These guidelines have been withdrawn

MOH clinical practice guidelines are considered withdrawn five years after publication unless otherwise specified in individual guidelines. Users should keep in mind that evidence-based guidelines are only as current as the evidence that supports them and new evidence can supersede recommendations made in the guidelines.

CLINICAL PRACTICE GUIDELINES

Anxiety Disorders

Ministry of Health

NMRC
National Medical Research Council

Nov 2003

MOH Clinical Practice Guidelines 7/2003

Levels of evidence and grades of recommendation

Levels of evidence

Level	Type of Evidence
Ia	Evidence obtained from meta-analysis of randomised controlled trials.
Ib	Evidence obtained from at least one randomised controlled trial.
IIa	Evidence obtained from at least one well-designed controlled study without randomisation
IIb	Evidence obtained from at least one other type of well-designed quasi-experimental study.
III	Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.
IV	Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

Grades of recommendation

Grade	Recommendation
A (evidence levels Ia, Ib)	Requires at least one randomised controlled trial as part of the body of literature of overall good quality and consistency addressing the specific recommendation.
B (evidence levels IIa, IIb, III)	Requires availability of well conducted clinical studies but no randomised clinical trials on the topic of recommendation.
C (evidence level IV)	Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates absence of directly applicable clinical studies of good quality.
GPP (good practice points)	Recommended best practice based on the clinical experience of the guideline development group.

CLINICAL PRACTICE GUIDELINES

Anxiety Disorders

MOH Clinical Practice Guidelines 7/2003

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Statement of Intent

These guidelines are not intended to serve as a standard of medical care. Standards of medical care are determined on the basis of all clinical data available for an individual case and are subject to change as scientific knowledge advances and patterns of care evolve.

The contents of this publication are guidelines to clinical practice, based on the best available evidence at the time of development. Adherence to these guidelines may not ensure a successful outcome in every case, nor should they be construed as including all proper methods of care or excluding other acceptable methods of care. Each physician is ultimately responsible for the management of his/her unique patient in the light of the clinical data presented by the patient and the diagnostic and treatment options available.

Foreword

All of us experience some form of anxiety at one time or another. It is a natural response to perceived threats to our wellbeing. However, up to one in ten people may experience anxiety seriously enough for it to be considered a disorder. Anxiety disorders can be distressing, disabling and affect the daily life of the sufferers. It is therefore important for medical practitioners to recognise the presence of anxiety disorders in our patients and to assess and manage them appropriately.

Fortunately, most anxiety disorders are amenable to treatment. These clinical practice guidelines provide evidence-based recommendations on appropriate psychological and pharmacological therapy for anxiety. The guidelines were drafted by a team comprising psychiatrists from the public and private sectors, a psychologist and a family physician. I hope that these guidelines will help you in managing your patients with anxiety disorders effectively.

PROFESSOR TAN CHORH CHUAN
DIRECTOR OF MEDICAL SERVICES

Contents

Executive Summary of Recommendations

Details of recommendations can be found in the main text at the pages indicated.

Treatment Settings for Anxiety Disorders

C Helpful immediate steps that can be instituted at the primary care level include:

- Evaluating particular symptoms and performing a diagnostic evaluation, in order to arrive at a provisional diagnosis of an anxiety disorder
- Evaluating the type and severity of functional impairment
- Establishing and maintaining a therapeutic alliance with the patient, based upon empathy and understanding
- Educating the patient about the nature and origin of their anxiety symptoms and appropriate reassurance, e.g. that they are not having a 'heart attack' or are 'going crazy'
- Evaluation and mobilization of family and social resources to aid the patient
- Suggestion of lifestyle changes as appropriate
  - Stress reduction strategies
  - Reducing alcohol and caffeine
  - Avoiding nicotine and drug use
  - Regular exercise
- Supportive counseling
- Symptomatic relief with medication prescribed on a short-term basis
- Monitoring over time and addressing early signs of relapse. (pg 15)

Grade C, Level IV

GPP Psychiatric evaluation and treatment is appropriate when

- there is serious risk of suicide,
- there are psychotic symptoms,
- co-occurring drug/alcohol problems exist,
- symptoms are severe/complex, or
- if symptoms fail to improve on initial treatment and follow-up.

(pg 17)

GPP

Psychosocial Interventions for Anxiety Disorders

GPP Psychological therapy should be routinely considered as a treatment option when assessing mental health problems, including anxiety disorder. (pg 18)

GPP

C Patients should be informed about all available forms of treatment including psychological therapies and their preference for the type of treatment should be taken into account when considering the overall treatment plan. (pg 19)

Grade C, Level IV

Medications for Anxiety Disorders

GPP Pharmacological treatment is indicated when:

- symptoms are severe,
- there is significant impairment of social, occupational and role functioning, or
- there is concurrent moderate or severe depressive disorder. (pg 24)

GPP

Antidepressants

A Antidepressants are recommended as effective agents for the treatment of panic disorders, social phobia, obsessive compulsive disorders, generalised anxiety disorder and post-traumatic stress disorder. (pg 24)

Grade A, Level Ib

A Selective serotonin reuptake inhibitors (SSRIs) are recommended as first-line drug treatment for anxiety disorder. (pg 25)

Grade A, Level Ib

Benzodiazepines

C The lowest effective dose to achieve symptom relief should be used over a limited period. The dose should be gradually tapered off. Long term use should be closely supervised for adverse effects, abuse, tolerance, dependency and withdrawal symptoms. (pg 31)

Grade C, Level IV

Treatments for Different Types of Anxiety Disorders

Panic Disorder

A For panic disorder, high potency agents like alprazolam and clonazepam are effective in providing rapid relief. With discontinuation of these agents, however, patients should be closely monitored for recurrence of symptoms, as the rates of relapse are very high, especially for shorter-acting agents. (pg 32)

Grade A, Level Ib

A Almost all the selective serotonin reuptake inhibitors (SSRIs) (fluoxetine, sertraline, fluvoxamine, citalopram, paroxetine) have documented efficacy in the treatment of panic disorder. (pg 27)

Grade A, Level Ib

A Imipramine is effective in the treatment of panic disorder. An optimal effective dose for treatment is 100-225 mg and should be continued for 8-12 weeks. (pg 26)

Grade A, Level Ia

A Clomipramine is effective for panic disorder at a dose of 50-100 mg for a duration of 6-12 weeks. (pg 26)

Grade A, Level Ia

A Cognitive behaviour therapy (CBT) is the psychotherapy of choice for panic disorder. Possible treatment components for panic disorder, with or without agoraphobia, are:

- Psychoeducation
- Exposure to symptoms or situations
- Cognitive restructuring
- Breathing retraining
- Continuous panic monitoring

(pg 20) **Grade A, Level Ia**

Specific Phobias

A Phobic symptoms respond best to exposure therapy to the feared situation or object. (pg 21)

Grade A, Level Ib

B Beta-blockers are effective for specific and circumscribed performance anxiety, especially for patients with prominent sympathetic hyperarousal such as palpitations and tremor. Propranolol 10-40 mg taken 45-60 minutes before the performance is sufficient for most patients. (pg 33)

Grade B, Level IIa

Social Anxiety Disorder (Social Phobia)

A Cognitive behaviour therapy (CBT) is recommended as effective treatment for social anxiety disorder. Exposure to feared situations is a crucial component. Group approaches are useful and often include elements of social skills training. (pg 20)

Grade A, Level Ia

A Selective serotonin reuptake inhibitor (SSRI) antidepressants are effective for the treatment of social phobia, and their favourable side-effect profile make them recommended first-line treatment for social phobia. Paroxetine has been the most extensively studied SSRI for social phobia. (pg 29)

Grade A, Level Ib

B There is limited support for the use of moclobemide for social anxiety disorder (SAD). (pg 29)

Grade B, Level IIb

Generalised Anxiety Disorder

A Cognitive behaviour therapy in generalised anxiety disorder delivered by experienced therapists shows good evidence of efficacy. Two-thirds of patients show clinically significant improvement at 6 months follow-up. (pg 21)

Grade A, Level Ia

C Imipramine for 3-6 months is recommended for treating generalised anxiety disorder (GAD). (pg 28)

Grade C, Level IV

A Paroxetine has shown efficacy compared to placebo for generalised anxiety disorder (GAD) treatment. (pg 28)

Grade A, Level Ib

A Venlafaxine, a serotonin norepinephrine reuptake inhibitor (SNRI) has been shown to be effective in generalised anxiety disorder. (pg 28)

Grade A, Level Ib

B Serotonin antagonist and reuptake inhibitors such as nefazodone and the noradrenergic and serotonin selective antagonist mirtazapine may have useful anxiolytic effects in generalised anxiety disorder. (pg 28)

Grade B, Level III

A Antidepressants can be considered as first-line agents over benzodiazepines in the treatment of generalised anxiety disorder over the long term. (pg 28)

Grade A, Level Ia

B Hydroxyzine 50 mg/day has shown efficacy for treatment of generalised anxiety disorder. (pg 32)

Grade B, Level IIb

Obsessive Compulsive Disorder

A The recommended first line of pharmacotherapy for obsessive compulsive disorder (OCD) is a 10-12 week trial with a selective serotonin reuptake inhibitor (SSRI) at adequate doses. Fluvoxamine, fluoxetine, citalopram, sertraline and paroxetine, have all been shown to be effective in adults with OCD. (pg 26)

Grade A, Level Ia

A The efficacy of fluvoxamine, fluoxetine and sertraline in obsessive compulsive disorder (OCD) has also been confirmed in children. (pg 27)

Grade A, Level Ib

A Clomipramine is effective treatment for obsessive compulsive disorder (OCD) in the dose range of between 100-300 mg/day for a period of 5-12 weeks. (pg 27)

Grade A, Level Ia

C It has been suggested that an adequate treatment trial in obsessive compulsive disorder (OCD) would be for at least 10-12 weeks, with a minimum mean daily dosage of one of the following agents: (pg 27)

clomipramine	150 mg
fluvoxamine	150 mg
fluoxetine	40 mg
sertraline	150 mg
paroxetine	40 mg

Grade C, Level IV

A Behaviour therapy using Exposure-Response Prevention (ERP) is the treatment of choice for limiting the dysfunction resulting from obsessions and/or compulsions. (pg 22)

Grade A, Level Ia

Post-Traumatic Stress Disorder (PTSD)

A Selective serotonin reuptake inhibitors are generally the most appropriate medication of choice for post-traumatic stress disorder (PTSD), and effective therapy should be continued for 12 months or longer. Paroxetine, sertraline and fluoxetine all have well documented evidence of efficacy. (pg 30)

Grade A, Level Ia

C It is not recommended however, that treatment of post-traumatic stress disorder (PTSD), including medication treatment be instituted and continued only at the primary care setting, over a long term. (pg 30)

Grade C, Level IV

A Studies of cognitive behaviour therapy (CBT) have shown the most effective results in the treatment of post-traumatic stress disorder (PTSD). The most appropriate psychotherapy is exposure therapy, and should be continued for 6 months, with follow-up therapy as needed. Support groups may be beneficial. (pg 22)

Grade A, Level IV

Choosing and Combining Medication and Psychosocial Interventions

C Choosing between medications or psychosocial interventions with or without medications should take into account comparable efficacies, differences in risks/benefits, differences in costs, the availability/accessibility of trained therapists and patient preferences. (pg 34)

Grade C, Level IV

B There is evidence that in the short-term, combined cognitive behaviour therapy with medication does confer additional benefits of faster onset of symptom relief and lasting remission for panic disorder. (pg 34)

Grade B, Level IIa

A For panic disorder, recent evidence supports the use of combined cognitive behaviour therapy (CBT) with medication as superior to either therapy alone in the longer term maintenance phase. (pg 34)

Grade A, Level Ib

Anxiety and co-existing conditions

A Depression, when co-existing with anxiety should be treated aggressively. (pg 35)

Grade A, Level Ia

A Antidepressants have good anti-anxiety properties and should be the medication of choice in comorbid depression and anxiety. Some selective serotonin reuptake inhibitors (SSRIs) and venlafaxine have demonstrated efficacy for treatment of co-morbid depression and anxiety. (pg 35)

Grade A, Level Ib

B Alcohol/substance abuse should be concurrently treated with the anxiety disorder. (pg 35)

Grade B, Level IIb

GPP Benzodiazepines prescribed for anxiety may be abused by some patients with co-morbid alcohol/substance abuse/dependence and are best avoided where possible. (pg 36)

GPP

Long-term Treatment

B Long-term maintenance treatment of anxiety disorder is recommended following the amelioration of acute symptoms, as it strongly predicts continued remission following discontinuation of medications. (pg 37)

Grade B, Level IIb

A Relapse is common after discontinuation of medication for most anxiety disorders. Maintenance therapy may be indicated for individuals who frequently relapse. (pg 37)

Grade A, Level Ib

B Medication should be continued in obsessive compulsive disorder (OCD) treatment for most patients for at least 1 year. The relapse rate with abrupt discontinuation of medication is high, as much as 90% in some studies. A

gradual taper of medication over a longer period, e.g. 6 months, is recommended. (pg 37)

Grade B, Level IIb

A After improvement with medication, antidepressant treatment for panic disorders and social phobias should be continued for at least 6 months. (pg 37)

Grade A, Level Ib

C Similarly for psychological treatments, there is evidence that continuation of therapy sessions during long term follow-up can further lead to improvement and reduce relapse. (pg 37)

Grade C, Level IV

B Abrupt discontinuation of benzodiazepines should be avoided. Medication should be tapered off gradually, over a number of weeks titrating against symptoms to avoid withdrawal syndrome and symptom rebound. (pg 38)

Grade B, Level IIa

B Longer-acting benzodiazepines are less likely to cause withdrawal and may be used during the tapering period to ameliorate symptoms. (pg 38)

Grade B, Level IIb

A Gradual tapering of dosage of medication is recommended in discontinuing benzodiazepines after long-term treatment of anxiety disorder. (pg 38)

Grade A, Level Ib

A Cognitive behaviour therapy (CBT) may facilitate the tapering of benzodiazepines. (pg 38)

Grade A, Level Ib

B Discontinuation of antidepressants poses less of a problem in terms of withdrawal symptoms, although changes in mood, affect, appetite, and sleep may occur with selective serotonin reuptake inhibitor (SSRI) discontinuation, more so with a shorter acting SSRI, such as paroxetine. (pg 38)

Grade B, Level IIb

1 Introduction

Anxiety is an emotion experienced by everyone in everyday life. It is a physical, emotional and behavioural response to perceived threats. Anxiety can also spur one to better performance.

However it can become a problem, and is considered to be a disorder when:

- it is of greater intensity and/or duration than would be expected in the given circumstances,
- it affects one's daily life,
- it gives rise to unexplained physical symptoms, or
- it leads to avoidance of situations and places.

Anxiety Disorders are prevalent[1] (a local study estimates the one year prevalence of anxiety disorder to be about 9.3% in the general population), distressing, disabling and impair social/vocational/role functioning, leading to poorer quality of life. They often run a chronic course, yet they frequently remain undetected and untreated by the healthcare system including primary care.

The anxiety disorders include panic disorder, obsessive compulsive disorder, generalised anxiety disorder, acute and post traumatic stress disorder and a range of phobias. In the clinical evaluation of anxiety disorders, it is important to ascertain the type of anxiety disorder present. This would allow treatment to be targeted at the specific type of anxiety disorder.

The co-occurrence of other psychiatric conditions (particularly depression and alcohol/substance abuse) is common with anxiety disorders. Physical disorders and anxiety may also overlap. Clinical mimics of anxiety disorders include some medical disorders (e.g. thyrotoxicosis) and prescribed medications.

1.1 Aims

Most of the anxiety disorders respond well to treatment and the guideline incorporates both psychological and pharmacological treatment approaches. The overall aim of treatment is to control and remove symptoms, reduce morbidity and improve overall functioning.

The guidelines are developed in an attempt to provide optimal care and good outcome to patients with anxiety disorders. In particular, it aims to assist primary health care physicians in clinical decision-making when assessing and treating patients with anxiety.

1.2 Principles

The following principles underlie the development of these guidelines:

- Treatment recommendations are supported by scientific evidence whenever possible (randomized controlled clinical trials represent the highest level of evidence) and expert clinical consensus is used when such data are lacking.
- Treatment should maximize therapeutic benefits and minimize side effects.
- Both pharmacological and non-pharmacological measures are incorporated.
- Optimal treatment is possible only through a thorough and comprehensive clinical assessment.

1.3 Review of Guidelines

Evidence-based clinical practice guidelines are only as current as the evidence that supports them. Users must keep in mind that new evidence could supercede recommendations in these guidelines. The workgroup advises that these guidelines be scheduled for review five years after publication, or if new evidence appears that requires substantive changes to the recommendations.

2 Clinical Evaluation of Anxiety Disorders

2.1 Diagnosis and Assessment

Patients with anxiety disorders often present with mainly somatic symptoms in primary care and emergency settings. A diagnosis of anxiety disorder should be considered after appropriate clinical evaluation and investigation to rule out general medical conditions.

Many patients do not seek professional help for psychological problems because of their attitudes and beliefs about mental health - thinking that one needs to be 'strong enough' to cope alone, for instance. Yet, as most people have regular contact with primary care health services, the patient with anxiety disorder is likely to see their general practitioner 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.

2.2 Comprehensive Assessment

A comprehensive general medical and psychiatric assessment is the basis for the formulation of a good treatment plan. It is important to determine if there are general medical conditions or drug/substance-induced conditions that may cause anxiety symptoms, complicate treatment or require specific interventions (Table 1, page 12). This is especially the case for a patient with a new onset of anxiety symptoms.

Table 1 Conditions which may aggravate or mimic anxiety symptoms

Type of physical condition	Examples
endocrine	▪ hyperthyroidism ▪ hypoglycaemia ▪ adrenal insufficiency ▪ hyperadrenocorticism ▪ phaeochromocytoma
cardiovascular	▪ congestive heart failure ▪ pulmonary embolism ▪ arrhythmia ▪ mitral valve prolapse
respiratory	▪ asthma ▪ chronic obstructive lung disease ▪ pneumonia
metabolic	▪ diabetes mellitus
neurologic	▪ vestibular dysfunction ▪ migraine ▪ neoplasm ▪ temporal lobe epilepsy
gastrointestinal	▪ irritable bowel syndrome
haematologic	▪ anaemia ▪ vitamin b12 deficiency

Appropriate laboratory investigations and diagnostic studies may be necessary.

Basic screening tests to identify medical conditions might include

- a full blood count
- serum urea, electrolytes, calcium, creatinine
- thyroid function tests
- electrocardiogram (ECG)
- chest X-ray

A psychosocial assessment would include elucidating the nature of developmental factors, life stressors and conflicts, social support/resources and the present general living situation.

2.3 Types of Anxiety Disorder

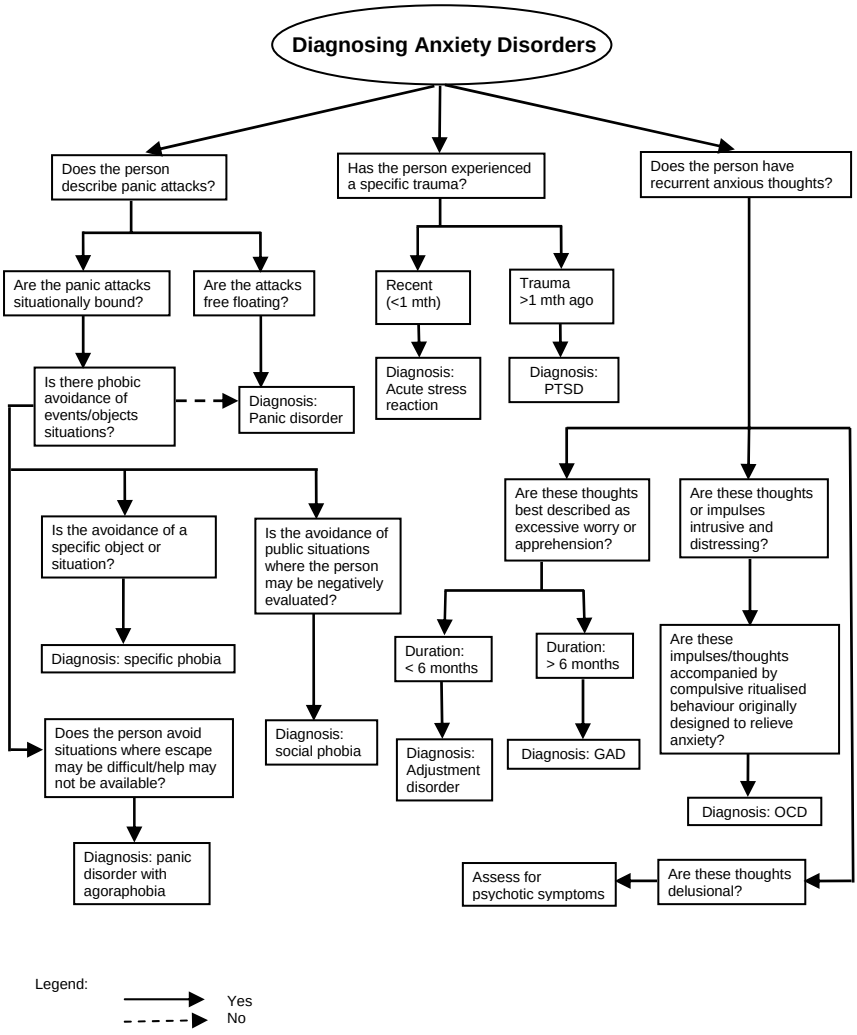
Anxiety disorders are classified into the categories shown in Table 2:

Table 2 Types of Anxiety Disorders and their main symptoms

Type of Anxiety Disorder (Classification ICD-10), DSM-IV)	Main Symptoms
Panic disorder without agoraphobia	Recurrent unexpected panic attacks
Panic disorder with agoraphobia	Panic attacks with avoidance of situations where escape is difficult/embarrassing
Specific phobia	Persistent, unreasonable fear, and avoidance of a feared object or situation
Social anxiety disorder (SAD)/Social phobia	Fear and avoidance of situations involving potential negative evaluation and scrutiny by others
Generalised anxiety disorder (GAD)	Excessive worry about a number of events or activities on most days for at least 6 months
Obsessive compulsive disorder (OCD)	Repeated, intrusive thoughts/images or actions which are recognized as excessive
Post traumatic stress disorder (PTSD)	Trauma causing intense fear and re-experiencing of trauma lasting longer than 1 month
Acute stress disorder	Trauma causing intense fear lasting less than 1 month
Adjustment disorder with anxiety	Stressor or life-event temporally related to onset of anxiety symptoms

Identifying the key features which characterize the disorder enables classification of the type of anxiety disorder according to a diagnostic algorithm (see Chart 1, page 14).

Chart 1 Diagnosing Anxiety Disorders



Adapted from "Guidelines for assessing and treating anxiety disorder", National Health Committee, New Zealand, November 1998.

3 Treatment Settings for Anxiety Disorders

3.1 Treatment in the Primary Care Setting

Anxiety Disorders are mostly managed in the outpatient setting and rarely require admission. Initial management can ideally be instituted at the primary care level.[2]

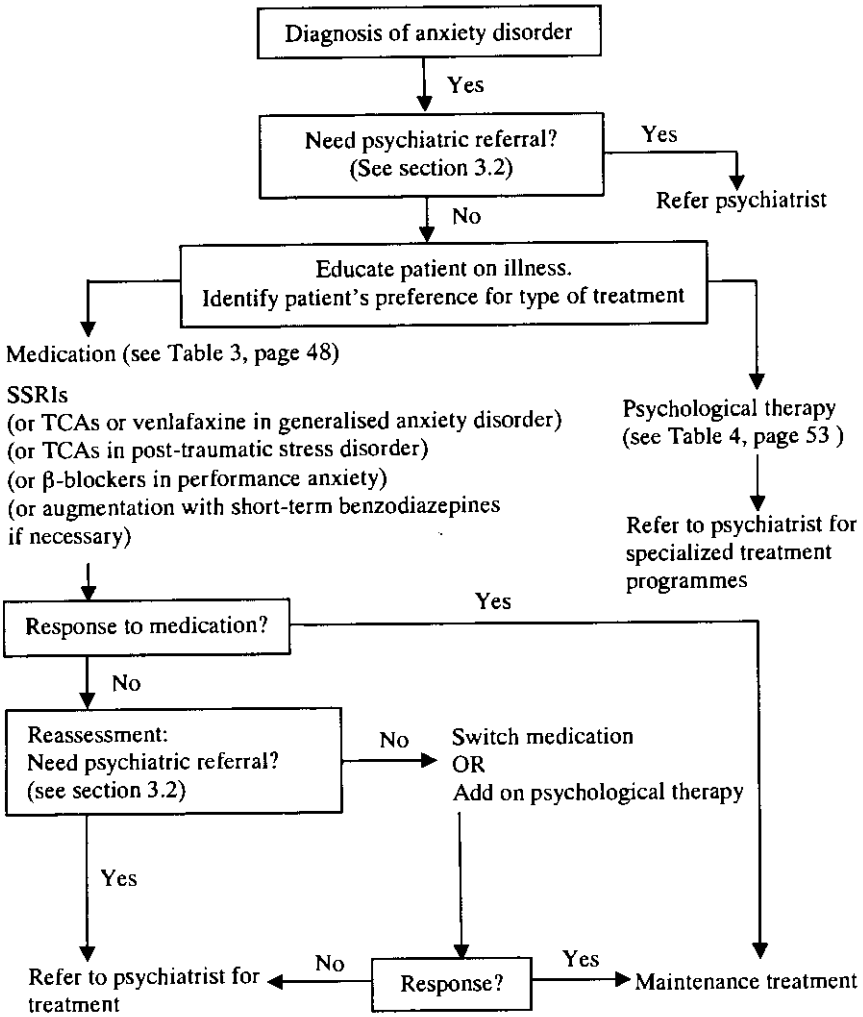
C Helpful immediate steps that can be instituted at the primary care level include the following: [3]

- Evaluating particular symptoms and performing a diagnostic evaluation, in order to arrive at a provisional diagnosis of an anxiety disorder
- Evaluating the type and severity of functional impairment
- Establishing and maintaining a therapeutic alliance with the patient, based upon empathy and understanding
- Educating the patient about the nature and origin of their anxiety symptoms and appropriate reassurance, e.g. that they are not having a 'heart attack' or are 'going crazy'
- Evaluation and mobilization of family and social resources to aid the patient
- Suggestion of lifestyle changes as appropriate
  - Stress reduction strategies
  - Reducing alcohol and caffeine
  - Avoiding nicotine and drug use
  - Regular exercise
- Supportive counseling
- Symptomatic relief with medication prescribed on a short-term basis
- Monitoring over time and addressing early signs of relapse.

Grade C, Level IV

Chart 2 outlines a treatment algorithm for managing anxiety disorders in primary care.

Chart 2 Treatment of Anxiety Disorders



3.2 Psychiatric Referral

GPP Psychiatric evaluation and treatment is appropriate when

- there is serious risk of suicide,
- there are psychotic symptoms,
- co-occurring drug/alcohol problems exist,
- symptoms are severe/complex, or
- if symptoms fail to improve on initial treatment and follow-up.

GPP

A psychiatrist can help clarify the psychiatric diagnosis, assess for psychiatric co-morbidity and make recommendations about therapy, including the addition of psychotherapy and changes in medications.

4 Psychosocial Interventions

Efficacy has been well established for psychosocial treatment of most anxiety disorders, especially cognitive behavioural therapy (CBT). Many components of psychological treatment can be incorporated into routine treatment; these include psychoeducation, discouraging avoidance, teaching controlled breathing and relaxation, problem solving, and supportive counselling. General practitioners and nurses can, with some additional training, learn and deliver a range of specific anxiety management strategies, including breathing control, relaxation and problem-solving techniques. More extensive training would be essential before specific interventions such as CBT can be undertaken safely.

4.1 Assumptions & General Aspects of Psychological Therapy

Initial assessment

GPP Psychological therapy should be routinely considered as a treatment option when assessing mental health problems, including anxiety disorder.

GPP

Therapeutic relationship

The effectiveness of therapy depends on forming a good therapeutic relationship, with a fundamental agreement on the goals and tasks of therapy and commitment to the working relationship between therapist and patient. The duration, frequency and nature of treatment should be collaboratively agreed upon at the outset. Social, cultural and religious/spiritual issues of the patient should be respected by the therapist in therapy.

Accessibility and availability of therapy

The assumption is made, that there is reasonable access to the effective therapies. The availability of trained therapists and accessibility of services is variable in the healthcare system and across different settings. The acceptability of psychotherapy to patients is also variable, with considerations of time, cost and motivation.

Patient preference

C Patients should be informed about all available forms of treatment including psychological therapies and their preference for the type of treatment should be taken into account when considering the overall treatment plan.[3]

Grade C, Level IV

4.2 Types of Psychological Interventions for Anxiety Disorders

There are several types of specific psychological therapies provided by members of different professional disciplines, including psychiatrists and clinical psychologists, specially-trained mental health nurses, occupational therapists, art and drama therapists, counsellors and psychotherapists.

Some commonly practiced therapies include Cognitive Behaviour Therapy (CBT), psychodynamic psychotherapy, systemic therapy, eclectic therapies and counseling. Other therapies described in the treatment of anxiety disorders include relaxation training, autogenic training, Dialectical Behaviour Therapy (DBT), Eye Movement Desensitization and Reprocessing (EMDR), Interpersonal Therapy (IPT), social skills training and stress inoculation therapy.

CBT is recommended as an effective treatment for most anxiety disorders, especially phobias, obsessive compulsive disorder (OCD), generalised anxiety disorder (GAD) and post-traumatic stress disorder (PTSD).

Cognitive Behaviour Therapy

CBT is a pragmatic combination of concepts and techniques from cognitive and behaviour therapies used for systematically analyzing and understanding a patient's emotional difficulties. Cognitive techniques (such as challenging negative automatic or illogical thoughts) in combination with behavioural techniques (such as activity scheduling and behavioural experiments) are used with the aim of relieving symptoms by changing maladaptive thoughts and beliefs.

Exposure-based Approaches

Phobias tend to persist when there is avoidance of the feared situation. The person is gradually exposed to a graded set of fearful situations involving the feared object/thought/situation.

Cognitive Approaches

The therapist helps individuals with anxiety disorders examine the thoughts that trigger and accompany anxiety symptoms, helping them to view the fear in the appropriate perspective and to challenge and replace these catastrophic thoughts with more realistic thinking.

4.3 Application of Psychological Treatment in the various Anxiety Disorders

Panic Disorder with or without Agoraphobia

The goal of treatment is to eliminate symptoms of the attacks (after ruling out organic causes), of anticipatory anxiety and of avoidance.

A Cognitive behaviour therapy (CBT) is the psychotherapy of choice for panic disorder. Possible treatment components for panic disorder, with or without agoraphobia, include [3,4,5,6]:

- Psychoeducation
- Exposure to symptoms or situations
- Cognitive restructuring
- Breathing retraining
- Continuous panic monitoring

Grade A, Level Ia

Social Anxiety Disorder (SAD) or Social Phobia

The goal of treatment is to improve overall well-being and functioning when the disorder impairs social, educational and occupational functioning.

A Cognitive behaviour therapy (CBT) is recommended as effective treatment for social anxiety disorder. Exposure to feared situations is a crucial component. Group approaches are useful and often include elements of role playing and social skills training.

Grade A, Level Ia

CBT has moderate to strong effect sizes compared with medication in meta-analysis of controlled treatment studies.[7,8]

Specific Phobias (or Simple Phobias)
The goal of treatment is to reduce fears that affect daily functioning and enable such individuals to resume day-to-day activities, helping them overcome their feared objects or situations.

A Phobic symptoms respond best to exposure therapy to the feared situation or object.[9,10]

Grade A, Level Ib

A very high percentage of specific phobias, perhaps as many as 70-85%, are effectively treated by this method.

The addition of cognitive techniques appears to add little to efficacy. There is some limited evidence to suggest that therapist-directed exposure is more effective than self-directed exposure.

Generalised Anxiety Disorder (GAD)
The goal of treatment is to reduce anxiety in individuals with chronic disturbance of excessive worry and apprehension that may affect their functioning and quality of life.

A Cognitive behaviour therapy in generalised anxiety disorder delivered by experienced therapists shows good evidence of efficacy. Two-thirds of patients should be expected to show clinically significant improvement at 6 months follow-up.[11,12]

Grade A, Level Ia

The medium term effects from CBT are markedly greater than those observed from psychodynamic psychotherapy, non-directive counselling, and behavioural methods such as applied relaxation training or biofeedback. Components may include self-management and problem-solving training. Treatment effects and gains are maintained for longer than improvements with medication, e.g. benzodiazepine alone, which tends to be associated with a return of symptoms on discontinuation.

Post-Traumatic Stress Disorder (PTSD)
The goal of treatment of PTSD is to help individuals cope with the aftermath of an extraordinary trauma; and to identify and deal with comorbid complications. In Acute Stress Disorder (ASD), in which symptoms occur within 4 weeks of the traumatic event and last from 2

days to 1 month, the goal of treatment is to prevent the development of PTSD, where symptoms last for more than 1 month.

PTSD is often chronic and significant improvement or resolution in the short term may not be realistic and management in primary care may not be the ideal setting.

C Where an individual is identified to be exposed to a traumatic event and at risk of developing acute stress reaction or post-traumatic stress disorder (PTSD), it is recommended that psychoeducation and supportive counselling by the family practitioner should begin immediately.[13]

Grade C, Level IV

A Studies of cognitive behaviour therapy (CBT) have shown the most effective results. The most appropriate psychotherapy is exposure therapy, and it should be continued for 6 months, with follow-up therapy as needed. Support groups may be beneficial.[14,15]

Grade A, Level Ia

Useful components of therapies based upon cognitive-behavioural principles include:

- Psychoeducation
- Self-help/management
- Cognitive therapy
- Stress inoculation training
- Imaginal exposure
- Exposure in vivo
- Eye Movement Desensitization and Reprocessing (EMDR)
- Supportive counseling

Obsessive Compulsive Disorder (OCD)

The goal of treatment is to reduce or eliminate the recurrence of symptoms of the illness.

A Behaviour therapy using Exposure-Response Prevention (ERP) is the treatment of choice for limiting the dysfunction resulting from obsessions and/or compulsions.[16,17]

Grade A, Level Ia

ERP has shown comparable clinical improvements as clomipramine, with lower relapse rates after cessation of treatment. However, even treatment responders fail to achieve a complete amelioration of symptoms.

5 Medications for Anxiety Disorders

a. Indications for the Use of Medications

In general, both psychological and pharmacological treatments are effective for the treatment of anxiety disorders. There is no clear evidence to suggest that one modality is clearly superior for all patients or for specific subpopulations of patients. The choice of treatment is based upon an individualized assessment of efficacy, accessibility/availability, benefits and risks of each treatment and the patient's preferences.

GPP Pharmacological treatment is indicated when:

- symptoms are severe,
- there is significant impairment of social, occupational and role functioning, or
- there is concurrent moderate or severe depressive disorder.[3]

GPP

Many anxiety disorders tend to run a chronic course. The decision for longer-term drug treatment makes individualized risk-benefit analysis even more important.

A variety of different antidepressants and benzodiazepines are efficacious for treating most anxiety disorders (see Table 3, page 48). Choosing the appropriate agent is based upon considerations of adverse effects, and monitoring of the clinical situation. Benzodiazepines are indicated where rapid control of anxiety symptoms is crucial. Its long term use is however associated with psychomotor/cognitive adverse effects and potential for dependence. Antidepressant therapy is shown to be effective for chronic moderate to severe anxiety disorders and thereby reduces the risk of benzodiazepine dependence.

b. Antidepressants

A Antidepressants are recommended as effective agents for the treatment of panic disorders, social phobia, obsessive compulsive disorders, generalised anxiety disorder and post-traumatic stress disorder.

Grade A, Level Ib

While most studies are conducted over a duration of 6 to 12 weeks, many patients are required to continue the antidepressant medications for a much longer duration. The decision to continue medication treatment has to be based on clinical factors such as presence of residual symptoms and potential for recurrence.

In addition, it is important to note that most pharmacological studies are performed in Western populations. Asian patients have relatively smaller body sizes with different pharmocokinetic and pharmacodynamic profiles compared to Caucasian patients. It is generally prudent to begin with a dose lower than the dosage usually recommended for Caucasians. A proportion may remain stable on a lower maintenance dose.[18,19,20]

A Selective Serotonin Reuptake Inhibitors (SSRIs) are recommended as first-line drug treatment for anxiety disorder.

Grade A, Level Ib

SSRIs are well tolerated compared to tricyclic antidepressants (TCAs) at effective therapeutic dose levels.

SSRIs have much less toxicity compared with that associated with TCA overdose. Antidepressant use, even over the long-term, has no potential for physiologic dependency, which may occur with benzodiazepine use.

Panic Disorder

SSRIs

A Almost all the selective serotonin reuptake inhibitors (SSRIs) (fluoxetine, sertraline, fluvoxamine, citalopram, paroxetine) have documented efficacy in the treatment of panic disorder.[21]

Grade A, Level Ib

Table 3 (page 48) lists the available SSRIs and their usual dose ranges. SSRIs reduce the frequency and intensity of panic attacks, reduce anticipatory anxiety and improve associated depressive mood.

TCAs

TCAs have well-established efficacy data for panic symptoms.

A Imipramine is effective in the treatment of panic disorder. An optimal effective dose for treatment is 100-225 mg/day and should be continued for 8-12 weeks.[22,23]

Grade A, Level Ia

A Clomipramine is effective for panic disorder at a dose of 50-100 mg/day for a duration of 6-12 weeks.[24]

Grade A, Level Ia

Monoamine Oxidase Inhibitors (MAOIs)

A Monoamine Oxidase Inhibitors (MAOIs) like phenelzine and tranylcypromine, are as effective as tricyclic antidepressants (TCAs) for panic disorder.[25]

Grade A, Level Ib

They are not widely used because of potentially serious side effects and interactions with other drugs and food components, and are indicated only when other drugs have failed.

B The selective reversible inhibitor of MAO type A (RIMA), moclobemide, has a more favourable side effect and safety profile but has limited evidence of efficacy for panic.[26]

Grade B, Level IIa

Obsessive Compulsive Disorder

SSRIs

There is strong evidence for the use of SSRIs in the treatment of obsessive compulsive disorder.

A The recommended first line of pharmacotherapy for obsessive compulsive disorder (OCD) is a 10-12 week trial with a selective serotonin reuptake inhibitor (SSRI) at adequate doses. Fluvoxamine, fluoxetine, citalopram, sertraline and paroxetine, have all been shown to be effective in adults with OCD.[27]

Grade A, Level Ia

A The efficacy of fluvoxamine, fluoxetine and sertraline in obsessive compulsive disorder (OCD) has also been confirmed in children.[28,29]

Grade A, Level Ib

TCAs

A Clomipramine is effective treatment for obsessive compulsive disorder (OCD) in the dose range of between 100-300 mg/day for a period of 5-12 weeks.[30,31]

Grade A, Level Ia

Clomipramine's efficacy in the treatment of OCD may be related to its marked potency for blocking serotonin reuptake.

Antidepressant Dosing for OCD

Some fixed-dose trials of SSRIs indicate that higher doses are significantly superior to lower doses in the treatment of OCD.

C It has been suggested that an adequate treatment trial in obsessive compulsive disorder (OCD) would be for at least 10-12 weeks, with a minimum mean daily dosage of one of the following agents:

clomipramine	150 mg
fluvoxamine	150 mg
fluoxetine	40 mg
sertraline	150 mg
paroxetine	40 mg

Grade C, Level IV

Generalised Anxiety Disorder (GAD)

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. For those with a confirmed diagnosis of GAD, there is a place for medication, but in the first instance psychological intervention should be tried. GAD symptoms wax and wane over time, and controlled pharmacotherapy trials often have found rather high placebo rates. Patients should be encouraged to cope with low levels of anxiety without medication, reserving medication for when it is clearly needed.

The following are recommended for treating GAD:

C Imipramine for 3-6 months is recommended for treating generalised anxiety disorder.[32]

Grade C, Level IV

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 a dose of 150 mg for 3-6 months. Side-effects limit its routine use as a first-line agent.

A Paroxetine has shown efficacy compared to placebo for generalised anxiety disorder treatment.[33]

Grade A, Level Ib

A Venlafaxine, a serotonin norepinephrine reuptake inhibitor (SNRI), has been shown to be effective in generalised anxiety disorder.[34]

Grade A, Level Ib

B Serotonin antagonist and reuptake inhibitors such as nefazodone and the noradrenergic and serotonin selective antagonist mirtazapine may have useful anxiolytic effects in generalised anxiety disorder.[35,36]

Grade B, Level III

A Antidepressants can be considered as first-line agents over benzodiazepines in the treatment of generalised anxiety disorder over the long term.[37]

Grade A, Level Ia

GAD is associated with chronicity, functional impairment, high health care use, and relatively poor treatment response. There is a high degree of co-morbidity of depression and GAD. Although they work more slowly, the antidepressants are equally effective compared with benzodiazepines, have a broader spectrum of action, are easier to discontinue and are less subject to misuse.

Social Anxiety Disorder (Social Phobia)

Social anxiety disorder (SAD), or social phobia, is under-recognized and under-treated in the primary care setting. Although the demarcation of "normal" shyness and SAD may be unclear, clinical treatment is appropriate, including pharmacotherapy, when significant distress or impairment is present.[38]

A Selective serotonin reuptake inhibitor (SSRI) antidepressants are effective for the treatment of social phobia, and their favourable side-effect profile make them recommended first-line treatment for social phobia. Paroxetine has been the most extensively studied SSRI for social phobia.[39]

Grade A, Level Ib

B There is limited support for the use of moclobemide for social anxiety disorder (SAD).[40]

Grade B, Level IIb

Studies of moclobemide for SAD have yielded more moderate levels of efficacy and more pronounced placebo effects.

A Effective treatment for social phobia can be delivered in primary care settings.[41]

Grade A, Level Ib

Post-Traumatic Stress Disorder (PTSD)

PTSD is a heterogeneous and complex disorder that requires a multifaceted treatment approach, of which pharmacologic treatment is an integral component.

Current treatment strategies combine patient education, pharmacologic interventions, and psychotherapy. PTSD is often a chronic and recurring condition associated with an increased risk of developing secondary comorbid disorders, such as depression.

Pharmacological therapy aims to reduce symptom distress, strengthen resilience and then restore function. Medication might be helpful if the focus is on symptoms of insomnia or generalised anxiety with a goal to minimise distress while the patient processes the traumatic exposure.

A Selective serotonin reuptake inhibitors are generally the most appropriate medication of choice for post-traumatic stress disorder (PTSD), and effective therapy should be continued for 12 months or longer. Paroxetine, sertraline and fluoxetine all have well documented evidence of efficacy.[42]

Grade A, Level Ia

C It is not recommended however, that treatment of post-traumatic stress disorder (PTSD), including medication treatment be instituted and continued only at the primary care setting, over a long term.[43]

Grade C, Level IV

Adverse Events and Special Consideration in using the different groups of Antidepressants (see Table 3, page 48).

SSRIs

Selective serotonin reuptake inhibitors (SSRIs) are generally well tolerated. The most common side effects are nausea, somnolence, insomnia, tremor and sexual dysfunction/anorgasmia. Individuals with panic disorder are particularly sensitive to certain activating side effects of the SSRIs, such as insomnia, restlessness/jitteriness, and agitation. Should these adverse effects occur without prior patient education, early treatment discontinuation may ensue. In general, SSRIs should be initiated at low doses with gradual upward titration. Less weight gain, few anticholinergic side effects, a benign cardiovascular profile and relative safety in overdose are all desirable properties, which often make them the first line drug of choice for treatment of many anxiety disorders. Adverse events have been associated with abrupt discontinuation of the SSRIs, paroxetine, fluvoxamine and sertraline, and the tricyclic, clomipramine. The constellation of symptoms is variable and include flu-like symptoms, vertigo/dizziness, insomnia, vivid dreams, irritability, and headaches lasting from several days to more than a week. No medically significant events have been documented, but patients often describe marked discomfort. To reduce the risk of a discontinuation syndrome, a gradual taper is recommended for all SSRIs except fluoxetine.

TCAs

Side effects include dry mouth, postural hypotension, blurred vision, carbohydrate craving, delirium, sexual dysfunction and ECG changes. Many patients complain of sedation and weight gain. Nausea, tremor and sweating are also common in Clomipramine. These side effects significantly limit their usefulness in a substantial percentage of patients. Toxicity in overdose with TCAs remains an additional disadvantage. The risk of seizures increases significantly at dosages greater than 250mg/day.

MAOIs

Side effects, which include weight gain, orthostatic hypotension and sleep difficulties, are a significant disadvantage. The need for dietary tyramine restriction and the risk of hypertensive crisis further limit the usefulness of these agents. MAOIs are rarely prescribed in primary care settings.

c. Benzodiazepines

Benzodiazepines provide rapid and effective relief of anxiety, but their use is associated with problems of dependence, rebound anxiety and withdrawal symptoms on cessation, and psychomotor/cognitive adverse effects. Benzodiazepines may be especially indicated where rapid control of symptoms is crucial. Benzodiazepines are also useful for the early control of anxiety symptoms while awaiting response to the benefits from antidepressant treatment or CBT.

C The lowest effective dose of benzodiazepines to achieve symptom relief should be used over a limited period. The dose should be gradually tapered off. Long term use should be closely supervised for adverse effects, abuse, tolerance, dependency and withdrawal symptoms.[44,45,46]

Grade C, Level IV

The Guidelines for Prescribing Benzodiazepines, issued by the Ministry of Health in August 2002, provide the following general advice on prescribing benzodazepines:

1. The need for a benzodiazepine must be assessed and justified before it is prescribed.
2. Drug tolerance and dependency can occur with the use of any of the benzodiazepines, even with regular use for only two weeks.
3. The type of benzodiazepine, the duration of use and other treatment options, must be considered before a decision to prescribe is made.
4. Patients being prescribed benzodiazepines must be advised to follow strictly the prescribed dosage. They should be asked about the manner in which they are taking the medicines. This should be clearly documented in the patient medical records.
5. The need for a repeat prescription should be assessed and the following clearly documented in the casenotes:
   (a) justification for repeat prescription
   (b) comprehensive assessment of the patient
   (c) diagnosis
   (d) psychosocial history of the patient
   (e) evidence that the psychosocial aspects have been attended to.

A For panic disorder, high potency agents like alprazolam and clonazepam are effective in providing rapid relief. With discontinuation of these agents, however, patients should be closely monitored for recurrence of symptoms, as the rates of relapse are very high, especially for shorter-acting agents.[47]

Grade A, Level Ib

d. Other psychotropic agents for treating anxiety

Hydroxyzine

B Hydroxyzine 50 mg/day has shown efficacy for treatment of generalised anxiety disorder (GAD).

Grade B, Level IIb

Hydroxyzine is a histamine (H1) receptor antagonist, and has not been found to induce dependence in animals or humans. Its efficacy is maintained after abrupt discontinuation, with lack of rebound effect. Hydroxyzine has shown comparable anxiolytic efficacy with lorazepam for GAD, with less cognitive impairment. The most frequent side effect is sleepiness, although most patients reported tolerance over the course of treatment. Its lack of potency makes it less useful for treatment of other anxiety disorders.[48]

Beta-blockers

B Beta-blockers are effective for specific and circumscribed performance anxiety, especially for patients with prominent sympathetic hyperarousal such as palpitations and tremor. Propranolol 10-40 mg taken 45-60 minutes before the performance is sufficient for most patients.[49]

Grade B, Level IIa

Beta-blockers have the advantage over benzodiazepines of rarely impairing concentration or coordination.

6 Choosing and Combining Medication and Psychosocial Interventions

C Choosing between medications or psychosocial interventions with or without medications should take into account comparable efficacies, differences in risks/benefits, differences in costs, the availability/accessibility of trained therapists and patient preferences.[50]

Grade C, Level IV

Table 4 (page 53) lists the advantages and disadvantages of various recommended treatment modalities which should be considered when making therapeutic decisions together with patients.

Integrating both psychosocial interventions and pharmacological treatments may be useful in many cases and helpful for patients who respond inadequately to either treatment alone.

A For panic disorder, recent evidence supports the use of combined cognitive behaviour therapy (CBT) with medication as superior to either therapy alone in the longer term maintenance phase.[51]

Grade A, Level Ib

B There is also evidence that in the short-term, combined cognitive behaviour therapy with medication does confer additional benefits of faster onset of symptom relief and lasting remission for panic disorder.[52]

Grade B, Level IIa

Table 5 (on page 54) summarizes the range of pharmacological and non-pharmacological treatments which are effective for the different anxiety disorders.

7 Anxiety and Co-existing Conditions

Anxiety disorders have a tendency to cluster together. The majority of individuals with anxiety condition suffer a co-morbid disorder. Some anxiety disorders are more likely to develop another co-morbid condition than others.[53]

7.1 Patterns of Co-morbidity

The most common additional diagnosis is another anxiety disorder, e.g. generalised anxiety disorder with social phobia. In addition, about a third of patients who suffer from an anxiety disorder also fulfill diagnostic criteria for depressive mood disorder. These patients often present with prominent somatic symptoms and their affective and/or cognitive symptoms may be masked. There is also an overlap as well as differences in the symptomatology between depression and anxiety.

7.2 Treatment of Co-morbid Depression and Anxiety

The prognosis of anxiety is worse when associated with depression; there is greater impairment and a higher risk of suicide. Depression interferes with CBT for anxiety. Benzodiazepines do not treat and may exacerbate depression.

A Depression, when co-existing with anxiety should be treated aggressively.[54,55]

Grade A, Level Ia

A Antidepressants have good anti-anxiety properties and should be the medication of choice in comorbid depression and anxiety. Some selective serotonin reuptake inhibitors (SSRIs) and venlafaxine have demonstrated efficacy for treatment of co-morbid depression and anxiety.[56,57]

Grade A, Level Ib

7.3 Co-morbid Alcohol/Substance Abuse or Dependence and Anxiety

B Alcohol/substance abuse should be concurrently treated with the anxiety disorder.[58,59,60]

Grade B, Level IIb

Co-morbid anxiety disorder can contribute to a poorer outcome in alcoholism treatment and an increase in the risk of relapse. Conversely, successfully treating comorbid anxiety disorder appears to improve alcoholism treatment outcome.

GPP Benzodiazepines prescribed for anxiety may be abused by some patients with co-morbid alcohol/substance abuse/dependence and are best avoided where possible.[61]

GPP

However, there is a lack of empirical research evidence to support this assumption.

8 Long-term Treatment

8.1 Continuation of Treatments

A After improvement with medication, antidepressant treatment for panic disorders and social phobias should be continued for at least 6 months.[62,63]

Grade A, Level Ib

A Relapse is common after discontinuation of medication for most anxiety disorders. Maintenance therapy may be indicated for individuals who frequently relapse.[64]

Grade A, Level Ib

Longitudinal studies in naturalistic settings have demonstrated that despite the availability of various effective treatment options, many anxiety disorders remain chronic conditions characterized by intermittent remissions and relapses over many years.[65]

B Medication should be continued in obsessive compulsive disorder (OCD) treatment for most patients for at least 1 year. The relapse rate with abrupt discontinuation of medication is high, as much as 90% in some studies. A gradual taper of medication over a longer period, e.g. 6 months, is recommended.[66]

Grade B, Level IIb

C Similarly for psychological treatments, there is evidence that continuation of therapy sessions during long term follow-up can further lead to improvement and reduce relapse.[67]

Grade C, Level IV

8.2 Discontinuation of Medications

B Long-term maintenance treatment of anxiety disorder is recommended following the amelioration of acute symptoms, as it strongly predicts continued remission following discontinuation of medications.[68]

Grade B, Level IIb

B Abrupt discontinuation of benzodiazepines should be avoided. Medication should be tapered off gradually, over a number of weeks titrating against symptoms to avoid withdrawal syndrome and symptom rebound.[69]

Grade B, Level IIa

B Longer-acting benzodiazepines are less likely to cause withdrawal and may be used during the tapering period to ameliorate symptoms.[70]

Grade B, Level IIb

Amongst chronic users of benzodiazepines who seek help in reducing or discontinuing treatment, most have significant previous or current psychiatric problems, including anxiety disorder. They tend to be taking relatively low doses, with a constant or reducing dose, with attempts to cut down or stop medication. The majority should not really be considered 'addicted' or 'dependent' as they are often taking the medication appropriately for a chronic psychiatric problem like anxiety disorder.[71]

A Gradual tapering of dosage of medication is recommended in discontinuing benzodiazepines after long-term treatment of anxiety disorder.[72]

Grade A, Level Ib

A Cognitive behaviour therapy (CBT) may facilitate the tapering of benzodiazepines.[73]

Grade A, Level Ib

B Discontinuation of antidepressants poses less of a problem in terms of withdrawal symptoms, although changes in mood, affect, appetite, and sleep may occur with selective serotonin reuptake inhibitor (SSRI) discontinuation, more so with a shorter acting SSRI, such as paroxetine.[74]

Grade B, Level IIb

9 Clinical Audit Parameters

The following clinical audit parameters, based on recommendations in these guidelines, are proposed:

1. Percentage of repeat prescriptions of benzodiazepines with documentation of regular reviews and indication for their use.

2. Percentage of patients with anxiety disorders in whom psychosocial interventions were considered and discussed with patients.

3. Percentage of patients with anxiety disorders in whom the type of anxiety disorder is documented.

4. Percentage of patients with anxiety disorders in whom the presence/absence of co-morbid depression or alcohol/substance abuse/dependence is documented.

5. Percentage of patients with anxiety disorders in whom antidepressant medication was prescribed.

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Annex

TABLE 3 Pharmacological Agents Used For Anxiety Disorder Treatment

BENZODIAZEPINES		
Drug	**Dosage**	**Remarks**
Alprazolam	**Initial dose**: 0.25-0.5 mg bid-tid **Maintenance dose**: **GAD**: 0.25-4 mg/day **Panic disorder**: 1- 6 mg/day **SAD**: 1- 6 mg/day	**Adverse Reactions** • Dependence and withdrawal symptoms can occur especially in patients with history of drug dependence. • Central nervous system effects (e.g. sedation, drowsiness, muscle weakness, ataxia. Less commonly, slurred speech, vertigo, headache, confusion). Symptoms decrease after continued use. • Paradoxical excitement can occur.
Bromazepam	**Initial dose**: 1.5 mg bid-tid **Maintenance dose**: 3-9 mg/day in divided doses	
Clobazam	**Initial dose**: 20 mg/day PO **Maintenance dose**: 20-30 mg/day PO in divided doses	
Clonazepam	**Initial dose**: 0.25-1 mg bid **Maintenance dose**: **GAD**: 0.5-3 mg/day **SAD & Panic Disorder**: 1-3 mg/day	
Diazepam	**Initial dose**: 2-5 mg tid **Maintenance dose**: 4-20 mg/day in divided doses	
Lorazepam	**Initial dose**: 0.5-2 mg/day in divided doses **Maintenance dose**: 1-6 mg/day in divided doses	

SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIS)		
Drug	**Dosage**	**Remarks**
Citalopram	**Panic disorder**: **Initial dose**: 10 mg once daily increasing to 20 mg once daily	**Adverse Reactions** • Dry mouth, nausea, insomnia, sexual dysfunction, sweating, tremor, diarrhea, somnolence, dyspepsia. **Special instructions** • Initial feeling of increased anxiety may occur with SSRI's therefore initial dose should be lower than normally prescribed for depression and increased slowly. • If discontinued after long-term use taper dose over several week.. • Use with caution in patients with hepatic or renal dysfunction and in patients with seizure disorders.
Fluoxetine	**Panic disorder:** **Initial dose**: 10 mg once daily Increase dose at 10 mg increments based on patient response	**Adverse Reactions** • Dose related: Nervousness and anxiety, insomnia • Headache, nausea, diarrhea, anorexia, blurred vision, sexual dysfunction. Drowsiness, sleep disturbance, abnormal dreams, mania. **Special instructions** • as for citalopram
Fluvoxamine	**Panic disorder:** 50-300 mg/day **SAD**: 50-150 mg/day	**Adverse Reactions** • Headache, somnolence, insomnia, dizziness, nervousness, nausea, diarrhea, muscle weakness, palpitations, yawning, sexual dysfunction, tremors. **Special instructions** ▪ as for citalopram

SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIS) – continued		
Drug	**Dosage**	**Remarks**
Paroxetine	**GAD:** **Initial dose**: 20 mg once daily **Panic disorder:** **Initial dose**: 10 mg once daily Maintenance dose: 20-40 mg/day **SAD:** Initial dose: 20 mg once daily Maintenance dose: 20-60 mg/day Increase dose gradually for above disorders at 10 mg increments weekly based on patient response	**Adverse Reactions** • Dose related: Somnolence, asthenia, dizziness, tremor, nausea. • Headache, insomnia, nervousness, anxiety, dry mouth, constipation, diarrhea, sexual dysfunction, oropharyngeal disorders, myopathy. **Special instructions** • as for citalopram
Sertraline	**Panic disorder:** **Initial dose**: 25 mg once daily Increase dose by 25 mg after 1 week then 50 mg weekly based on patient response up to200 mg/day	**Adverse Reactions** • Headache, somnolence, drowsiness, fatigue, dizziness, insomnia, tremor, anxiety, paresthesia, agitation, sexual dysfunction, nausea, dry mouth, diarrhea, constipation, abnormal vision. **Special Instructions** ▪ as for citalopram

SEROTONIN & NOREPINEPHRINE REUPTAKE INHIBITOR (SNRI)		
Drug	**Dosage**	**Remarks**
Venlafaxine	**GAD**: **Initial dose:** 37.5mg **Extended release**: 75 mg PO once daily May increase dose by 75 mg every 4 days (or more) based on patient response **Max dose**: 225 mg/day	**Adverse Reactions** • Headache, somnolence, dizziness, insomnia, nervousness, nausea, anorexia, constipation, diarrhea, sexual dysfunction, anxiety, abnormal dream, yawning, tremor, blurred vision. • Dose related: vasodilation, hypertension. **Special instructions** • If discontinued after long-term use taper dose over several week • Use with caution in renal and hepatic impairment.

TRICYCLIC ANTIDEPRESSANTS (TCA)		
Drug	**Dosage**	**Remarks**
Clomipramine	**Panic disorder, phobias**: **Initial dose**: 25 mg/day Increase dose gradually over 2 weeks based on patient response **Maintenance dose:** 50-150 mg/day in divided doses **Max dose**: 250 mg/day	**Adverse Reactions** • Side effects are mostly due to antimuscarinic actions and may be decreased if started at low dose and increased gradually. • Dry mouth, constipation (may lead to paralytic ileus), blurred vision, increased intraocular pressure, urinary retention, hyperthermia, drowsiness can occur, nervousness, insomnia, headache, peripheral neuropathy, ataxia, tremor, confusion/delirium can occur especially in older patients, nausea /vomiting, gastric irritation, hypotension, tachycardia, sweating, weight gain. **Special instructions** • Do not stop medication abruptly; taper dose over several week • Use with caution in patients with urinary retention, prostatic hyperplasia, chronic constipation, untreated angle-closure glaucoma, patients with cardiovascular disease, history of epilepsy, diabetes mellitus, impaired hepatic function • Elderly patients may be sensitive to side effects; lower dose should be used.
Imipramine	**Initial dose**: 25 mg ON-bid Increase dose gradually based on patient response **Maintenance dose**: 50-100 mg/day PO in divided doses **Max dose**: 200 mg/day	

ANTIHISTAMINE		
Drug	**Dosage**	**Remarks**
Hydroxyzine	**GAD**: 25-50 mg once daily at bedtime or in divided doses May increase dose to 50-100 mg qid	**Adverse Reactions** • Drowsiness, sedation, dizziness, lassitude which may diminish over time. • Headache, psychomotor impairment, muscarinic side effects, (e.g. dry mouth, blurred vision, urinary retention, constipation, gastroesophagal reflux disease), nausea/vomiting, sweating, myalgia.

BETA BLOCKERS		
Drug	**Dosage**	**Remarks**
Atenolol	**SAD (Non-generalized subtype)**: 50-100 mg as required	**Adverse Reactions** • Not usually significant when only taken on an as needed basis. • Cardiovascular effects (e.g. bradycardia, hypotension. In patient's with pre-existing cardiovascular disorders: heart block, heart failure) bronchospasm, fatigue, depression, dizziness, sleep disturbances. • May interfere with carbohydrate and lipid metabolism, rash. **Special instructions** • Use with caution in patients with asthma, chronic obstructive pulmonary disease, diabetes mellitus.
Propranolol	**SAD (Non-generalized subtype)**: 20-40 mg as required	

Notes:
All dosage recommendations are for non-elderly adults with normal renal and hepatic functions unless otherwise stated.
GAD = generalized anxiety disorder
SAD = social anxiety disorder

Table 4 Advantages and Disadvantages of Treatment Modalities

Modality	Advantages	Disadvantages
Psychotherapies		
CBT	▪ Minimal side effects compared with pharmacotherapies ▪ No risk of physiological dependency	▪ Patient must be willing to do "homework" (e.g. breathing exercises, recording of anxious cognitions) and confront feared situation ▪ Lack of availability ▪ in some regions
Other psychotherapies (e.g. psychodynamic psychotherapy, family therapy)	▪ May be the treatment of choice for some patients (e.g. those with prominent personality disorder or psychological conflicts)	▪ Efficacy is less well studied compared with CBT
Pharmacotherapies		
SSRIs	▪ Ready availability ▪ Fewer serious adverse side effects compared with TCAs and MAOIs ▪ No potential for the physiological dependency associated with benzodiazepines	▪ Sexual side effects ▪ Cost may be higher compared with other medication classes
TCAs	▪ Ready availability ▪ Tolerated by most patients, although generally not as well as SSRIs, enlafaxine, or nefazodone ▪ No potential for the physiological dependency associated with benzodiazepines	▪ Risks of cardiovascular and anticholinergic side effects (especially for the elderly or patients with general medical problems) ▪ Suboptimal for suicidal ▪ patients because overdose ▪ may be fatal
Benzodiazepines	▪ Ready availability ▪ Rapid control of symptoms	▪ Risk of tolerance, dependence, and withdrawal symptoms ▪ In elderly, risk of confusion and falls

Modality	Advantages	Disadvantages
Pharmacotherapies (continued)		
Other antidepressants	• Ready availability • For some patients, a more tolerable side effect profile than other classes of antidepressants • No potential for the physiological dependency associated with benzodiazepines	• Limited data support the use of venlafaxine and nefazodone

Table 5 Summary of Effective Treatment Strategies in Anxiety Disorders

Disorder	Non-pharmacological therapies	Drug therapies
Panic disorder	▪ Education about nature of disorder ▪ Behavioural therapy: controlled breathing; graded exposure to feared situations ▪ Group therapy (groups of patients with similar problems directed by a trained therapist)	▪ SSRIs ▪ TCAs ▪ Benzodiazepines
Agoraphobia	▪ Education about nature of disorder ▪ Behavioural therapy: controlled breathing; graded exposure to feared situations ▪ Group therapy ▪ Specialist referral to a cognitive behavioural program for non-responders	▪ SSRIs ▪ TCAs ▪ Benzodiazepines
Social phobia	▪ Behaviour therapy (i.e. exposure to the feared social situation)	▪ SSRIs ▪ TCAs ▪ Benzodiazepines ▪ Moclobemide (for performance anxiety) ▪ Beta-blockers
Specific phobias	▪ Behaviour therapy (i.e. exposure to the feared situation or object)	Drugs alone are generally not helpful.

Disorder	Non-pharmacological therapies	Drug therapies
Obsessive-compulsive disorder	▪ Education about nature of disorder ▪ Behaviour therapy (i.e. training in exposure to the provoking stimuli) ▪ Cognitive therapy – patient taught to challenge the validity of his fears & to resist carrying out compulsions ▪ Specialist referral to a cognitive behavioural program is recommended.	▪ SSRIs ▪ Clomipramine
Post-traumatic stress disorder	▪ Psychoeducation ▪ Self-help/management ▪ Cognitive therapy ▪ Stress inoculation training ▪ Imaginal exposure ▪ Exposure in vivo to safe triggers of generalized avoidance ▪ Eye Movement Desensitization and Reprocessing (EMDR) ▪ Supportive counselling ▪ Treatment of comorbid disorders, especially depression ▪ Specialist referral to a cognitive behavioural program is recommended	▪ SSRIs ▪ TCAs ▪ Benzodiazepines
Generalised anxiety disorder	▪ Education about nature of disorder ▪ Support (guidance, advice) ▪ Counselling ▪ Relaxation therapy ▪ Stress management (relaxation, meditation) ▪ Behavioural therapy: structured problem solving; graded exposure to difficult situations ▪ Specialist referral to a cognitive behavioural program for non-responders	▪ SSRIs, Venlafaxine ▪ TCAs ▪ Benzodiazepines ▪ Beta-blockers

Notes:
SSRI = selective serotonin reuptake inhibitor
TCA = tricyclic antidepressant.

Self-assessment (MCQs)

After reading the Clinical Practice Guidelines, you can claim one CME point under Category III (Self-Study) of the SMC Online CME System. Before you login to claim the CME point, we encourage you to evaluate whether you have mastered the key points in the Guidelines by completing this set of MCQs. This is an extension of the learning process and is not intended to "judge" your knowledge and is not compulsory. The answers can be found at the end of the questionnaire.

Instruction: Choose the best answer

1. Which of the following is a characteristic of an anxiety disorder?
   A. Anxiety which affects one's daily life and functioning
   B. Anxiety which leads to avoidance of situations and places
   C. Anxiety which gives rise to unexplained physical symptoms
   D. All of the above

2. Which of the following statement is false about the use of benzodiazepines for anxiety disorders?
   A. Cognitive behavioural therapy may facilitate the tapering off of benzodiazepines
   B. Longer acting benzodiazepines are more likely to cause withdrawal symptoms
   C. Brief and time-limited use of benzodiazepines is most effective
   D. Avoid the use of more than one benzodiazepine concurrently

3. Psychiatric referral for an anxiety disorder is appropriate when:
   A. Symptoms are complex and severe
   B. Co-occurring depression exists
   C. There is a serious risk of suicide
   D. All of the above

4. Pharmacological treatment for anxiety disorder is indicated in which of the following situations?
   A. There is significant impairment of social functioning.
   B. Symptoms are severe.
   C. There is concurrent moderate or severe depression disorder.
   D. All of the above.

5. Which of the following statements on co-morbid anxiety and depression is false?
   A. Treatment should be aggressive.
   B. Benzodiazepines are the treatment of choice.
   C. Depression interferes with cognitive behavioural therapy for anxiety.
   D. Prognosis of anxiety is worse when associated with depression.

6. Which of the following are techniques used in cognitive behavioural therapy?
   A. Activity scheduling
   B. Graded exposure to feared situations
   C. Challenging negative, automatic or illogical thoughts
   D. All of the above

7. Which of the following statements is true of psychosocial interventions?
   A. Therapies of fewer than eight sessions are optimal for most moderate to severe mental health problems.
   B. Age, sex, social class and ethnic groups are critical factors in the choice of therapy.
   C. Patient preference should be considered when selecting the type of treatment.
   D. Conflict should not exist between therapist and patient.

Answers:

1. D
2. B
3. D
4. D
5. B
6. D
7. C

Workgroup Members

The members of the workgroup, who were appointed in their personal professional capacity, are:

Chairman	Associate Professor Calvin Fones Chief Department of Psychological Medicine National University Hospital
Members	Dr Lyn Chua Head Department of Psychology Woodbridge Hospital & Institute of Mental Health
	Associate Professor Goh Lee Gan Department of Community, Occupational & Family Medicine National University of Singapore
	Associate Professor Ko Soo Meng Head, Division of Stress Medicine Department of Psychological Medicine National University Hospital
	Adjunct Associate Professor Leslie Lim Head Behavioural Medicine Department Singapore General Hospital
	Dr Low Bee Lee Head Department of Psychological Medicine Tan Tock Seng Hospital
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Anxiety Disorders

Ministry of Health

NMRC
National Medical Research Council

Types of Anxiety Disorders and their main symptoms

Type of Anxiety Disorder (Classification ICD-10, DSM-IV)	Main Symptoms
Panic disorder without agoraphobia	Recurrent unexpected panic attacks
Panic disorder with agoraphobia	Panic attacks with avoidance of situations where escape is difficult/embarrassing
Specific phobia	Persistent, unreasonable fear, and avoidance of a feared object or situation
Social anxiety disorder (SAD)/Social phobia	Fear and avoidance of situations involving potential negative evaluation and scrutiny by others
Generalised anxiety disorder (GAD)	Excessive worry about a number of events or activities on most days for at least 6 months
Obsessive compulsive disorder (OCD)	Repeated, intrusive thoughts/images or actions which are recognized as excessive
Post-traumatic stress disorder (PTSD)	Trauma causing intense fear and re-experiencing of trauma lasting longer than 1 month
Acute stress disorder	Trauma causing intense fear lasting less than 1 month
Adjustment disorder with anxiety	Stressor or life-event temporally related to onset of anxiety symptoms

Pharmacological Agents Used For Anxiety Disorder Treatment

BENZODIAZEPINES		
Drug	**Dosage**	**Remarks**
Alprazolam	**Initial dose**: 0.25-0.5 mg bid-tid **Maintenance dose**: **GAD**: 0.25-4 mg/day **Panic disorder**: 1- 6 mg/day **SAD**: 1- 6 mg/day	**Adverse Reactions** • Dependence and withdrawal symptoms can occur especially in patients with history of drug dependence. • Central nervous system effects (e.g. sedation, drowsiness, muscle weakness, ataxia. Less commonly, slurred speech, vertigo, headache, confusion). Symptoms decrease after continued use. • Paradoxical excitement can occur.
Bromazepam	**Initial dose**: 1.5 mg bid-tid **Maintenance dose**: 3-9 mg/day in divided doses	
Clobazam	**Initial dose**: 20 mg/day PO **Maintenance dose**: 20-30 mg/day PO in divided doses	
Clonazepam	**Initial dose**: 0.25-1 mg bid **Maintenance dose**: **GAD**: 0.5-3 mg/day **SAD & Panic Disorder**: 1-3 mg/day	
Diazepam	**Initial dose**: 2-5 mg tid **Maintenance dose**: 4-20 mg/day in divided doses	
Lorazepam	**Initial dose**: 0.5-2 mg/day in divided doses **Maintenance dose**: 1-6 mg/day in divided doses	

SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIS)		
Drug	**Dosage**	**Remarks**
Citalopram	**Panic disorder**: **Initial dose**: 10 mg once daily increasing to 20 mg once daily	**Adverse Reactions** • Dry mouth, nausea, insomnia, sexual dysfunction, sweating, tremor, diarrhea, somnolence, dyspepsia. **Special instructions** • Initial feeling of increased anxiety may occur with SSRI's therefore initial dose should be lower than normally prescribed for depression and increased slowly. • If discontinued after long-term use taper dose over several week.. • Use with caution in patients with hepatic or renal dysfunction and in patients with seizure disorders.
Fluoxetine	**Panic disorder:** **Initial dose**: 10 mg once daily Increase dose at 10 mg increments based on patient response	**Adverse Reactions** • Dose related: Nervousness and anxiety, insomnia • Headache, nausea, diarrhea, anorexia, blurred vision, sexual dysfunction. Drowsiness, sleep disturbance, abnormal dreams, mania. **Special instructions** • as for citalopram
Fluvoxamine	**Panic disorder:** 50-300 mg/day **SAD**: 50-150 mg/day	**Adverse Reactions** • Headache, somnolence, insomnia, dizziness, nervousness, nausea, diarrhea, muscle weakness, palpitations, yawning, sexual dysfunction, tremors. **Special instructions** ▪ as for citalopram

SELECTIVE SEROTONIN REUPTAKE INHIBITORS (SSRIS) – continued		
Drug	**Dosage**	**Remarks**
Paroxetine	**GAD:** **Initial dose**: 20 mg once daily **Panic disorder:** **Initial dose**: 10 mg once daily Maintenance dose: 20-40 mg/day **SAD:** Initial dose: 20 mg once daily Maintenance dose: 20-60 mg/day Increase dose gradually for above disorders at 10 mg increments weekly based on patient response	**Adverse Reactions** • Dose related: Somnolence, asthenia, dizziness, tremor, nausea. • Headache, insomnia, nervousness, anxiety, dry mouth, constipation, diarrhea, sexual dysfunction, oropharyngeal disorders, myopathy. **Special instructions** • as for citalopram
Sertraline	**Panic disorder:** **Initial dose**: 25 mg once daily Increase dose by 25 mg after 1 week then 50 mg weekly based on patient response up to200 mg/day	**Adverse Reactions** • Headache, somnolence, drowsiness, fatigue, dizziness, insomnia, tremor, anxiety, paresthesia, agitation, sexual dysfunction, nausea, dry mouth, diarrhea, constipation, abnormal vision. **Special Instructions** ▪ as for citalopram

SEROTONIN & NOREPINEPHRINE REUPTAKE INHIBITOR (SNRI)		
Drug	**Dosage**	**Remarks**
Venlafaxine	**GAD**: **Initial dose:** 37.5mg **Extended release**: 75 mg PO once daily May increase dose by 75 mg every 4 days (or more) based on patient response **Max dose**: 225 mg/day	**Adverse Reactions** • Headache, somnolence, dizziness, insomnia, nervousness, nausea, anorexia, constipation, diarrhea, sexual dysfunction, anxiety, abnormal dream, yawning, tremor, blurred vision. • Dose related: vasodilation, hypertension. **Special instructions** • If discontinued after long-term use taper dose over several week • Use with caution in renal and hepatic impairment.

TRICYCLIC ANTIDEPRESSANTS (TCA)		
Drug	**Dosage**	**Remarks**
Clomipramine	**Panic disorder, phobias**: **Initial dose**: 25 mg/day Increase dose gradually over 2 weeks based on patient response **Maintenance dose:** 50-150 mg/day in divided doses **Max dose**: 250 mg/day	**Adverse Reactions** • Side effects are mostly due to antimuscarinic actions and may be decreased if started at low dose and increased gradually. • Dry mouth, constipation (may lead to paralytic ileus), blurred vision, increased intraocular pressure, urinary retention, hyperthermia, drowsiness can occur, nervousness, insomnia, headache, peripheral neuropathy, ataxia, tremor, confusion/delirium can occur especially in older patients, nausea /vomiting, gastric irritation, hypotension, tachycardia, sweating, weight gain. **Special instructions** • Do not stop medication abruptly; taper dose over several week • Use with caution in patients with urinary retention, prostatic hyperplasia, chronic constipation, untreated angle-closure glaucoma, patients with cardiovascular disease, history of epilepsy, diabetes mellitus, impaired hepatic function • Elderly patients may be sensitive to side effects; lower dose should be used.
Imipramine	**Initial dose**: 25 mg ON-bid Increase dose gradually based on patient response **Maintenance dose**: 50-100 mg/day PO in divided doses **Max dose**: 200 mg/day	

ANTIHISTAMINE		
Drug	**Dosage**	**Remarks**
Hydroxyzine	**GAD**: 25-50 mg once daily at bedtime or in divided doses May increase dose to 50-100 mg qid	**Adverse Reactions** • Drowsiness, sedation, dizziness, lassitude which may diminish over time. • Headache, psychomotor impairment, muscarinic side effects, (e.g. dry mouth, blurred vision, urinary retention, constipation, gastroesophagal reflux disease), nausea/vomiting, sweating, myalgia.

BETA BLOCKERS		
Drug	**Dosage**	**Remarks**
Atenolol	**SAD (Non-generalised subtype)**: 50-100 mg as required	**Adverse Reactions** • Not usually significant when only taken on an as needed basis. • Cardiovascular effects (e.g. bradycardia, hypotension. In patient's with pre-existing cardiovascular disorders: heart block, heart failure) bronchospasm, fatigue, depression, dizziness, sleep disturbances. • May interfere with carbohydrate and lipid metabolism, rash. **Special instructions** • Use with caution in patients with asthma, chronic obstructive pulmonary disease, diabetes mellitus.
Propranolol	**SAD (Non-generalised subtype)**: 20-40 mg as required	

Notes:
All dosage recommendations are for non-elderly adults with normal renal and hepatic functions unless otherwise stated.
GAD = generalised anxiety disorder
SAD = social anxiety disorder

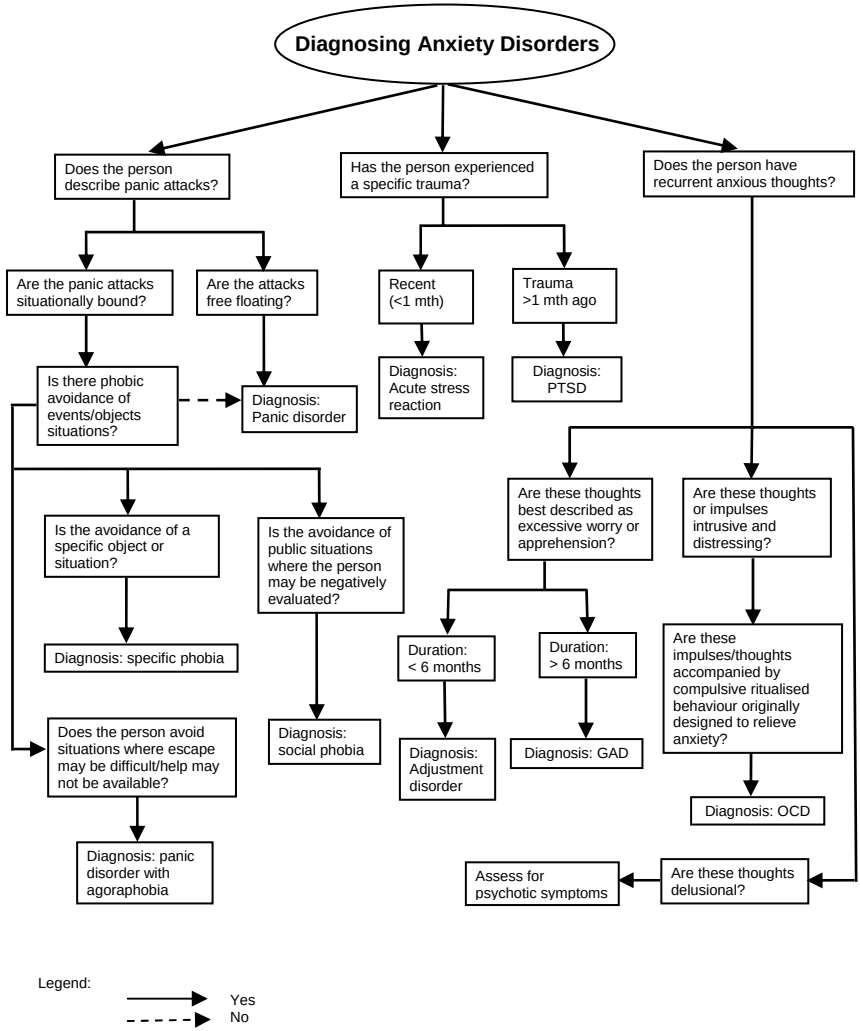
Summary of Effective Treatment Strategies in Anxiety Disorders

Disorder	Non-pharmacological therapies	Drug therapies
Panic disorder	▪ Education about nature of disorder ▪ Behavioural therapy: controlled breathing; graded exposure to feared situations ▪ Group therapy (groups of patients with similar problems directed by a trained therapist)	▪ SSRIs ▪ TCAs ▪ Benzodiazepines
Agoraphobia	▪ Education about nature of disorder ▪ Behavioural therapy: controlled breathing; graded exposure to feared situations ▪ Group therapy ▪ Specialist referral to a cognitive behavioural program for non-responders	▪ SSRIs ▪ TCAs ▪ Benzodiazepines
Social phobia	▪ Behaviour therapy (i.e. exposure to the feared social situation)	▪ SSRIs ▪ TCAs ▪ Benzodiazepines ▪ Moclobemide (for performance anxiety) ▪ Beta-blockers
Specific phobias	▪ Behaviour therapy (i.e. exposure to the feared situation or object)	Drugs alone are generally not helpful.
Obsessive-compulsive disorder	▪ Education about nature of disorder ▪ Behaviour therapy (i.e. training in exposure to the provoking stimuli) ▪ Cognitive therapy – patient taught to challenge the validity of his fears and to resist carrying out compulsions ▪ Specialist referral to a cognitive behavioural program is recommended.	▪ SSRIs ▪ Clomipramine

Disorder	Non-pharmacological therapies	Drug therapies
Post-traumatic stress disorder	▪ Psychoeducation ▪ Self-help/management ▪ Cognitive therapy ▪ Stress inoculation training ▪ Imaginal exposure ▪ Exposure in vivo to safe triggers of generalised avoidance ▪ Eye Movement Desensitization and Reprocessing (EMDR) ▪ Supportive counselling ▪ Treatment of comorbid disorders, especially depression ▪ Specialist referral to a cognitive behavioural program is recommended	▪ SSRIs ▪ TCAs ▪ Benzodiazepines
Generalised anxiety disorder	▪ Education about nature of disorder ▪ Support (guidance, advice) ▪ Counselling ▪ Relaxation therapy ▪ Stress management (relaxation, meditation) ▪ Behavioural therapy: structured problem solving; graded exposure to difficult situations ▪ Specialist referral to a cognitive behavioural program for non-responders	▪ SSRIs, Venlafaxine ▪ TCAs ▪ Benzodiazepines ▪ Beta-blockers

Notes:
SSRI = selective serotonin reuptake inhibitor
TCA = tricyclic antidepressant.

Diagnosing Anxiety Disorders



Adapted from "Guidelines for assessing and treating anxiety disorder", National Health Committee, New Zealand, November 1998.

Treatment of Anxiety Disorders