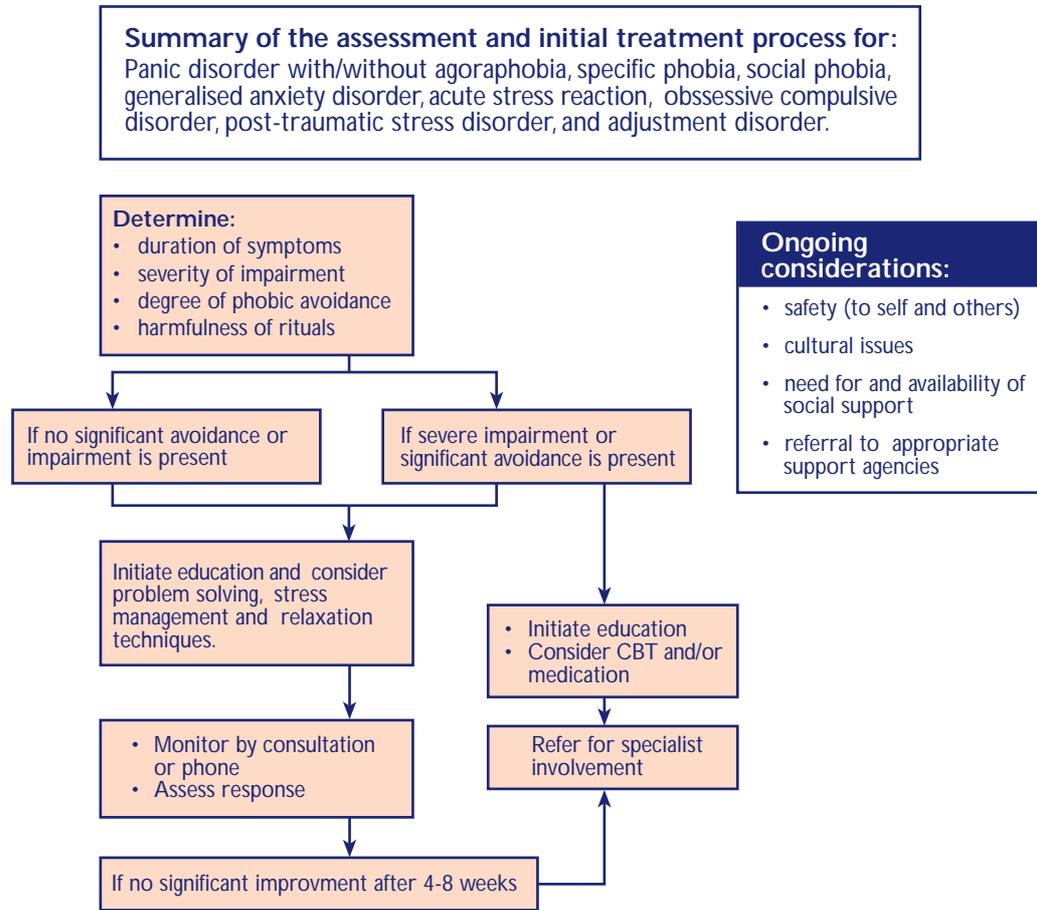
RECOMMENDED BEST PRACTICE

Questions which may elicit disclosure include:

- **have there been times you keep thinking about when people have treated you badly or put you down?**
- **has anyone ever frightened you or made you feel unsafe?**
- **have you ever had a sexual experience that, looking back, you feel bad about or wish hadn't happened?**
- **have you ever had to have the morning-after pill and how did it come about?**

TREATMENT

Summary of assessment and initial treatment



Immediate steps in primary care

1. Listening and questioning is itself therapeutic

A health professional's communication and counselling skills, used in initial and ongoing contact with those suffering anxiety disorders, are themselves an aspect of treatment.

Respectful probing and reflective listening will:

- help the person feel understood and valued
- promote optimism and motivation while assessment, diagnosis, and treatment strategies are negotiated and actioned.

2. Involve others

It is useful to mobilise partners, family, whānau and other support networks. This is particularly important if there is any risk of self-destructive behaviour, especially suicide. In most cases, it helps if others are at least informed and educated about the patient's anxiety disorder.

3. Educate about anxiety disorders

An initial component of treatment is educating the person about anxiety and its disorders. It is important to stress anxiety symptoms are normal and common, and reassure the person they are not 'going crazy.' It is also important they understand that the right treatment will help

4. Be aware of appropriate support agencies

This step is especially important when psychosocial factors are contributing to the person's anxiety, e.g. being in a violent relationship, 'coming out.' These agencies can be found through the local Citizen's Advice Bureau or listed in the community information pages in the front of telephone directories.

RECOMMENDED BEST PRACTICE

Putting the person and their family in touch with, or informing them of, appropriate support agencies can be an important first step in treatment

The Phobic Trust (09 849 4363) has contacts for support groups throughout the country. Local community mental health teams can put people in touch with support groups in their region.

5. Suggest self-help material for clients

Self-help books can have useful information about anxiety and how the person with anxiety and their friends and family might cope with it. These are available in public libraries and general bookstores. Good examples are:

- The Anxiety and Phobia Workbook by Edmund Bourne (New Harbinger Publications, 1990)
- Living with Fear. Understanding and Coping with Anxiety by Isaac Marks (McGraw-Hill, New York 1978)

6. Investigate appropriate lifestyle changes

It is important to explore what is causing stress in the person's life, and brainstorm avenues for reducing it. Structured problem solving may be helpful here.

RECOMMENDED BEST PRACTICE

Lifestyle changes may:

- reduce the risk of anxiety disorder occurring
- relieve anxiety symptoms
- reduce the risk of anxiety disorder becoming more severe or, in the case of panic disorder, the risk of agoraphobia developing.

Lifestyle changes which may help the person cope with stress include:

- stress reduction - although people should be cautioned against big life changes until it is clear what is precipitating the symptoms
- reducing alcohol and drug use, including stimulants such as caffeine and nicotine
- healthy eating habits
- regular exercise - 'uses up' adrenaline circulating in the nervous system because of the fight-or-flight response
- regular relaxation - including diaphragmatic breathing and progressive relaxation
- assertiveness techniques
- practical help, e.g. budgeting, childcare, housing
- taking part in any activity in which success is likely
- improving knowledge of the person's heritage.

7. Introduce problem solving methods

GRADE A2 RECOMMENDATION

Structured problem solving can be an effective way to help people manage anxiety and depression. (see Appendix 7 for more detail)

This 'problem solving treatment' was developed for the primary care setting. It is a useful way of structuring decision-making and working out problems. The patient is helped to work through these steps:

1. what is the problem?
2. list all possible solutions (even ineffective or unworkable ideas)
3. discuss each solution
4. choose the best or most practical solution
5. plan how to put that solution into effect
6. review how well the solution was carried out and praise all efforts.

The primary health professional - who might need training in this method - can work through examples with the patient during appointments until the person can manage to do so on their own. Then the patient should be given copies of the work page to practice at home.

The aim of teaching structured problem solving is NOT for the health professional to solve everybody's problems. It is to help individuals incorporate its principles into their everyday lives, to help them develop the skills to overcome problems and achieve goals for themselves (50-51).

8. Teach relaxation techniques

Relaxation techniques reduce general levels of autonomic arousal in people experiencing anxiety who may describe themselves as 'on edge' and 'uptight,' even when not exposed to feared situations. Regular relaxation can reduce worry and anxiety, improve sleep, and relieve other symptoms of stress. It can provide motivation to continue treatment since, done regularly, it quickly has a positive effect.

A range of relaxation techniques including progressive relaxation, visualisation and breathing techniques may be beneficial. Procedures which use visual imagery or focus on content of thinking may help anxiety by allowing the person to control what they think about.*

* Relaxation tapes can be bought through many community mental health teams. The Mental Health Foundation has developed a relaxation pack which can be ordered through the foundation. While relaxation tapes are useful, it is important for the primary health professional to take time to teach techniques so they can check for adverse effects and ensure the person is doing them correctly. Practice nurses may be valuable in teaching patients these techniques.

GRADE A2 RECOMMENDATION

Techniques which produce relaxation have been shown to reduce general levels of autonomic arousal if practised regularly (see Appendix 8).

Use of relaxation techniques should be monitored. Occasionally they may actually provoke anxiety symptoms, and if so, the patient should discontinue them.

Monitoring

RECOMMENDED BEST PRACTICE

Monitoring the anxious person being treated with medication is essential in both primary and secondary care. It may be done at follow-up consultations, at the person's home, or by telephone between consultations.

Practice nurses can monitor progress - they are time and cost-efficient and often more acceptable to patients. Monitoring should include inquiry into:

- level of anxiety, alteration in symptoms, and negative thoughts
- ongoing safety issues
- social situation, social support
- access to any referral agencies and barriers to accessing them
- any side-effects of prescribed drugs, encouraging to continue medication
- feelings about the therapist and effectiveness of therapy.

Frequency of monitoring

How, and how often, each anxious person's symptoms should be monitored, must be decided in consultation with them. Ideally, there should be a balance between minimising intrusiveness and cost to the individual on the one hand. And on the other, ensuring the health professional has reliable and accurate information about treatment response, negative side-effects that may reduce compliance, and any significant alteration in stressors or supports which might aggravate the disorder.

Monitoring should be regular and done by a person with appropriate clinical training and experience.

RECOMMENDED BEST PRACTICE

If anxiety symptoms are significantly impairing daily function, e.g. interrupting tasks because of avoidance or ritualistic behaviour, the following guidelines are useful:

- **week one:** review progress by telephone, especially if using medications, to discuss side-effects and compliance
- **subsequent weeks:** monitor weekly or fortnightly if necessary
- **from six weeks:** if there has been a good response to treatment, continue to monitor monthly depending on severity.

It is critical the health professional stay alert to signs or symptoms becoming more severe, or the possibility of harm to self or others. People do not always find it easy to communicate disturbing feelings. If suspicious of unspoken concerns, increase monitoring and consider referral to a more experienced colleague or the mental health services.

If the degree of impairment from anxiety symptoms is small, or the person is making a good recovery, monitoring may be less frequent.

Involving mental health services

Consider involving mental health services when:

- there is a serious risk of suicide
- there are psychotic symptoms
- the diagnosis is unclear and needs further evaluation
- the person is experiencing a restricted range of emotions, flashbacks or periods of dissociation
- the person has limited access to social support
- there is significant co-occurrence of other disorders or complex problems
- there are contributing social factors, e.g. a young person's anxiety about their sexuality, or factors influencing assessment and treatment processes, e.g. cultural issues
- the primary health professional feels their skills are not appropriate
- the patient demands it
- symptoms fail to remit
- the patient is a child or adolescent.

PSYCHOLOGICAL THERAPIES

USING PSYCHOLOGICAL INTERVENTIONS IN PRIMARY CARE

Many of the components of these treatment approaches are a natural part of the role of the GP and, if they are not already part of clinical practice, can readily be incorporated into it. They include

- education about the nature of anxiety and its effects
- counselling to help the patient re-evaluate the cause of symptoms and link them to psychosocial stresses, and
- education to discourage avoidance.

With some additional training for the GP or practice nurse, a range of specific anxiety management strategies could be learned, including breathing control and relaxation, and 'Problem Solving Treatment'. Before specific interventions such as Cognitive-Behaviour Therapy (CBT) could be undertaken safely by the GP or practice nurse, more extensive training would be essential.

In some people, the tendency to become anxious may be easily triggered by events in their environment. The influence of these events on a person's emotional response is mediated by psychological factors, (attitudes and beliefs that the person holds about themselves and the world), as well as genetic and biological factors.

In spite of the wide variety of different forms of psychological therapy available in the community, the strength of formal evidence for the effectiveness of many is slender. Some practitioners argue that randomised controlled trials are not a feasible form of evaluation for determining the treatment outcome of a unique individualised process of therapy. However, in order to recommend action which might be taken by a primary care practitioner, it is necessary to have information about effectiveness of a given intervention and its relevance to the treatment of other patients with similar problems.*

Evidence for psychological treatments

The following overview aims to identify specific interventions where there is evidence from controlled trials of efficacy in the treatment of anxiety disorders. Where there is evidence from three or more randomised control trials, this has been included in the calculation of Numbers Needed to Treat (NNT) presented in Appendix 15.

The psychological treatment for which there is strongest evidence is Cognitive-Behaviour Therapy. Efficacy has also been

shown for the use of CBT in phobias, OCD, GAD and PTSD, although there are not always three comparable studies available, and it is not always possible to calculate NNTs from the information reported. CBT is generally as effective as medications in reducing symptoms of anxiety, (e.g. for Panic Disorder, pooled NNT = 2, 95% CI = 2-4). Further, there is evidence that the likelihood of relapse is lower if CBT is used in treatment. (8) For discussion of NNTs see page 42.

GRADE A2 RECOMMENDATION

Cognitive-Behaviour Therapy is established as an effective treatment for most anxiety disorders.

Who should provide psychological therapy?

Professionals competent to provide specialised psychological therapies outlined in these guidelines would have the following attributes:

- evidence (such as a tertiary qualification) of a theoretical understanding of personal and interpersonal behaviour and psychological dysfunction
- understanding, knowledge and skills in techniques for effecting change
- understanding of their own values, beliefs, emotions, relationships, and how these affect the process of therapy
- adherence to ethical standards (e.g. by membership of a professional association with ethical and disciplinary procedures)

* Recommendations for CBT are based on randomised control studies. However there are not always three comparable studies available and neither is it always possible to calculate Numbers Needed to Treat.

- use ongoing professional supervision to help maintain the quality of their work.

These professionals will typically be psychologists, psychotherapists, psychiatrists, qualified counsellors, or primary care practitioners trained in the delivery of psychological therapy.

Counselling skills such as supportive listening, providing information, problem solving, and encouragement to make decisions and act in ways that will improve the client's situation, will form part of the skill repertoire of most primary health workers. Counselling skills are useful in the initial stages of treatment for any person presenting with an identified anxiety disorder. Psychological therapy should begin with an assessment and formulation of the problem, and involve a collaborative relationship with the patient.

Cognitive-Behaviour Therapy

Cognitive-Behaviour Therapy consists of treatment components derived from separate strands of psychological knowledge about behaviour and about thinking (cognition). Behavioural interventions focus on changing emotional distress and disturbed behaviour by directly altering behaviour, for example, by the use of reinforcement and exposure.

Cognitive interventions focus on changing emotional distress and disturbed behaviour by helping the individual change attitudes and beliefs such as the way they think and appraise themselves, the world about them, and their future. Cognitive techniques include educative and problem solving strategies, but the core elements focus on learning ways of identifying and changing irrational and faulty thinking and assumptions which lead to emotional distress, and replacing those thinking patterns with ones which are more realistic and adaptive.

Both cognitive and behavioural interventions assume that prior learning in the individual's past is implicated in current distress or behaviour, and that this learning can be undone by new, more adaptive learning experiences (15).

CBT is essentially a theoretical framework for systematically analysing and understanding a client's emotional

difficulties so that a treatment strategy can be devised. CBT has been used as a highly structured and standardised procedure or 'package' for treatment of common disorders (e.g. 50,51). Successful treatment gains may be achieved using either group or individually oriented treatment packages (32). It can also form the basis of a flexible, individually tailored approach to complex and novel presentations of problems, alone and in combination with other approaches to psychological treatment (18).

In spite of the evidence that CBT works, the essential components of CBT have not been identified for all disorders in which it is effective. Furthermore the theory and the practice of CBT have not remained static and the nature of CBT has evolved since its rather formulaic beginnings (29, 12). Since the early work on cognitive approaches to treatment CBT has been influenced by other approaches to psychotherapy and by developments in experimental and social psychology. Greater attention has been paid to the role of unconscious processing in everyday thinking (104,15), and to the nature of processes in the client-therapist relationship (39).

Exposure-based approaches

Avoidance helps phobias to persist. For example, as long as the agoraphobic person avoids being in a public situation, or being in a place where they might panic and not be able to escape, their phobia is maintained: their avoidance is rewarded as they do not have to experience the anxiety associated with that feared situation. Furthermore, they never test the reasonableness of that fear i.e. they are never in a situation long enough to learn that they can cope.

The principle of exposure is to gradually expose the person to a graded set of fearful situations (from least challenging to most challenging) involving the feared object/ thought/ situation*. Each level of exposure is repeated until the person is able to be in the presence of the feared stimulus without (or with only mild) discomfort. The most effective exposure has been shown to be prolonged rather than short, real life rather than fantasy and needs to be regularly practised with homework assignments (38). To be most effective, the person should face situations beyond those they would be

expected to face in normal situations (e.g. someone who has a spider phobia should have the goal of being able to hold the spider in their hand).

Health care professionals using exposure-based treatment for anxiety disorders will need education and training

in its use, and assistance to devise treatment targets. Much of the exposure work is done through self-directed homework tasks, and the health professional will also need to utilise their counselling skills both with the intervention itself and when giving encouragement and advice. Even where anxiety is at the less severe end of the spectrum, and intensive exposure based treatment may not be necessary, education which helps a patient to recognise physical symptoms as anxiety may also usefully convey the message “approach, don’t avoid” where any identifiable situation provokes unrealistic anxiety.

The exposure based behavioural therapies are typically demanding on the person. Compliance with behavioural tasks both during the treatment sessions and through homework assignments, is essential if the person is to achieve maximum treatment gains. With severely depressed patients, physiological habituation to feared situations/events may not occur, regardless of the length of exposure. However, such people will often respond well to the behaviour therapy once the depression has been controlled by antidepressants (54).

Cognitive approaches

People with all types of anxiety disorders tend to imagine the worst outcome when confronted with a situation they are fearful of. This thinking generates anticipatory anxiety, increases the likelihood of avoidance, and raises anxiety upon exposure to the feared situation. The therapist helps the person to examine the thoughts that trigger and accompany anxiety symptoms, helping them to get the fear into perspective and to challenge and replace these catastrophic thoughts with more realistic thinking. For example, in the case of a person experiencing a panic attack, the person would be encouraged to challenge their catastrophic thinking such as “I’m having a heart attack”, “I’m going crazy”, “people will see that I can’t breathe

properly and they will think that I am an idiot” etc., with more realistic thoughts e.g. “I’m not having a heart attack, I’m panicking. It feels bad now but it will soon pass”.

Examples of specific applications of Cognitive-Behaviour Therapy in the treatment of anxiety disorders

Social phobia

Traditionally social skills training has been the first behavioural intervention for people with social phobia. More recent research has demonstrated however, that people with social phobia may not lack social skills, and that even those who do can experience improvement in symptoms through cognitive and/ or exposure therapy (52).

Cognitive-Behaviour Therapy seeks to challenge the negatively biased beliefs that people with social phobia have about others’ evaluation of them by identifying, challenging and changing the thoughts, feelings and images that occur prior to, during and after exposure to a feared social situation (52). It also seeks to help the person learn to evaluate experiences of potentially awkward social situations more realistically- e.g. “if that person notices that I am blushing, that will be unfortunate- but it won’t harm me. And learning to tolerate others’ disapproval, while uncomfortable, is in my long term interests”.

Panic disorder

The goal of therapy is to help people to construct alternative non threatening interpretations of their sensations, using cognitive restructuring and behavioural experiments. A common cause of unpleasant physical sensations in panic is hyperventilation. The person should be educated about the causes of hyperventilation, and more importantly, the fact that, although unpleasant, it is harmless.

* In the case of someone who was afraid to leave their house, the initial stages of exposure might involve going to the front door, later, opening it, and so on until they are able to, for example walk to the local shops, or drive their car to visit a friend.

Obsessive compulsive disorder

Treatment packages for OCD usually involve an exposure-response prevention package. The procedure for this is identical to the exposure process outlined earlier (i.e. hierarchical) but the person also needs to resist performing their compulsive ritual. A comparison of the literature on the efficacy of exposure-response prevention (ERP) therapy vs. clomipramine for the treatment of OCD revealed that ERP was associated with the same treatment gains, but lower relapse rates following treatment cessation. However it should be noted that even treatment responders failed to achieve a complete amelioration of symptoms, demonstrating the chronic and complex nature of OCD (124).

Generalised Anxiety Disorder

People with generalised anxiety disorder have difficulties in limiting their worry over various events in their lives. They typically have considerable difficulty finding solutions to their problems, and will agonise over whether they have made the 'right' decision. It is useful to teach people with GAD (or other disorders where problem solving is inhibited) specific problem solving strategies which can be systematically applied to situations causing worry.

Specific Phobias

Many specific phobias do not interfere with social or occupational functioning to a great extent. When they do, cognitive and behavioural approaches are likely to help. The components of this treatment include education, relaxation, challenging the assumptions underlying anxiety, and graded exposure to the feared situation or object. (see Appendix 11)

Acute Stress and Adjustment Disorders

It is common to experience symptoms of anxiety and depression as part of a response to acute stress or at times of major life changes. Empathic listening and clarification of the issues involved may be all that is needed to facilitate resolution of distress, but if symptoms persist, more active intervention may be required involving problem solving, or addressing the cognitive and behavioural processes underlying the distress. (see Appendices 12 and 13)

Summary: Choosing cognitive-behavioural management strategies

(from Hunt et al., 1995)

Problem	Primary Health Care Intervention	Specialist Service Intervention
panic attacks	<ul style="list-style-type: none"> • Education • Breathing control (Grade D) 	<ul style="list-style-type: none"> • cognitive interventions to reframe catastrophic thinking (Grade A2) • graded exposure to any feared situations (Grade A2)
chronic levels of tension (leading to muscle aches, insomnia etc.)	<ul style="list-style-type: none"> • relaxation skills (including deep breathing and progressive relaxation) (Grade D) 	
significant phobic avoidance	<ul style="list-style-type: none"> • education about avoidance • relaxation skills Grade D) 	<ul style="list-style-type: none"> • graded exposure (Grade A2)
obsessional thoughts	<ul style="list-style-type: none"> • education about OCD (Grade D) 	<ul style="list-style-type: none"> • exposure- response prevention programme (e.g. using loop tapes) (Grade A2)
compulsive behaviours	<ul style="list-style-type: none"> • education about OCD (Grade D) 	<ul style="list-style-type: none"> • exposure-response prevention programme (Grade A2)
reaction is of recent onset and follows a traumatic event	<ul style="list-style-type: none"> • provide reassurance and education about what is normal or expected after a traumatic event (Grade D) 	<ul style="list-style-type: none"> • (if problem doesn't resolve after 6 weeks) refer to trauma counsellors for therapy to address PTSD (Grade D)
patient is experiencing (or recently experienced) a stressful life event or other stress	<ul style="list-style-type: none"> • encourage problem solving to help resolve the source of stress (Grade A2) 	<ul style="list-style-type: none"> • relevant psychosocial interventions (i.e. referral to support groups (e.g. cultural healers etc.) (Grade D)
are there somatic complaints without medical explanation	<ul style="list-style-type: none"> • help the patient re-evaluate the cause of complaints and link them to psychosocial stress • problem solving • relaxation (Grade D) 	<ul style="list-style-type: none"> • cognitive interventions to reframe unhelpful thinking (Grade A2)
preoccupation with fear of panic, negative evaluation, disease or chronic worry despite education, explanation, reassurance		<ul style="list-style-type: none"> • cognitive interventions to reframe catastrophic/ fearful thinking and ruminations (Grade A2) • exposure based programmes (Grade A2) • cognitive interventions to control ruminations (e.g. thought stopping) (Grade A2)
insomnia	<ul style="list-style-type: none"> • implement 'sleep hygiene' measures (Grade D) see Appendix 14 	

MEDICATIONS

The type of drug used for treating anxiety will depend on the specific type of anxiety disorder experienced. Medication is not recommended for every anxiety disorder. In particular caution is needed in using medications for disorders which are:

- likely to spontaneously remit
- of mild severity
- highly specific, so that they do not interfere with social or occupational functioning.

Acute stress disorder, adjustment disorder and specific phobias may benefit from short-term use of benzodiazepines but these should be prescribed at the lowest dose necessary to achieve symptom relief and should not be continued for more than 2-3 weeks without review. (See page 44) Because social phobia and OCD have high rates of comorbidity, severity and chronicity, it may be important to initiate treatment and also seek specialist advice.

Indications for the use of medications

- Severity of symptoms and degree of impairment of social and/ or occupation or role functioning.
- Whether concurrent moderate or severe depressive disorder is present
- Willingness to accept medication and/ or CBT
- Whether CBT is available
- Whether the person is able to benefit from CBT

Contraindications for the use of medications

- Where there is minimal impairment of functioning

This section is ordered according to type of anxiety disorder. Within these categories medications recommended for use in primary care are discussed first, followed by those requiring specialist endorsement, followed by those not recommended for reasons of safety, availability or insufficient RCT evidence of efficacy.

Pharmacological recommendations are made where there are three or more supporting randomised controlled trials. At least two of these must be from different research groups.

In describing the strength of effectiveness of medications, we report 'Numbers Needed to Treat' (NNT), and Numbers Needed to Harm (NNH). This statistic is derived from evidence from randomised placebo controlled studies and calculated relative to exposure to a pharmacologically inert placebo. The NNT is an estimate of the number of patients that would need to be given a treatment, for one of them to achieve a desired outcome such as treatment success. NNH similarly estimates the number of patients needed to be treated for one of them to experience adverse outcomes such as unpleasant or troubling side effects. The 'pooled NNT' is calculated for the effect across two or more studies. (for evidence data see Appendix 15)

Pharmac's special conditions

A pharmaceutical requiring 'specialist endorsement,' is only eligible for subsidy if it is supplied on a prescription or practitioner's supply order signed by a specialist. Examples in this section are the drugs paroxetine and clomipramine.

A pharmaceutical requiring Special Authority is not eligible for subsidy unless it has been prescribed and dispensed to a patient in accordance with all the restrictions and instructions specified. In the case of buspirone this means it is only available as an anxiolytic where other agents are contraindicated or have failed. There is a month restriction, and a specialist must make application for approval to prescribe.(101)

If an antidepressant or anxiolytic is prescribed, it is useful to have a clinician available by telephone during the adjustment to medication period. To elicit compliance it is best to 'start low and go slow.' Further, the cited studies are

relatively short-term but in many cases a relapse of symptoms may occur when the drug is stopped. It is quite likely that some patients, particularly those with chronic relapsing disorders such as obsessive compulsive disorder and generalised anxiety disorder, will require medication long-term.

RECOMMENDED BEST PRACTICE

When prescribing psychotherapeutic drugs, adopt a 'start low, go slow' approach.

Panic disorder

People with panic disorder are often very sensitive to the side effects from medication and interpret them as panic (111). Some of these side effects (tachycardia, dizziness, dry mouth, tremor) are very similar to the physical symptoms of anxiety and it may be that some patients are more vulnerable to the anxiety-like side effects of agitation and jitteriness. This is not necessarily a reason to cease medication. It is very important for practitioners to educate the patient to the possibility of this.

Medications for use in primary care

Numerous randomised control trials have shown **imipramine** (Imipramin) to be effective in the treatment of panic disorder (Pooled NNT = 5, 95% CI 3-11). An optimal dose for treatment is 100-225 mg and should be continued for 8-12 weeks. Side effects include dry mouth, postural hypotension, blurred vision, carbohydrate craving, weight gain, delirium, sexual dysfunction, and ECG changes. (NNHs in the range of 2-3 have been found for insomnia and sweating.)

Medications on specialist endorsement

Paroxetine (Aropax) has been shown to be effective in the 10-60 mg range for a treatment duration of 10-12 weeks with little evidence of significant side effects. (Pooled NNT = 4, 95% CI 3-7)

NB: The treatment response to SSRIs is associated with a characteristic initial increase in anxiety which peaks over the first week of treatment and then subsides as the treatment effect emerges. Counselling patients about this adverse effect is important to prevent their premature withdrawal from treatment (38).

Clomipramine (Anafranil) has been shown to be effective at 50-100 mg for a duration of 6-12 weeks. (Pooled NNT = 4, 95% CI 3-8) For side effects, see imipramine. NNHs in the range 3-8 for sweating and dizziness.

Alprazolam (Xanax) has also been shown to be highly effective in the dose range of 4-15 mg for a duration of 4-15 weeks. (Pooled NNT = 3, 95% CI 2-4) Side effects include sedation and ataxia. NNHs in the range of 3-5 have been found. Like other benzodiazepines, Alprazolam carries significant risk of producing dependency. For further information, see section on Benzodiazepines below.

Mono amine oxidase inhibitors (MAOIs)

Because of the potential for life threatening adverse events, it is not recommended that trials of these medications be initiated in primary care settings without consulting a psychiatrist.

Obsessive compulsive disorder

Medications for use in primary care

There is strong evidence for the use of SSRIs as a class of medication in the treatment of OCD. **Fluoxetine** (Prozac) is widely used as a treatment in New Zealand. Only two studies reviewed here support its use in the treatment of OCD. (Pooled NNT = 4, 95% CI 3-6), but there is good evidence that Fluoxetine is as effective as Clomipramine and may have fewer side effects (89).

Medications on specialist endorsement

Clomipramine has been shown to be effective for the treatment of OCD at a dose range of 100-300 mg for a period of 5-12 weeks. (Pooled NNT = 2, 95% CI 2-3). NNHs in the range of 5-7 have been found for symptoms such as nausea and sweating.

Generalised anxiety disorder

Episodes of anxiety are commonplace in the general population. These episodes should be distinguished from GAD in which symptoms persist for at least six months. Care should be taken to exclude major depression. For those

with a confirmed diagnosis of GAD there is a place for medication, but in the first instance psychological intervention should be tried.

Medications for use in primary care

Imipramine has been shown to be as effective as Benzodiazepines in treating GAD although evidence of optimal dose and duration has not yet been established. Consensus of expert opinion suggests 150 mg for 3-6 months.

Benzodiazepines (eg. Diazepam at a dose range of 19-26 mg - Pooled NNT=3, 95% CI 2-6) have been found to effectively reduce anxiety in most studies. However, given the risks associated with benzodiazepine use, benzodiazepines are not recommended for the treatment of GAD.

Medications on specialist endorsement

Although there is some support for the use of **bupirone** (an azipirone which requires Special Authority) in the treatment of GAD, the evidence is not entirely consistent. However there have been several double blind trials (reviewed in 1998) showing bupirone to be as effective as benzodiazepines in treating GAD. This medication does not carry the risks of dependency or interaction with alcohol inherent in the use of benzodiazepines. Consensus of expert opinion suggests that where CBT has failed, is not available or is not an acceptable option, and other pharmacological options are contraindicated, bupirone should be considered on the basis of specialist endorsement.

Social phobia

Medications for use in primary care

We do not recommend the use of any medications available for prescription in primary care for the treatment of social phobia

Medications on specialist endorsement

There is limited support for the use of **moclobemide** at a dose range of 580-900 mg for 8-16 weeks. However the evidence is not consistent, (Pooled NNT = 9, 95% CI 5-24), and specialist assessment should be sought before prescribing moclobemide. (Please note that the data sheet recommends a maximum of 600mg a day. At higher doses the drug may no longer be selective.)

Phenelzine, an MAOI, has been shown to be highly efficacious in the treatment of social phobia at a dose of 55-76 mg for a duration of

8-12 weeks. (Pooled NNT = 2, 95% CI 2-3)

Side effects include insomnia, sexual dysfunction, agitation, and hepatic dysfunction. These should be prescribed under specialist supervision only. This medication requires a low tyramine diet (avoiding tyramine-rich foods such as cheese, marmite, and red wine) and avoidance of sympatho-mimetic drugs.

Post traumatic stress disorder

Medications for use in primary care

We do not recommend the use of any medications available for prescription in primary care for the treatment of PTSD. Currently there is insufficient research relating to the effects of specific medications. Two studies have shown Imipramine at a dose of 225-240mg for 8 weeks to be effective in treating PTSD. (Pooled NNT = 2, 95% CI 2-6) Two studies have shown Phenelzine at a dose of 2-7 mg for 5-8 weeks to be effective in treating PTSD. (Pooled NNT = 3, 95% CI 2-7)

Notes on the use of benzodiazepines

- **Even short term doses of benzodiazepines can lead to physical dependence.** Associated withdrawal symptoms may mirror anxiety symptoms, resulting in the person failing to stop taking medication.
- **Intense rebound anxiety and withdrawal symptoms are common** in instances of rapid dose reduction, and occur most commonly when the person has been taking a benzodiazepine with a short half-life (e.g. Alprazolam) (91, 106).
- Overdose with benzodiazepines produces drowsiness, confusion, muscle weakness
- It may potentiate the depressive effects of alcohol and barbiturates, and should not be prescribed to someone who is substance dependent and unable to reduce substance use.
- There may be psychomotor impairment, which has implications for driving or handling machinery, and benzodiazepine compounds can also significantly affect memory processing.

Benzodiazepines may be indicated for the treatment of a small group of people with chronic anxiety disorders, and older patients who cannot tolerate the cardiovascular effects of TCAs. Where people who have not had benefit from antidepressants, have not

responded to psychological therapies, and have failed to respond to other medications, long term use of Benzodiazepines might be considered. However this should only be initiated following a specialist assessment.

If long term use of Benzodiazepines is considered, The Royal Australian and New Zealand College of Psychiatrists have approved the following guidelines for their use:

- the dosage used should be the lowest effective dose necessary to achieve symptomatic relief
- care should be taken to avoid excessive sedation which poses a risk in the ambulant patient
- the drugs are most effective when they are used for short periods of treatment
- caution should be exercised in prescribing benzodiazepines for patients when there is a history of, or evidence of, substance abuse, particularly of alcohol and other sedative- hypnotic drugs
- the use of more than one benzodiazepine prescribed concurrently should be avoided if possible
- tolerance with the risk of dependency and withdrawal symptoms occur with all benzodiazepines
- these drugs should not be discontinued abruptly
- patients should be advised the benzodiazepines may produce dependency. Any suspicion that the patient is misusing benzodiazepines should be documented and discussed with the patient
- a person who has shown other tendencies towards addictive behaviours should not be prescribed benzodiazepines
- repeat prescriptions for benzodiazepines should not be provided without regular review.

To limit the experience of withdrawal, patients should be tapered off benzodiazepines gradually, titrating the rate of reduction against the patient's symptoms. Longer acting benzodiazepines (e.g. diazepam) are associated with fewer withdrawal complications than the shorter acting ones such as alprazolam. It may be useful to switch to longer acting benzodiazepines during the taper period to ameliorate symptoms (122).

Combining psychological therapy and medications

Current evidence suggests that CBT and pharmacological treatments may be of similar efficacy (see appendix 11) however the effects of CBT are long lasting, whereas there is a high risk of relapse after cessation of medication. Whether combined medication and CBT adds further advantage to CBT alone in the long term is not yet clear and further studies are required.

RECOMMENDED BEST PRACTICE

We recommend combining or replacing medication with psychological therapies and clinical management in cases where:

- **The prior course of the illness is chronic (typically the case with anxiety disorders) or characterised by poor inter-episode recovery**
- **The course of illness is associated with high levels of functional impairment as with OCD**
- **medication alone has only been partially effective and where negative thoughts (in the case of anxiety-catastrophic thoughts), intrusive obsessions, low self-esteem and/ or relationship difficulties are identified**
- **there is a history of chronic psychosocial problems (as is often the case with PTSD, and social phobia)**
- **there are residual symptoms that are largely psychological**
- **the person is self-medicating using alcohol or illicit drugs**
- **the person has ongoing stressful life circumstances**
- **the anxiety is associated with marked phobic avoidance**

When psychotherapy alone is not successful and the practitioner may want to combine or replace psychological therapies with medicine, we recommend referral to a specialist mental health service.

TREATMENT OF COMMONLY CO - OCCURRING MENTAL DISORDERS

It is common for a person with an anxiety disorder to present with other co-existing disorders, including other anxiety disorders. Although treating the primary disorder will often result in a reduction of symptomology among the concurrent conditions, the literature suggests that a failure to treat both/ all conditions (even when one develops secondary to the other's presentation) may result in poorer post treatment outcomes (16). The most commonly concurrent disorders are substance abuse disorders and depression.

Treatment of co- occurring substance abuse disorders

When the person presents with substance abuse/ dependence and concurrent symptoms of anxiety or depression, the alcohol abuse needs to be addressed. This is irrespective of whether the alcohol dependence is the primary disorder, or developed secondary to the anxiety or depression. This is because, irrespective of how it started, alcohol dependence may “take on a life of its own”.

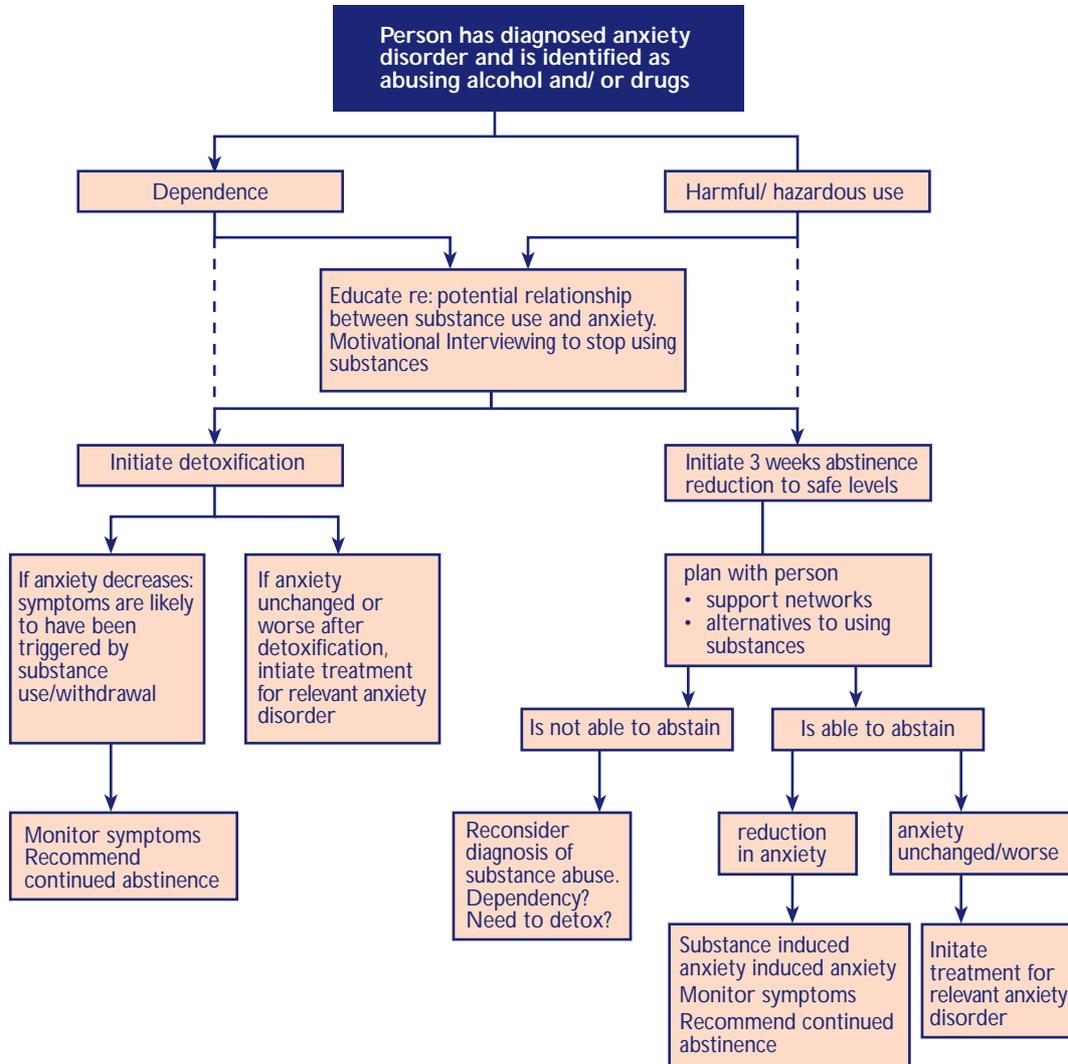
Even when substance abuse/dependence has developed secondary to the anxiety disorder, treatment of the anxiety disorder rarely “cures” the substance dependence (93).

The co-existence of substance abuse can seriously impair a person's ability to follow through with the planned therapy. Detoxification needs to be addressed before a plan for the anxiety disorder (psychopharmacological or psychological) is initiated. In particular, the use of substances to self-medicate during exposure therapy will interfere with the normal habituation to the feared object/ event. A high alcohol or drug intake may also effect the action of psychotropic medication.

The following risks of pharmacotherapy in patients still abusing substances should be carefully considered: (40,93)

1. most antidepressants and benzodiazepines lower the seizure threshold if abruptly withdrawn or taken erratically. Caution should be taken in prescribing medication to patients with a history of seizures or brain injury
2. psychotropic medication may increase intoxication due to alcohol
3. liver damage may impair metabolism rates and increase systemic levels of medications
4. benzodiazepine effects may serve as a cue that triggers alcohol craving as the pharmacological effects of benzodiazepines may resemble those of alcohol
5. the use of MAOI's should be avoided (due to dietary limitations) in all but the most reliable patients for whom other treatment approaches have failed
6. medications that are prescribed may be abused and actually facilitate a relapse of drug abuse
7. patients may be more likely to attribute symptom reduction to the medication rather than to their abstinence.

Treating concurrent anxiety and substance use



Once a person is identified as abusing drugs/ alcohol, maintain a high index of suspicion for concurrent depressive/ anxiety disorder;

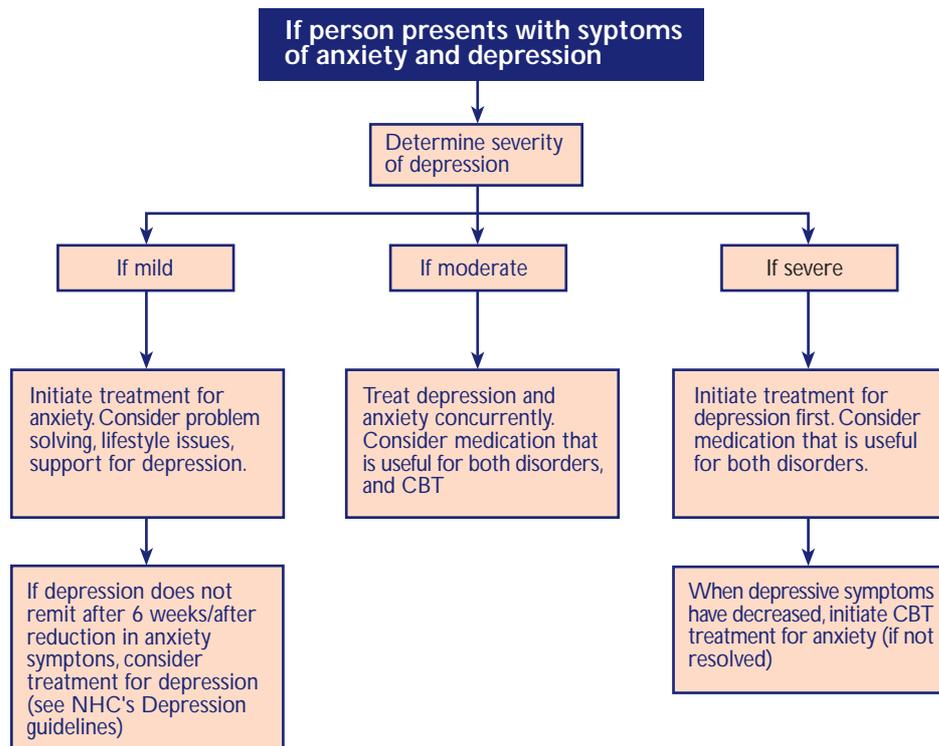
Treating concurrent anxiety and depression

Patients with both depression and anxiety have a greater likelihood of experiencing relapse, recurrence, chronicity or residual symptoms between full episodes, than those with either disorder alone. People with major depression and coexisting panic disorder display more psychological and social impairment and have more anxiety and somatic problems than people with major depression alone. These people may also be at as higher risk for suicide attempts (61).

In cases where the person presents with symptoms of both anxiety and depression*, priority should be given to the treatment of the depression, particularly if it is severe. This is because the negative symptoms of depression (low motivation, apathy, poor concentration, low energy) may compromise the efficacy of CBT treatments for anxiety

(See figure below for an description of treatments for anxiety and depression). Many of the drugs used to treat depression (particularly clomipramine and SSRIs) also have anti-anxiety properties, and this confers added advantages to their use (38)#. Benzodiazepines may exacerbate or worsen symptoms of depression.

Treating concurrent anxiety and depression



* The DSM-IV also acknowledges in its appendices (for further research) a new diagnostic criteria of Mixed Anxiety-Depressive disorder for people who exhibit symptoms of both anxiety and depression that fail to meet the diagnostic criteria for a specific and separate disorder.

When there is a partial return of symptoms, but not of the severity or intensity pre-treatment.

TREATMENT ISSUES FOR SPECIAL POPULATIONS

Appreciation of how the person views their anxiety symptoms is critical for any successful treatment. When working with people of the health professional's own ethnic group it is important not to assume that they subscribe to the same cultural or world views.

Respectful inquiry into how the person views their anxiety disorder and what treatments they consider are appropriate will go a long way towards ensuring selection of treatments which the person will accept and follow. The presence of a family member or support person can be useful in enabling the person to speak about these issues. If there is a specialist health service for the person's cultural group, the health professional should offer to involve this service in the treatment process.

Treatment issues for Māori

In treating a Māori person with an anxiety disorder, it is important to establish early on whether cultural factors are significantly contributing to aspects of the presenting problem(s). If so, then involving a Māori health worker(s) and/or community elder in the assessment and treatment stages, or to making a referral to a specialist Māori health service is recommended.

Guidance with accessing such assistance may be found from specialist Māori mental health teams, Māori community health workers or Māori health units of your local hospital. Community based Māori agencies such as Iwi-based or urban authority providers may also be able to assist.

In referring a person to another service, or making contact with a Māori health worker(s) or elder, the primary healthcare worker(s) should ensure that:

- they obtain the patient's permission to release information to another person (as prescribed in the Privacy Act)
- where possible, someone from the service should accompany the person to the consultation. When this is not possible, a family member or close friend should accompany the person after issues of client

choice and confidentiality have been considered. This is preferable to the person going alone. Referral to specialist services does not however imply that the primary healthcare worker(s) ceases to have any responsibility for the client.

If the treatment of the person is to take place jointly with a Māori elder or Māori health service provider, then roles and responsibilities for different aspects of the person's care need to be carefully and respectfully negotiated between the parties involved in conjunction with the person and (where the client prefers) their whānau. Ongoing exchange of information between specialists is also encouraged. Preference on the part of some Māori providers such as traditional healers to retain intellectual property should not be interpreted as a lack of willingness to engage in a collaborative working relationship. Joint assessment and treatment endeavours work best when there is an existing relationship between the healthcare provider and Māori specialist or service, preferably established before any particular people are referred.

Problems which may present with anxiety among Māori (such as problematic use of drugs and alcohol or violent behaviour) may be addressed by a referral to other appropriate Māori services if locally available. Māori drug and alcohol services and treatment programmes are available in some regions, as are Māori men's non - violence groups. Again, advice may be sought from a local Māori health or social services about potential sources of help within your local community.

Pacific cultures

When treatment for anxiety is indicated for a Pacific person, a number of factors need to be taken into account when selecting the appropriate intervention and provider:

- the person should be offered the option of appropriate Pacific healthcare worker(s).
- Guidance from a Pacific service or recognised community organisation is recommended
- inclusion of a religious minister, pastor or priest (Faifeau, Akoako) may be offered. Elder (Matua) intervention may be offered if requested by the person

- alternative healing such as traditional healers (Fofu, Taulasea) may be offered, particularly if requested by the person
- inclusion of support person(s), advocate, family or significant others for the person is vital.

Treatment for anxiety disorders may have to involve the family, both immediate and extended, as the root of the anxiety may be family based.

People with intellectual disabilities

Behavioural approaches to fear reduction and anxiety management among people with intellectual disabilities can be very effective, particularly if the focus is on establishing positive changes in the person's behaviour and lifestyle rather than simply eliminating the fear or the inappropriate behaviour (30).

The use of anxiolytic medication with people with intellectual disability should be approached with caution. There are very few studies on the efficacy and safety of these medications with this population (146). These drugs may have adverse effects on cognition, and sometimes have paradoxical effects with some patients who show self-injurious or stereotyped behaviours. The use of drugs to control anxiety in people with intellectual disabilities should only be considered:

- when an anxiety disorder has been diagnosed and an anxiolytic drug is indicated for that disorder for the general population (146);
- for the control of acute anxiety reactions on a short-term basis (136);
- when a plan for careful monitoring of benefit and side-effects is included (146).

Shorter acting benzodiazepines are preferred to the longer-acting drugs like diazepam (136).

Children and adolescents

Active treatment of developmentally inappropriate anxiety is important in order to prevent a child with an anxiety disorder's condition from becoming chronic.

Research has indicated that many anxious adults report that their symptoms originated in childhood. Likewise, older children with anxiety disorders report higher levels of anxiety than younger children with the same diagnosis (suggesting that anxiety worsens over time if untreated) (63).

The process of assessment and treatment of children and adolescents requires active involvement with the family/whānau, school, and possibly other relevant resources in the community (e.g. New Zealand Children Young Persons and their Families Service, specialist child and youth mental health services, Special Education Services etc.,).

The first line of treatment should be a comprehensive approach that includes working with the family/whānau, co-ordination with the child's school and individual, group and/ or family-based psychotherapy.

The main goals of intervention with anxious children and their families (as with adults) are, anxiety management, reduction of distress, and an increase in coping skills. For example, with children who miss school as a result of anxiety a main goal of therapy would be to help them overcome their avoidance (due to anxiety) and return to school (109).

When a child is diagnosed as experiencing an anxiety disorder, referral to a specialist for treatment is strongly recommended. If there is evidence of significant impairment in school or social functioning, or the symptoms are developmentally inappropriate, or (in the case of an adolescent) there is a non response to treatment, then referral to a specialist child and adolescent mental health service is strongly recommended. There is considerable Grade A2 evidence for Cognitive-Behaviour Therapy as an efficacious treatment for children with anxiety disorders (62,109)

Women, pregnancy and anxiety

There are a number of special concerns about selecting antidepressants for women especially in relation to child bearing. Women who are taking birth control medication require higher doses of tricyclic antidepressants because of the induction of hepatic enzymes responsible for drug metabolism. When treatment with an antidepressant is being considered during pregnancy, tricyclic antidepressants are preferable to newer antidepressants because of the greater knowledge of the apparently low teratogenic risk with these compounds. Tricyclic antidepressants have been shown to be associated with low birth weight, delayed reflexes, slowed physical maturation in the first 30 days after birth (1), and transient withdrawal symptoms. The amount of tricyclic medication that is secreted in breast milk appears too small to cause harm but has been shown to be associated with low birth weight, and delayed reflexes and slowed physical maturation in the first 30 days after birth (1) and transient withdrawal symptoms. **sting harm.**

Benzodiazepines have been associated with a higher risk of congenital abnormalities to the baby in its first trimester and should be avoided. Benzodiazepines used later in the pregnancy produce a higher risk in the baby for muscular hypotonicity, failure to feed, depressed respiratory drive at birth (low Apgar scores) and the possibility of developmental delay (1).

Where possible, the mother (or woman contemplating becoming pregnant) should be encouraged to use non-medication based strategies such as CBT to manage their anxiety. In cases where medication is being considered, the practitioner should discuss with the woman the potential risks and weigh up the relative risk to her and the baby of the anxiety versus exposure to medication. If a decision to treat with medication is made, the medication should be prescribed at the lowest effective dose for the shortest period of time necessary (67). If at all possible, antidepressants should be avoided in the first trimester and when breast feeding.

Treatment issues for older people

The essential treatment principles that apply to the general adult population also apply to older adults. The most effective treatment strategies for anxiety disorders remains either CBT or medication treatments. The difference lies in the selection of and doses of medication used to treat the anxiety disorders.

Generally, any medications which impact upon cognitive processing (e.g. benzodiazepines), or produce orthostatic hypotension (e.g. TCAs) may put the elderly person at a greater risk for falls, should be considered carefully before use, and initiated at lower doses if selected (2).

Further, the slower metabolism rates of the elderly may increase plasma levels of medication and lower doses may be required. The elderly have a low threshold for drug-induced confusional states. Benzodiazepines and tricyclic antidepressants are relatively contraindicated. Many elderly are chronically addicted to night sedatives and attempts to withdraw them may trigger an anxiety state.

Most anxiety disorders have their onset in the late teens or early adulthood. It is not common for anxiety disorders to develop in later years. Adjustment reactions may develop after a major life change, for example the death of a partner. Consideration must also be paid to social conditions that may be contributing to the person's presentation. If a person is presenting with anxiety symptoms of recent onset, consideration should be paid to excluding physical conditions and medications which have side-effects which mimic anxiety (see page 25) or other mental health conditions which may similarly present (e.g. agitated depression and the early stages of dementia, see pages 26, and National Health Committee dementia guidelines).

REVIEW AND CONTINUATION OF TREATMENTS

How to maintain outcomes and prevent relapse

Risk factors that increase the likelihood of relapse include the presence of residual symptoms of anxiety, phobic avoidance or panic after the cessation of therapy (37).

Development of strategies to prevent or minimise the likelihood of relapse are an integral part of CBT. These involve identification of early signs of worsening of symptoms and reintroduction or reapplication of strategies for managing anxiety.

In cases where the person has spent many hours engaged in ritualised behaviour (as in the case with OCD, or to facilitate avoidance), the person needs to find purposeful activity to fill the time void left by the behaviour. This activity needs to be rewarding and less anxiety provoking than the previous rituals. For example, it would not be recommended that a person who has not worked for many years initially seek full time employment, although this could be a goal to work towards.

People should be followed up after treatment ceases to ensure that gains are maintained, and to deal with any lapses. For patients who lapse*, booster sessions of psychological therapy are often helpful. A recommended practice is to offer follow up 1, 3, 6, and 12 months after treatment (38).

Discontinuation of medication

There is growing evidence that rapid cessation of any medication used to manage anxiety can cause a rebound of anxiety states particularly with the benzodiazepines (see page 44, 'Notes on the use of Benzodiazepines'), but also seen with the antidepressants. In the case of people with social phobia who use beta blockers to manage performance situations, a rapid cessation of the drug may cause panic like symptoms to resurface in such situations. All medications should be tailed off gradually, over at least a four week period (longer may be necessary for benzodiazepines). This is less crucial for SSRIs.

People who do not have alternative strategies to manage their anxiety may notice an increase in symptoms when medication is tailed off. During the discontinuation phase, people with anxiety disorders should be particularly encouraged to increase their use of relaxation strategies, continue exercise and avoid stimulant drugs (such as caffeine and nicotine).

Maintenance

Maintenance therapy is indicated for those people who have particularly high risk of developing a new episode of anxiety (i.e. of relapsing). There are a small number of people with a high risk of relapse who may need treatment with medication. Specialist advice should be sought before setting such a strategy in place. Such maintenance therapy should be subjected to episodic review and there should be continuing discussion about self-management of the anxiety.

CONCLUSION

This guideline has delineated the nature of anxiety disorders and made recommendations relevant to their recognition, assessment and treatment. The strength of evidence for these recommendations has been made explicit. The recommendations encompass both psychological interventions and medications.

The psychological interventions generally fall into two groups: simple measures such as education, problem-solving, and stress management, all of which can be readily implemented in most practices now if anxiety disorders are recognised, and more complex psychological treatments (especially CBT). These require training for primary care health professionals and changes in the organisation and structure of practice to enable their utilisation. Recommendations for use of medications address choice of medication, dose and duration for each of the anxiety disorders. This document is intended as a comprehensive reference, and its recommendations are available in a summarised form for day to day use by primary care health professionals and their patients.

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Appendix 1 Process used for developing the guidelines.

These guidelines have been developed using the following process:

1. Assembly of a working party of a range of experts in the area of anxiety disorders and primary mental health, including representation from; Māori, Pacific Islands, consumers, psychologists, psychiatrists, general practitioners, and a practice nurse.
2. Developing a draft of the perceived key components in the assessment, and diagnosis of anxiety disorders, with specific sections sent to named individuals for review.
3. Analysis of the literature to develop evidence tables for key decision points specifically in the areas of treatment, i.e., psychological vs. pharmacological (and the specific treatments within each broad area). (See next section for a discussion of how this was conducted).
4. Incorporation of the evidence tables into the draft, and into the key decision points.
5. Extensive peer review. Comments from resulting submissions were considered by the entire working party, and the document updated accordingly.

Literature review

The medical and psychological literature from 1992-1998 was reviewed by searching MEDLINE, EMBASE, PSYCLIT, the Cochrane library, and the Internet using the following key words; anxiety disorders, generalized/generalised anxiety disorder, panic, stress, social, social anxiety, adjustment, post traumatic stress, obsessive compulsive disorder(s), social, specific phobia(s), agoraphobia, treatment, therapy, randomized/randomised control trials, meta-analysis, meta-analytic, case series. References from selected articles and reviews were also examined.

Two reviewers (with backgrounds in psychological research) extracted information from articles and assigned them to categories of evidence (see below).

Where possible, the 'Number Needed to Treat' figure was calculated, to help ascertain treatment effect. The expert opinion of selected members of the working party was used to judge the clinical significance of findings in the literature. (An additional meeting of psychiatrists was convened to establish agreement on pharmacological recommendations)

Basic evidence grading strategy

Grade of evidence	Description	Comment
A1	Randomised controlled trials with double blind placebo control	RCT's can control for selection bias
A2	Randomised controlled trials without double blind placebo control	Patients are randomly assigned to treatment and control groups, but both experimenter (and often the patient) are aware of which treatment they are receiving, which may generate bias.
B	<ul style="list-style-type: none"> • non-randomised controlled trials (incl.: non-randomised historical cohort studies) • other studies with non-experimental designs (e.g., population based studies) 	Comparisons are made between patients who did and did not receive the intervention. Selection bias may result from unrecognised or recognised or inappropriate comparisons over time. Only through randomisation can unknown selection bias be controlled.
C	Case series	The reader is informed of the outcomes for a group of patients. May provide useful information about clinical course and prognosis but can only hint at efficacy.
D	Expert opinion	Is used to inform when there is a lack of robust scientific evidence on particular cases where sound decisions still need to be made. In this case it reflects accumulated clinical wisdom by people who are experienced in the field.

Methodological issues in grading evidence

There are two fundamental issues to be aware of when considering the evidence grading strategy that has been employed in developing this guideline:

1. although the majority of evidence considered in the evidence tables is Grade A1 or A2, it is evidence that has been taken from specialist services in the secondary and tertiary sectors. There is a dearth of evidence for the treatment of anxiety disorders in primary care. Some studies of interventions in primary care have been conducted in other countries, but the extent to which findings may be generalised to the New Zealand context is arguable. Where evidence is reported, it has been moderated by expert opinion as to its relevance to the primary care sector in New Zealand.

2. the psychological research cited as evidence falls into Grade A2 evidence as it is not possible to provide 'double-blind' psychological interventions, in which neither the client nor the therapist knows which intervention is being delivered.

In addition to the explicitly evidence-based treatment recommendations, the guideline also recommends best practice based on expert opinion about the process of recognition, assessment and treatment of anxiety disorders. (Grade D evidence)

Appendix 2 Features of anxiety disorders

Main fear/symptom	recurrent unexpected panic attacks experienced for >1 month. Fear is recognised as excessive ²³	panic attacks/ anxiety occurring in situations where escape is difficult/ embarrassing or help is unavailable	persistent unreasonable fear, cued by the anticipated or actual presence of the feared stimulus	persistent fear for longer than six months of social situations, where the person feels exposed to the scrutiny of others	presence of either obsessions and/or compulsions. Fear is recognised as excessive	excessive anxiety and worry about a number of events or activities, present most days for at least 6 months. The worry is recognised as excessive	triggered by trauma where the safety of self or others was threatened causing intense fear, lasting longer than 1 month
Associated cognitions	persistent concern re: future panic attacks/ worry about the implications of the panic (e.g. having a heart attack)	persistent concern re: future panic attacks/ worry about the implications of the panic (e.g. having a heart attack)	that others are negatively evaluating them, will be able to tell that the person is anxious etc.	see section on the diagnosis of OCD for a description of obsessions	the person anxiously ruminates and thinks catastrophically. The worry is hard to control	the person continues to experience the trauma through flashbacks, etc.*	
symptoms upon exposure to feared stimuli	immediate anxiety response which may take the form of a panic attack	immediate anxiety response which may take the form of a panic attack	immediate anxiety response which may take the form of a panic attack	compulsive rituals which are time consuming involving at least 1 hour per day	at least 3 of the following: restlessness, fatigue, concentration difficulties, muscle tension, sleep disturbance	immediate anxiety response, or dissociation. Persistent symptoms of increased arousal [#]	
avoidance	phobic situations are avoided or endured with intense anxiety	phobic situations are avoided or endured with intense anxiety	phobic situations are avoided or endured with intense anxiety	phobic situations are avoided or endured with intense anxiety	the themes of obsessions may be avoided, e.g. not going outside for fear of contaminants	avoidance of situations associated with trauma, numbing of general responsiveness ^f	
Feature	Panic disorder without agoraphobia	Panic disorder with agoraphobia	Specific phobia	Social phobia	OCD	GAD	PTSD

* also illusions, hallucinations, dissociative episodes and a sense of reliving the experience.

[#] including insomnia, irritability, outbursts of anger, hypervigilance, concentration difficulties, exaggerated startle response as indicated by at least three of the following; (1) efforts to avoid thoughts, feelings or conversations associated with the trauma, (2) efforts to avoid activities, places or people that trigger recollections of the trauma, (3) inability to recall an important aspect of the trauma, (4) markedly diminished interest or participation in significant activities, (5) feeling detached or estranged from others, (6) restricted range of affect; (7) sense of foreshortened future.

Appendix 3 A list of questions to aid in eliciting specific anxiety symptoms

Physical symptoms

- do you ever feel tense or on edge?
- do you have difficulty falling asleep or staying asleep?
- have you ever noticed that your muscles are tight - is there some tenderness for example if you press your neck or shoulder muscles with your fingers?
- do you get butterflies in your stomach?

Social factors

- are there currently things in your life that are causing you worry or distress?
- do you have access to social support?
- are there any things that have happened to you in the past that you can't stop thinking about?
- how is your general health?
- has any one else in your family had problems similar to yours?

General worry/ anxiety

- would you describe yourself as a worrier?
- do you ever find that concerns play over and over in your mind?
- are you the kind of person who sometimes "makes mountains out of molehills"?
- do you ever find it hard to make decisions or make your mind up about a problem that has been bothering you?
- do you sometimes find that you can't get to sleep because some thought or concern, even if not very important, keeps going around and around in your mind?

Panic

- have you ever felt your heart pounding, blood rush to your ears, or pains that have made you feel frightened or upset? – What did you think was the cause of these?
- have you ever had a flood of sensations that made you fear that you were having a heart attack, or that some disaster was about to happen to you?

Phobias and avoidance

- are there any specific things that you are fearful of and would avoid if you could? What happens if you are unexpectedly faced with the feared object/ situation?
- do you have worries or fears that prevent you from doing things that you would like to, or that others seem to be able to do without much difficulty?

- are there things that you are reluctant to do/ places you would rather not go, because you feel uncomfortable?
- have you ever had to leave a situation because you felt uncomfortable, conspicuous or unsafe? What happened?

Obsessions

- do you ever have unwanted and repetitive thoughts that come in to your head that are intrusive or distressing? Is there anything you do to make these thought go away/ seem less bad?

Compulsions

- do you ever find yourself having to do things over and over again or for a set number of times or in a certain order to get them just right?
- are there things that you just have to do before you can do other things in your day?
- do you find yourself spending a lot of time doing things like cleaning or checking that everything is safe?
- how long do you spend each day cleaning, checking, counting etc.? What happens if you are interrupted before you have finished this?
- does the (behaviour) seem unreasonable or excessive, but you still feel compelled to do it?

Trauma

- have you ever seen or had something happen to you that made you feel frightened and helpless?
- do you still have recurrent upsetting memories of this?
- do you see images of what happened?
- do you ever have experiences like you were reliving the event?
- are there things that remind you of the event that are upsetting to you?
- are there situations that you now avoid because they trigger memories of what happened?
- what do you do to try and cope with these feelings? How do you numb or block them out?
- have you noticed that since the event you have lost interest in some things that you used to enjoy?
- how has the trauma changed how you feel about the future?

Appendix 4 Self-monitoring scale for the measurement of anxiety

Use the following table to describe times when you have felt anxious. Try and be specific, as it helps establish the nature, severity and triggers for your anxiety

Emotions

What do you feel?

Situation

What were you doing to trigger this feeling?

Thoughts

What did you think about the situation that led to these feelings? What images and thoughts went through your mind?

Challenging Thoughts

How can you challenge the validity of the thoughts?

Outcome

How strongly do you believe the thoughts now?

Appendix 6 Slow breathing exercise

You will remember that when you get anxious your rate of breathing increases. This overbreathing is often referred to as 'hyperventilation'. When you overbreathe you breathe out too much carbon dioxide which leads to a decrease in the level of carbon dioxide in the blood. The decreased level of carbon dioxide causes or worsens a number of symptoms such as breathlessness or light-headedness. You may experience these symptoms if you have panic attacks.

To get rid of these symptoms, the level of carbon dioxide in the blood must be increased and steadied. One way of achieving increased levels of carbon dioxide is to breathe into a paper bag. A large portion of the air you breathe out is carbon dioxide, therefore, by rebreathing your old air you are taking higher amounts of carbon dioxide into your lungs.

Although breathing into a paper bag is simple and effective, it may not always be convenient or socially appropriate to pull out a paper bag in public! Additionally, although breathing into a paper bag is effective during a panic attack, this method cannot prevent hyperventilation in the future. An alternative method which is less obvious to other people and more effective in the long run is the slow breathing exercise. This method will help you to control your hyperventilation. Also, by learning slow and regular breathing habits you will help to prevent future episodes of hyperventilation and other symptoms of panic.

The following exercise is to be practised four times every day for at least five minutes each time, AND at the first signs of panic or anxiety. Combining slow breathing with relaxation is particularly helpful.

SLOW BREATHING EXERCISE (TO BE PRACTISED REGULARLY AND AT THE FIRST SIGNS OF ANXIETY OR PANIC)

If you recognise the first symptoms of overbreathing, STOP what you are doing and sit down or lean against something. If you are driving, pull over and park in a safe place.

1. Hold your breath and count to 5 (do not take a deep breath).
2. When you get to 5, breathe out and say the word 'relax' to yourself in a calm, soothing manner.
3. Breathe in and out slowly through your nose in a six second cycle. Breathe in for three seconds and out for three seconds. This will produce a breathing rate of 10 breaths per minute. Say the word 'relax' to yourself every time you breathe out.
4. At the end of each minute (after 10 breaths) hold your breath again for 5 seconds and then continue breathing using the six second cycle.
5. Continue breathing in this way until all the symptoms of overbreathing have gone.

It is important for you to practise this exercise so that it becomes easy to use any time you feel anxious. (Treatment Protocol Project 1997)

Appendix 7 Structured problem solving

Step 1: What is the problem?

Think about and discuss the problem or goal carefully then write down exactly what you believe to be the main problem or goal.

Step 2: List ALL possible solutions for the main problem

Brainstorm and put down all ideas, even ones you think are bad ideas. List all possible solutions without any evaluation of them at this stage.

(1)

(2)

(3)

(4)

(5)

(6)

Step 3: Discuss each possible solution

Quickly go down the list of possible solutions and assess the main advantages and disadvantages of each one.

Step 4: Choose the best or most practical solution

Choose the solution that can be carried out most easily with your present resources (time, money, skills, etc.)

Step 5: Plan how to carry out the best solution

List the resources needed and the main obstacles that need to be overcome. Practice difficult steps and make notes of information needed.

Resources needed: _____

Obstacles to overcome: _____

Step 1: _____

Step 2: _____

Step 3: _____

Step 4: _____

Step 6: Implement the solution

Step 7: Review how well the solution was carried out and praise all efforts

Revise your plans if necessary. Continue the problem solving process until you have resolved your stress or achieved your goal.

(from Hunt et al, 1995)

Appendix 8 Progressive relaxation

Relaxation is useful for reducing physical and mental tension. Relaxation helps people to: reduce worry and anxiety, improve sleep, and relieve physical symptoms caused by stress (e.g. headaches, stomach pains, diarrhoea or constipation).

If you follow the steps below you will be well on the way to learning how to relax. This exercise should take about 15-20 minutes. However, if you only have 5 minutes to spare, 5 minutes is certainly better than nothing!

1. Find a quiet and relaxing place: Choose a comfortable chair, or somewhere to lie down, in a place which is free from noise and interruptions.
2. Clear your mind: Focus your attention on your breathing, and try to clear your mind of worries or disturbing thoughts. If these thoughts drift back into your mind when relaxing, try and focus attention on pleasant, or at least neutral material (e.g. imagining a place where you have felt happy and calm).
3. Practice the slow breathing exercise (outlined in Appendix 6)
4. Relax your muscles: For each of the muscle groups in your body, tense the muscle for 7-10 seconds, then relax for ten seconds. The muscles should not be so tense that they become uncomfortable or the person gets cramp - but just enough to get the sensation of tightness. Muscles should be relaxed in the following order:
 - Hands - curl hands into fists, then relax
 - Lower arms - bend hand down at the wrist, as though trying to touch the underside of the arm, then relax
 - Upper arms - tighten biceps by bending arm at the elbow, then relax
 - Shoulders - lift shoulders up as if trying to cover ears with them, then relax
 - Neck - stretch neck gently to the left, then forward, then to the right, then to the back in a slow rolling motion, then relax

- Forehead and scalp - raise eyebrows, then relax
- Eyes - screw up eyes, then relax
- Jaw - clench teeth (just to tighten the muscles), then relax
- Tongue - press tongue against the roof of your mouth, then relax
- Chest - breathe in deeply to inflate your lungs, then breathe out and relax
- Stomach - push your tummy out to tighten the muscle, then relax
- Upper Back - pull your shoulders forward with your arms at your side, then relax
- Lower Back - while sitting, lean your head and upper back forward, rolling your back in a smooth arc thus tensing the lower back, then relax
- Buttocks - tighten your buttocks, then relax
- Thighs - while sitting, push your feet firmly into the floor, then relax
- Calves - lift your toes off the ground towards your shins, then relax
- Feet - gently curl your toes down so that they are pressing into the floor, then relax.
- Mentally scan your body for any remaining signs of tension. Repeat muscle tension and relaxation on any identified areas.

5. Enjoy the feeling of relaxation

Take some slow breaths while you sit still for a few minutes enjoying the feeling of relaxation.

Practise once or twice every day for at least eight weeks.

During the day, try relaxing specific muscles whenever you notice that they are tense.

(Treatment Protocol Project 1997)

Appendix 9: Coping with trauma

What to do immediately after the event

- Make sure that you are with people. Do not go home to an empty house, get a friend or relative to stay with you.
- Talk about the incident with others. Talking will help you get over the experience.
- Remind yourself that the event is over and that you are safe now.
- Get some physical exercise to 'burn off' tension and anxiety.
- Avoid alcohol, sedatives and sleeping pills (they will only dull the experience and not allow you to deal properly with your feelings).
- Restrict stimulants (e.g. tea, coffee, chocolate, Coca-Cola, cigarettes), as you don't want to make your body even more agitated than it already is.
- Try and eat something even if you do not feel like eating.
- If you can't sleep, do not lie in bed tossing and turning - get up and do something relaxing until you feel tired.

How to handle the next few days

- Remind yourself that your reactions are a normal result of trauma and will pass in time
- Try to get back into your normal routine as soon as possible. You may need to gradually introduce yourself to tasks that seem difficult.
- If you feel uncomfortable, afraid or anxious, take some long slow breaths and remind yourself that you are safe and the trauma is over.
- Try and do things that are relaxing and enjoyable.
- Continue to talk to your family, friends, and colleagues about the trauma, as this will help you to get over your feelings. Even if you feel a bit detached from other people, don't reject their support.
- Work on your general stress levels by ensuring that you have adequate sleep, a good diet, and regular exercise. Practice relaxation techniques to help reduce nervous tension.
- Because accidents are more common after severe stress, take extra care e.g. drive more carefully and be more careful around the home and with machinery.
- Allow yourself time to deal with memories. There may be some aspects of the experience that will be difficult to forget.

**REMEMBER THAT AT ANY TIME YOU CAN ASK FOR
HELP FROM A COUNSELLOR OR THERAPIST**

Appendix 10 Membership of the Working Party

Working Party

John Bushnell (Chairperson)

Associate Professor of Clinical Psychology
Department of Psychological Medicine
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Mark Oakley-Browne

Associate Professor
Department of Psychological and Behavioural
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Ros Gellatly

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Paul Hirini

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Corinne Curtis

Consumer Representative, Waiheke Island

Ron Butler

Consumer Representative
Lyttleton

Robyn Beckingsale

Practice Nurse
Nelson

Bruce Adlam

Goodfellow Unit
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Gary Hermansson

Associate Professor
Department of Human Developmental Studies
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Emma Sutich

Richard McLachlan

(National Health Committee secretariat)

Kristen Garstang (literature reviewer)

Contract Researcher

Tai Kake (analysis of evidence)

Research Fellow
Department of Psychological Medicine
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Appendix 11

Management plan for specific phobias

Management strategies will always vary from one individual to the next depending on the individual's particular problems. Generally, however, the management of specific phobias usually involves:

1. Ongoing assessment of the disorder. For example, ask the individual whether or not he or she still avoids the feared situation, and obtain his or her subjective rating of anxiety when in the feared situation (scored out of 10 where 0 is no anxiety and 10 is maximum anxiety).
2. Education about the nature of anxiety, tailored to each individual's needs.
3. Providing training in strategies to control anxiety symptoms, and encouraging the individual to practise these techniques regularly.
 - Breathing control- the slow breathing exercise in Appendix 6
 - Relaxation training in Appendix 8
4. Graded exposure to feared situations. For example, if an individual is afraid of snakes,

the following hierarchy could be arranged depending on how fearful the individual finds each step:

- looking at pictures of snakes
 - touching pictures of snakes
 - looking at snakes in the zoo
 - touching a fake snake
 - touching a snake through a sheet of glass (i.e. hand on one side of the glass and the snake on the other side) if a snake is available
 - imagining how it would feel to touch a snake (scaly skin, cool, firm, etc.)
 - touching a snake (if a snake is available).
5. Individuals are to be encouraged to avoid using sedative medication to cope with the feared situations
 6. Individuals with a blood/injury phobia who faint may require additional intervention
 7. Referral or specialist consultation if avoidance of the feared situation persists despite the above measures.
(Treatment Protocol Project 1997)

Appendix 12 Management plan for Acute Stress Reaction

Management strategies will always vary from one individual to the next depending on the individual's particular problems. However, the management of acute stress reaction generally involves:

1. Help with removal of any ongoing traumatic event. This help could involve minimising further traumas that may arise from the initial traumatic event. For example, practical assistance with finding safe accommodation if necessary or protecting against further loss (possessions, job)
2. Discussion about what happened during the traumatic event: (e.g. what was seen, how the individual acted or felt, or what he or she thought at the time). Discussion may help the individual reduce any negative appraisals of his or her reaction during the experience. For example, some individuals may feel guilty about their sense of helplessness during the trauma (e.g. that they did not do anything to stop the trauma). These negative appraisals are a common reaction to a traumatic event. In most cases it is highly unlikely that, when faced with such a trauma, the individual could have acted in any other way.
3. Provision of education about the typical responses to a traumatic event and guidelines for how best to cope in the hours and days following the event.
4. Encourage the individual to confront the trauma by talking about the experience to family and friends.
5. Time. Reassure the individual that the acute stress reaction is likely to pass in a short period of time.
6. Social support will be critical for helping the individual cope after a trauma has occurred. It may be necessary to identify potential sources of support and facilitate support from others (e.g. partners, family, friends, work colleagues, and work supervisors). Peers may be provided with information about the typical responses to a traumatic event so as to help them understand how the individuals may best cope in the days following the event.
7. Use of simple relaxation methods. These methods provide effective and productive ways coping with the anxiety and tension associated with the stress reaction (e.g. breathing control, exercise, relaxation, or pleasant activities).
8. Encourage the individual to gradually confront situations associated with the traumatic event (e.g. returning to work within a couple of weeks, perhaps for a few hours at a time).

9. Advise the individual not to use drugs or alcohol to cope with his or her reaction to the trauma. Instead, encourage the individual to use simple relaxation methods as per item 7 above.
10. Ensure that the individual receives follow-up. Persistent symptoms may require more specialised treatment and a revised diagnosis of Post Traumatic Stress Disorder and/or depression. (Treatment Protocol Project 1997)

Appendix 13 Management plan for Adjustment Disorder

Management strategies will always vary from one individual to the next depending on the individual's particular problems. However, the management of adjustment disorder generally involves:

1. Education
 - a. Individuals with adjustment disorder can be reassured that stress and life events often have mental and physical effects.
 - If symptoms of anxiety are prominent, an explanation of the fight-or-flight response is required
 - If depressive symptoms are prominent the individual could be reassured that a low or sad mood is common during or following the experience of significant life problems or loss
 - Likewise, if somatic symptoms are prominent, the link between stress and physical problems could be explained. For example, "When individuals get stressed they can experience prolonged muscle tension (this is part of the fight-or-flight response). This muscle tension can directly cause headaches (or backaches/bowel disturbances etc.)."
 - b. Stress related symptoms will usually only last a few days or weeks and will resolve without any specific intervention.
2. Coping with stress-related symptoms
 - Acknowledge the significance of the stressful event/s
 - Reinforce any positive steps the individual has taken to deal with the stressful event/s
 - If the stress is unresolved, help the individual modify the situation with structured problem solving (see Appendix 7)
 - Short term rest and relief from stress may be helpful
 - Encourage a return to usual activities within a few weeks
 - Avoid the use of drugs and alcohol to relieve stress
 - Consider consultation if significant symptoms last more than one month despite carrying out the interventions suggested here.(Treatment Protocol Project 1997)

Appendix 14 Good sleep habits ('sleep hygiene')

1. Reduce light, noise and extremes of temperature in the bedroom.
2. Avoid caffeine, nicotine and alcohol before bedtime.
3. Avoid a heavy meal within two hours of bedtime, however a light snack may help if you are hungry.
4. Regular exercise late in the afternoon or in the early evening may deepen sleep but do not exercise vigorously within three hours of bedtime.
5. In order to achieve relaxation at bedtime, allow about one hour of quiet activity prior to bedtime, such as reading, watching television or listening to music.
6. Develop a bedtime ritual such as reading or listening to relaxing music, clean your teeth etc. so that your body knows that you are getting ready to go to sleep.
7. Don't go to bed too early. That is, don't go to bed unless you are feeling sleepy. If you try to go to sleep too early before feeling sleepy you will have difficulty getting to sleep. This may make you feel irritated and frustrated about not feeling sleepy, not falling asleep and anxious about how you will cope the next day.
8. Do not stay in bed if you are awake. If you go to bed when you are feeling tired and sleep but do not fall asleep within about 15-20 minutes (estimated time only, do not use a clock), get out of bed, go to another room and do something mundane until you feel sleepy again. Repeat this procedure until you fall asleep quickly.
9. Get up at the same time in the morning as this will help train your body clock. Do not sleep in on weekends or after a late night.
10. Try not to nap during the day as this tends to reduce your sleepiness at night and results in poorer quality sleep during the night.
11. Do not worry if you can't get to sleep at night because worry and anxiety will delay sleep even more. The harder you try the worse it will be. If you get very little sleep one night you will still function the next day although you may be a little more irritable and tired than usual.

Appendix 15 Numbers Needed To Treat Anxiety Disorders using Medication

What does Number Needed to Treat or Number Needed to Harm Mean?

The NNT is an estimate of the number of patients that would need to be given a treatment for one of them to achieve a desired outcome. The NNT is derived from evidence from randomised placebo controlled studies and calculated relative to exposure to a placebo. For example, consider a trial of a medication such as 'extract of hens teeth' for treating Obsessive Compulsive Disorder.

If we decide that 50% symptom relief is considered to be 'benefit' from treatment, the NNT may be calculated very simply as: $NNT = 1 / (\text{the proportion of patients not benefiting from the placebo} - \text{the proportion of patients not benefiting from the treatment})$

Taking a hypothetical example from a randomised placebo controlled trial of 'extract of hens teeth': 50 patients were given 'extract of hens teeth' at a dose of 200 mg per day for 12 weeks, and 10 of them had less than 50% symptom relief at 12 week assessment. Fifty patients were given placebo, and 27 of them had less than 50% symptom relief at 12 week assessment.

$$\begin{aligned} \text{The NNT is therefore } & 1 / ((27/50) - (10/50)) \\ & = 1 / (0.54 - 0.20) \\ & = 1 / 0.34 \\ & = 2.9 \end{aligned}$$

This means that a clinician would expect to treat about three patients with 'extract of hens teeth' in order for one of them to achieve the specified degree of benefit from treatment.

The best NNT would, of course, be 1, which would mean every patient with treatment benefited, but no patient given placebo control benefited. Generally NNTs between 2 and 5 are indicative of effective treatments. (However, it does depend on the intervention and the consequences: NNTs of 20, 50 or 100 may be useful for prophylactic treatments, like interventions to reduce death after heart attack).

Harm

For adverse effects, we can calculate a number needed to harm (NNH), in exactly the same way as an NNT. For an NNH, large numbers are obviously better than small numbers, because this means that the adverse effect occurs with less frequency. The NNH is usually compared with the NNT as a way of comparing benefits of treatment with significant hazards of treatment. In other areas of medicine this is usually calculated for severe adverse events (such as death or a major complication of treatment). Caution is needed in interpreting the data described in this guideline, as the research has generally reported only mild adverse events such as nausea, dry mouth, sweating. There is no consistent format or rating scale for describing side effects of medications. Some studies report a general measure of harm, while others provide measures of specific side effects.

Procedure and methods

Studies were sampled using electronic searching of the Medline, PsycLit, and Cochrane Collaboration databases, and by manual searching with reference to published reviews and authoritative texts. In some instances, recommendations made in this guideline reflect evidence from studies in which NNTs cannot be calculated (e.g. comparison of two active drugs but no inert placebo). All Randomised Placebo Controlled Trials were included in an initial pool of 125 studies. Fifty three studies which reported data that permitted the calculation of NNT or NNH were included in the analyses.

NNT Estimates were calculated using intention to treat analyses. Confidence intervals were calculated using the Pukka method and verified using Arcus Biostat software.

Outcome measures, doses and duration of treatment varied across the sampled studies. Pooled analyses were undertaken wherever this was possible given the heterogeneity of outcome measures.

A Pooled NNT was used to summarise the findings of individual studies wherever there are three or more randomised controlled trials.

Panic Disorder						
STUDY	DRUG	POOLED NNT	95% CI	DOSE RANGE mg	DURATION wks	POOLED SAMPLE SIZE
3,117,77,137	Imipramine	5	3.0-11	35-225	8.0-12	239
3,688,128,119 117,65,137	Alprazolam	3	2.0-4	2.0-6.1	4.0-15	769
84,34,69	Clomipramine	4	3.0-8	50-150	6.0-12	268
69,25	Paroxetine	4	3.0-7	10.0-60	10.0-12	368
Obsessive-Compulsive Disorder						
STUDY	DRUG	POOLED NNT	95% CI	DOSE RANGE mg	DURATION wks	POOLED SAMPLE SIZE
148,130,56, 132,78,58	Clomipramine	2	2.0-3	100-300	5.0-12	1057
133,86	Fluoxetine	4	3.0-6	20-60	7.0-8	267
Social Phobia						
STUDY	DRUG	POOLED NNT	95% CI	DOSE RANGE mg	DURATION wks	POOLED SAMPLE SIZE
131,143, 92,116	Moclobemide	9	5.0-24	580-900	8.0-16	681
73,143,43	Phenelzine	2	2.0-3	55-76	8.0-12	131
Post Traumatic Stress Disorder						
STUDY	DRUG	POOLED NNT	95% CI	DOSE RANGE mg	DURATION wks	POOLED SAMPLE SIZE
41,66	Imipramine	2	2.0-6	225-240	8	64
41,66	Phenelzine	3	2.0-7	68-71	5.0-8	59
Generalised Anxiety Disorder						
STUDY	DRUG	POOLED NNT	95% CI	DOSE RANGE mg	DURATION wks	POOLED SAMPLE SIZE
98,107,105	Diazepam	3	2.0-6	19-26	4.0-8	234

KEY TO ABBREVIATIONS USED IN TABLES	
%IMP	Percent improvement
%PF	Percent Panic free
CGI	Clinicians Global Improvement
CRS	Clinician Rating Scale
GAS	Global Assessment Scale
GPS	Global Phobia Scale
HAM-A	Hamilton Anxiety Scale
IES	Impact of Events Scale
ISPI	Index of Social Phobia Improvement Scale
NIMH	NIMH Obsessive Compulsive Scale
PGI	Patient Global Impression Scale
PHYGIS	Physicians Global Impression of functioning Scale
SAS	Social Anxiety Scale
SCL90-OCL	Symptom CheckList-90 Obsessive Compulsive Scale
SI-PTSD	Severity index of PTSD
SPS	Social Phobia Scale
Y-BOCS	Yale-Brown Obsessive Compulsive Scale
NNT	Number needed to treat
NNH	Number needed to harm
NS	Not significant
ARR	Absolute risk reduction
RRR	Relative risk reduction
NR	Not reported
General	Side effects of medication not reported individually
INF	Infinity

Panic Disorder

STUDY	TREATMENT	DOSE (mg)	DURATION (wks)	SAMPLE	MEASURE	RRR	95% CI	ARR	95% CI	NNT	95% CI	NNH	95% CI	NNH	95% CI	95% CI
3	Imipramine	150	8	123	PHYGIS %PF	0.413	0.130-0.621	0.292	0.077-0.482	3	2.0-13					
3	Alprazolam	6.1	8	123	PHYGIS %PF	0.517	0.250-0.705	0.366	0.151-0.548	3	2.0-7					
6	Alprazolam	4.9	4	479	%PF	0.629	0.503-0.723	0.343	0.243-0.439	3	2.0-4					
140	Brofaromine	150	12	30	SCL-90 %PF	0.736	0.373-0.908	0.598	0.245-0.815	2	1.0-4	1 (insomnia)	1.0-2	2 (nausea)	1.0-4	
88	Alprazolam	3.62	5	55	% PF	0.556	-0.020-0.817	0.313	-0.012-0.584	3	2.0-INF					
88	Propranolol	185	5	55	% PF	NS		NS		NS						
128	Alprazolam	5.39	6	71	% PF	0.368	0.067-0.600	0.315	0.044-0.544	3	2.0-23	5 (General)	2.0-INF			
12	Clonazepam	2.5	6	71	% PF	0.416	0.127-0.634	0.357	0.087-0.576	3	2.0-12	15 (General)	4.0-INF			
119	Alprazolam	5.2	8	85	CGI %IMP	0.684	0.468-0.828	0.589	0.359-0.752	2	1.0-3	2 (sedation)	1.0-4	5(ataxia)	3.0-27	
119	Buspirone	61	8	85	CGI %IMP	0.042	-0.233-0.286	0.036	-0.168-0.259	28	4.0-INF					
119	Alprazolam	5.2	8	85	PGI %IMP	0.78	0.571-0.897	0.646	0.417-0.797	2	1.0-2					
119	Buspirone	61	8	85	PGI %IMP	0.054	-0.253-0.316	0.045	-0.173-0.278	22	4.0-INF					
119	Alprazolam	5.2	8	85	%PF	0.385	0.031-0.623	0.265	0.015-0.483	4	2.0-66					
119	Buspirone	61	8	85	%PF	NS		NS		NS						
117	Alprazolam	5.7	8	106	%PF	0.395	0.09-0.614	0.281	0.052-0.483	4	2.0-19	3 (sedation)	2.0-6			
117	Imipramine	175	8	106	%PF	0.218	-0.121-0.471	0.155	-0.073-0.37	6	3.0-INF	7 (insomnia)	3.0-INF			
77	Imipramine	35	8	63	Composite	NS		NS		NS						
77	Imipramine	99	8	63	Composite	0.433	0.136-0.672	0.404	0.098-0.647	2	2.0-10					
77	Imipramine	200	8	63	Composite	0.464	0.154-0.716	0.464	0.117-0.689	2	1.0-9					
84	Clomipramine	109	12	57	%PF	1	0.603-1.0	0.4	0.166-0.691	2	1.0-6	3 (sweat)	2.0-89			
84	Imipramine	124	12	57	%PF	NS		NS		NS				4 (insomnia)	2.0-INF	
65	Cognitive Therapy		15	57	%PF	0.79	0.302-0.944	0.503	0.128-0.763	2	1.0-8					
65	Alprazolam	4.6	15	57	%PF	NS		NS		NS						
34	Clomipramine	100	6	66	%PF	0.429	-0.122-0.737	0.25	-0.059-0.512	4	2.0-INF					
34	Lofepramine	140	6	66	%PF	0.429	-0.072-0.712	0.25	0.035	4	2.0-INF					
74	Desimipramine	177	12	56		NS		NS		NS						
137	Alprazolam	2	8	63	%PF	0.093	-0.350-0.38	0.079	-0.222-0.349	13	3.0-INF					
137	Alprazolam	6	8	63	%PF	0.592	0.265-0.794	0.507	0.173-0.730	2	1.0-6					
137	Imipramine	225	8	63	%PF	0.364	-0.066-0.681	0.312	-0.051-0.623	3	2.0-INF					
144	Clomipramine	60-90	8	475	PHYGIS %PF	0.179	0.051-0.303	0.227	0.070-0.366	6	3.0-20	8 (sweat)	5.0-33	8 (dizzy)	5.0-30	
144	Citalopram	20-30	8	475	PHYGIS %PF	0.242	0.085-0.382	0.192	0.062-0.317	5	3.0-16					

144	Citalopram	40-60	8	475	PHYGIS %PF	0.163	0.001-0.308	0.129	0.000-0.256	8	4.0-3136		
13	Fluoxetine	230	8	75	%PF	0.736	0.394-0.897	0.532	0.223-0.745	2	1.0-4		
13	Cognitive Therapy		8	50	%PF	0.2	-0.141-0.462	0.16	0.093-0.397	6	3.0-INF		
69	Paroxetine	20-60	12	367	%PF	0.282	0.104-0.432	0.193	0.065-0.315	5	3.0-15	(general)	
69	Clomipramine	50-150	12	367	%PF	0.074	-0.117-0.238	0.0507	-0.073-0.174	20	6.0-INF	5 (general)	3.0-9
25	Paroxetine	10	10	278	%PF	NS		NS		NS			
25	Paroxetine	20	10	278	%PF	NS		NS		NS			
25	Paroxetine	40	10	278	%PF	0.582	0.347-0.74	0.329	0.170-0.473	3	2.0-6		
7	Cognitive Therapy		8	67	%PF	0.789	0.546-0.910	0.549	0.326-0.716	2	1.0-3		
127	Cognitive Therapy		12	32	%PF	0.75	0.155-0.934	0.375	0.0514-0.634	3	2.0-18		

STUDY		DRUG	POOLED NNT	95% CI	DOSE RANGE mg	DURATION wks	SAMPLE SIZE
"3,117,77,137"		Imipramine	5	3.0-11	35-225	8.0-12	239
"3,6,88,128,119,117,65,137"		Alprazolam	3	2.0-4	2.0-6.1	4.0-15	769
"84,34,69"		Clomipramine	4	3.0-8	50-150	6.0-12	268
"69,25"		Paroxetine	4	3.0-7	10.0-60	10.0-12	368
"65,13,7,127"		Cognitive Therapy	2	2.0-4		8.0-15	175

Obsessive-compulsive disorder

STUDY	DRUG	DOSE (mg)	DURATION (wks)	SAMPLE	MEASURE	RRR	95% CI	ARR	95% CI	NINT	95% CI	NNH	95% CI	NNH	95% CI
133	Fluoxetine	20-60	7	355	Y-BOCS %IMP	0.29	0.164-0.417	0.265	0.142-0.389	4	3.0-7				
148	Paroxetine	37.5	12	391	Y-BOCS %IMP	0.305	0.135-0.436	0.197	0.077-0.309	5	3.0-13				
148	Clomipramine	113.1	12	391	Y-BOCS %IMP	0.319	0.118-0.484	0.209	0.069-0.342	5	3.0-14				
130	Clomipramine	218-234	10	501	NIMH CUT-OFF	0.475	0.410-0.539	0.46	0.394-0.525	2	2.0-3				
86	Fluoxetine	20	8	108	Y-BOCS/CGI	0.133	-0.122-0.343	0.098	-0.078-0.270	10	4.0-INF				
86	Fluoxetine	40	8	108	Y-BOCS/CGI	0.29	0.048-0.488	0.213	0.023-0.384	5	3.0-33				
86	Fluoxetine	60	8	110	Y-BOCS/CGI	0.266	0.023-0.463	0.195	0.014-0.365	5	3.0-69				
21	Sertraline	200	8	87	CGI %IMP	0.352	0.055-0.571	0.24	0.03-0.43	4	2.0-33				
56	Clomipramine	100	6	40	CGI %IMP	0.5	0.266-0.694	0.5	0.297-0.703	2	1.0-3				
132	Clomipramine	150	5	48	CPRS %IMP	0.364	0.121-0.581	0.333	0.093-0.530	3	2.0-11				
78	Clomipramine	230	12	12	CRS (Ciba-Geigy)	0.571	0.269-1.34	0.423	-0.117-0.759	2	1.09-INF				
100	Fluvoxamine	150	20	32	OCL/SCL-90 %IMP	0.769	0.436-0.920	0.625	0.288-0.824	2	1.0-3				
46	Sertraline	50-200	12	224	CGI %IMP	0.128	-0.079-0.289	0.09	-0.048-0.215	11	5-INF	7 (General)	4.0-15		
45	Fluvoxamine	255	8	42	Y-BOCS %IMP										
21	Sertraline				CGI %IMP			0.24		4					
147	Paroxetine	60			Y-BOCS %IMP			0.2		5					
58	Clomipramine	250-300	10	263	NIMH CUT-OFF	0.488	0.397-0.575	0.469	0.376-0.557	2	2.0-3	5 Nausea	4.0-10	5 (sweat)	4.0-8
STUDY		DRUG	DOSE RANGE	POOLED NINT	95% CI	DOSE RANGE	DURATION	SAMPLE							
			mg		mg		wks	SIZE							
"148,130,56,132,78,58"		Clomipramine		2	2.0-3	100-300	5.0-12	1057							
"133,86"		Fluoxetine		4	3.0-6	20-60	7.0-8	267							

Social Phobia

STUDY	TREATMENT	DOSE av (mg)	DURATION (wks)	SAMPLE	MEASURE	RRR	95% CI	ARR	95% CI	NNT	95% CI	NNH	95% CI	NNH	95% CI
142	Bupirone	30	12	30	SPS 50% IMP	NS		NS		NS					
24	Clonazepam	2.4	10	72	CGI % IMP	0.73	0.517-0.860	0.583	0.367-0.740	2	1.0-3				
73	Phenelzine	76	8	74	CGI CUT-OFF	0.532	0.218-0.744	0.409	0.138-0.625	2	2.0-7				
131	Moclobemide	300	12	382	CIC-SP	NS		NS		NS					
131	Moclobemide	600	12	384	CIC-SP	0.199	0.054-0.325	0.131	0.033-0.227	8	4.0-30				
135	Atenolol	100	12	41	ISPI %IMP	0.116	0.402-0.45	0.081	-0.211-0.358	12	3.0-INF				
135	Flooding		12	41	ISPI %IMP	0.456	0.025-0.717	0.319	0.009-0.572	3	2.0-101				
59	Sertraline	50-200	10	12	L-SAS	0.273	-0.125-0.580	0.25	-0.649	4	2.0-INF				
143	Moclobemide	580	16	78	CGI % IMP	0.478	0.229-0.680	0.423	0.175-0.627	2	2.0-6	NS			
143	Phenelzine	67.5	16	78	CGI % IMP	0.696	0.366-0.784	0.615	0.366-0.784	2	1.0-3	2 (General)	1.0-4		
43	Phenelzine	55	12	57	SPS 50% IMP	0.616	0.200-0.846	0.492	0.121-0.745	2	1.0-8				
43	Alprazolam	4.2	12	57	SPS 50% IMP	0.271	0.121-0.745	0.217	-0.135-0.537	5	2.0-INF				
43	Cognitive Therapy		12	57	SPS 50% IMP	0.044	-0.463-0.369	0.035	-0.269-0.324	28	3.0-INF				
141	Fluvoxamine	150	12	28	SAS % IMP	0.422	0.084-0.678	0.389	0.054-0.650	3	2.0-19	2 (nausea)	1.0-7	4 (insomnia)	2.0-INF
92	Moclobemide	900	12	506	CGI % IMP	NS		NS		NS					
116	Moclobemide	728	8	77	CGI % IMP	NS		NS		NS		NS		NS	
33	Brofaromine	150	12	76	CGI% IMP	0.713	0.491-0.851	0.553	0.340-0.712	2	1.0-3				

STUDY	DRUG	POOLED NNT	95% CI	DOSE RANGE mg	DURATION wks	SAMPLE SIZE
"131,143,92,116"	Moclobemide	9	5.0-24	580-900	8.0-16	681
"73,143,43"	Phenelzine	2	2.0-3	55-76	8.0-12	131

Post-traumatic Stress Disorder

STUDY	DRUG	DOSE (mg)	DURATION (wks)	SAMPLE	MEASURE	RRR	95% CI	ARR	95% CI	NNT	95% CI	NNH	95% CI	NNH	95% CI	NNH	95% CI		
41	Imipramine	240	8	33	GAS % IMP	0.656	0.133 to 0.883	0.477	0.060-0.753	2	1.0-17								
41	Phenelzine	71	8	33	GAS % IMP	0.5	-0.103 to 0.677	0.364	0.061-0.677	3	1-inf								
139	Fluoxetine	40	5	59		NR		NR		NR				4 (Diarrhoea)	2.0-INF	3 (sweating)	2.0-33	5 (headache)	2.0-505
66	Imipramine	225	8	60	CGI %IMP	0.518	0.121-0.751	0.374	0.063-0.617	3	2.0-16								
66	Phenelzine	68	8	60	CGI %IMP	0.562	0.152-0.796	0.406	0.081-0.653	2	2.0-12								
66	Imipramine	225	8	60	IES % IMP	0.217	-0.043-0.439	0.205	-0.037-0.425	5	2.0-INF								
66	Phenelzine	68	8	60	IES % IMP	0.54	0.299-0.731	0.51	0.241-0.707	2	1.0-4								
23	Amitryptiline	175	8	66	SI-PTSD	NS		NS		NS				NS					
120	Phenelzine	30-90	5		CGI %IMP/IOES	NS		NS		NS									

STUDY/DRUG	POOLED NNT	95% CI	DOSE RANGE mg	DURATION wks	SAMPLE SIZE
"41,66" Imipramine	2	2.0-6	225-240	8	64
"41,66" Phenelzine	3	2.0-7	68-71	5.0-8	59

NOTES