



Complete Summary

GUIDELINE TITLE

Anxiety disorders.

BIBLIOGRAPHIC SOURCE(S)

Singapore Ministry of Health, National Medical Research Council. Anxiety disorders. Singapore: Singapore Ministry of Health; 2003 Nov. 69 p. [74 references]

GUIDELINE STATUS

This is the current release of the guideline.

** REGULATORY ALERT **

FDA WARNING/REGULATORY ALERT

Note from the National Guideline Clearinghouse: This guideline references a drug(s) for which important revised regulatory and/or warning information has been released.

- [May 2, 2007, Antidepressant drugs](#): Update to the existing black box warning on the prescribing information on all antidepressant medications to include warnings about the increased risks of suicidal thinking and behavior in young adults ages 18 to 24 years old during the first one to two months of treatment.
- [October 25, 2006, Effexor \(venlafaxine HCl\)](#): Published retrospective studies report that venlafaxine overdose may be associated with an increased risk of fatal outcome.
- [May 12, 2006, Paxil \(paroxetine\) and Paxil CR](#): Changes to the Clinical Worsening and Suicide Risk subsection of the WARNINGS section in the prescribing Information related to adult patients, particularly those who are younger adults.
- [December 8, 2005, Paxil \(paroxetine\)](#): Pregnancy category changed from C to D and new data and recommendations added to the WARNINGS section of prescribing information.
- [September 27, 2005, Paxil \(paroxetine\) and Paxil CR](#): Changes to the Pregnancy/PRECAUTIONS section of the Prescribing Information to describe the results of a retrospective epidemiologic study of major congenital malformations in infants born to women taking antidepressants during the first trimester of pregnancy.

COMPLETE SUMMARY CONTENT

**** REGULATORY ALERT ****

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INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT

CATEGORIES

IDENTIFYING INFORMATION AND AVAILABILITY

DISCLAIMER

SCOPE

DISEASE/CONDITION(S)

Anxiety disorders

- Panic disorder
- Agoraphobia
- Specific phobias
- Social anxiety disorder (SAD, social phobias)
- Generalized anxiety disorder
- Obsessive-compulsive disorder
- Post-traumatic stress disorder

GUIDELINE CATEGORY

Counseling
Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Family Practice
Psychiatry
Psychology

INTENDED USERS

Allied Health Personnel
Physicians
Psychologists/Non-physician Behavioral Health Clinicians
Social Workers

GUIDELINE OBJECTIVE(S)

- To provide optimal care and good outcomes to patients with anxiety disorders
- To assist primary health care physicians in clinical decision-making when assessing and treating patients with anxiety
- To help medical practitioners recognise the presence of anxiety disorders in patients and to assess and manage them appropriately
- To provide evidence-based recommendations on appropriate psychological and pharmacological therapy for anxiety

TARGET POPULATION

Adults and children with anxiety disorders in Singapore

INTERVENTIONS AND PRACTICES CONSIDERED

Diagnosis and Assessment

1. Evaluation of symptoms: psychotic symptoms, severity/complexity of symptoms, and severity of functional impairment
2. Evaluation and mobilization of family and social resources
3. Assessment for suicide risk
4. Assessment for coexisting mental health disorders such as depression and drug/alcohol problems
5. Patient response to treatment: monitoring for remission and relapse

Treatment: Non-pharmacotherapy

1. Supportive counseling and monitoring: reassuring patient; educating patient, including providing information on treatment options
2. Lifestyle changes: stress reduction strategies; reducing alcohol and caffeine; avoiding nicotine and drug use; regular exercise
3. Group therapy
4. Referral to psychiatrist or other behavioral treatment specialist
5. Psychotherapy
 - Cognitive behavior therapy (CBT), including psychoeducation; exposure to symptoms or situations; cognitive restructuring; breathing retraining; continuous panic monitoring.
 - Other psychotherapies

Treatment: Pharmacotherapy

1. Antidepressants
 - Selective serotonin reuptake inhibitors (SSRIs) as first-line drug treatment, including citalopram, fluoxetine, fluvoxamine, sertraline, and paroxetine
 - Tricyclic antidepressants including imipramine and clomipramine
 - Monoamine oxidase inhibitor (MAOIs) such as phenelzine and tranylcypromine
 - Selective reversible inhibitor of MAO type A (RIMA) (moclobemide)
2. Benzodiazepines: alprazolam, bromazepam, clobazam, clonazepam, diazepam, lorazepam
3. Beta-blockers, such as propranolol and atenolol

4. Venlafaxine, a serotonin norepinephrine reuptake inhibitor (SNRI)
5. Serotonin antagonist and reuptake inhibitor (nefazodone) and noradrenergic and serotonin antagonist (mirtazapine)
6. Antihistamine (hydroxyzine)

MAJOR OUTCOMES CONSIDERED

- Symptoms of anxiety disorders
- Morbidity and overall functioning
- Effectiveness of counseling and behavioral therapies
- Effectiveness and safety of medications
- Side effects, adverse reactions, and potential interactions of medications

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Levels of Evidence

Level Ia: Evidence obtained from meta-analysis of randomised controlled trials

Level Ib: Evidence obtained from at least one randomised controlled trial

Level IIa: Evidence obtained from at least one well-designed controlled study without randomisation

Level IIb: Evidence obtained from at least one other type of well-designed quasi-experimental study

Level III: Evidence obtained from well-designed nonexperimental descriptive studies, such as comparative studies, correlation studies, and case studies

Level IV: Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

The guidelines were drafted by a team comprising psychiatrists from the public and private sectors, a psychologist, and a family physician.

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Grades of Recommendations

Grade 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.

Grade B (evidence levels IIa, IIb, III): Requires availability of well conducted clinical studies but no randomised clinical trials on the topic of recommendation.

Grade 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.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Not stated

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not applicable

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The recommendations that follow are those from the guideline's executive summary; detailed recommendations can be found in the original guideline document. Each recommendation is rated based on the level of the evidence and the grades of recommendation. Definitions of the grades of the recommendations (A, B, C, Good Practice Points [GPP]) and level of the evidence (Level I-Level IV) are presented at the end of the "Major Recommendations" field.

Treatment Settings for Anxiety Disorders

C - Helpful immediate steps that can be instituted at the primary care level include ("Practice guideline for the treatment of patients with panic disorder," 1998):

- 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)**

GPP - Psychiatric evaluation and treatment is appropriate when

- There is serious risk of suicide
- There are psychotic symptoms
- Cooccurring drug/alcohol problems exist
- Symptoms are severe/complex
- If symptoms fail to improve on initial treatment and follow-up **(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. **(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 ("Practice guideline for the treatment of patients with panic disorder," 1998). **(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
- There is concurrent moderate or severe depressive disorder ("Practice guideline for the treatment of patients with panic disorder," 1998). **(GPP)**

Antidepressants

A - Antidepressants are recommended as effective agents for the treatment of panic disorders, social phobia, obsessive compulsive disorders, generalized anxiety disorder, and post-traumatic stress disorder. **(Grade A, Level Ib)**

A - Selective serotonin reuptake inhibitors (SSRIs) are recommended as first-line drug treatment for anxiety disorder. **(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 ("Guidelines for prescribing benzodiazepines," 2002; "College Guidelines for use of benzodiazepines," 1999; "Benzodiazepines: risks, benefits or dependence," 1997). **(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 (Noyes et al., 1991). **(Grade A, Level Ib)**

A - Almost all the SSRIs (fluoxetine, sertraline, fluvoxamine, citalopram, paroxetine) have documented efficacy in the treatment of panic disorder (Otto et al, 2001). **(Grade A, Level Ib)**

A - Imipramine is effective in the treatment of panic disorder. An optimal effective dose for treatment is 100 to 225 mg and should be continued for 8 to 12 weeks ("Drug treatment of panic disorder," 1992; Mavissakalian & Perel, 1989). **(Grade A, Level Ia)**

A - Clomipramine is effective for panic disorder at a dose of 50 to 100 mg for a duration of 6 to 12 weeks (Cassano et al., 1988). **(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 ("Practice guideline for the treatment of patients with panic disorder," 1998; Clum, Clum, & Surls, 1993; Clark et al, 1994; Trull, Nietze, & Main, 1988):

- Psychoeducation
- Exposure to symptoms or situations
- Cognitive restructuring
- Breathing retraining
- Continuous panic monitoring **(Grade A, Level Ia)**

Specific Phobias

A - Phobic symptoms respond best to exposure therapy to the feared situation or object (Dupont, 1982; Park et al., 2001). **(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 to 40 mg taken 45 to 60 minutes before the performance is sufficient for most patients (Tyrer, 1988). **(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. **(Grade A, Level Ia)**

A - 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 (Leibowitz et al., "A randomized, double-blind, fixed dose comparison of paroxetine," 2002). **(Grade A, Level Ib)**

B - There is limited support for the use of moclobemide for social anxiety disorder (SAD) (Stein et al., 2002). **(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 (Durham et al, 2003; Borkovec & Costello, 1993). **(Grade A, Level Ia)**

C - Imipramine for 3 to 6 months is recommended for treating generalized anxiety disorder (GAD) (Rickels et al, 2000). **(Grade C, Level IV)**

A - Paroxetine has shown efficacy compared to placebo for GAD treatment (Stocchi et al., 2003). **(Grade A, Level Ib)**

A - Venlafaxine, a serotonin norepinephrine reuptake inhibitor (SNRI) has been shown to be effective in GAD (Gelenberg et al., 2000). **(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 GAD (Goodnick et al., 1999; Hedges et al., 1996). **(Grade B, Level III)**

A - Antidepressants can be considered as first-line agents over benzodiazepines in the treatment of GAD over the long term (Kapczinski et al., 2003). **(Grade A, Level Ia)**

B - Hydroxyzine 50 mg/day has shown efficacy for treatment of GAD. **(Grade B, Level IIb)**

Obsessive Compulsive Disorder

A - The recommended first line of pharmacotherapy for obsessive compulsive disorder (OCD) is a 10 to 12 week trial with an SSRI at adequate doses. Fluvoxamine, fluoxetine, citalopram, sertraline, and paroxetine, have all been shown to be effective in adults with OCD (Greist et al., 1995). **(Grade A, Level Ia)**

A - The efficacy of fluvoxamine, fluoxetine, and sertraline in OCD has also been confirmed in children (Cook et al., 2001; Liebowitz et al., "Fluoxetine in children and adolescents," 2002). **(Grade A, Level Ib)**

A - Clomipramine is effective treatment for OCD in the dose range of between 100 to 300 mg/day for a period of 5 to 12 weeks (McDonough & Kennedy, 2002; Mundo, Maina, & Uslenghi, 2000). **(Grade A, Level Ia)**

C - It has been suggested that an adequate treatment trial in OCD would be for at least 10 to 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)**

A - Behaviour therapy using Exposure-Response Prevention (ERP) is the treatment of choice for limiting the dysfunction resulting from obsessions and/or compulsions (Van Balkom et al., 1994; O'Sullivan et al., 1991). **(Grade A, Level Ia)**

Post-Traumatic Stress Disorder (PTSD)

A - SSRIs are generally the most appropriate medication of choice for PTSD, and effective therapy should be continued for 12 months or longer. Paroxetine, sertraline, and fluoxetine all have well documented evidence of efficacy (Ballenger et al., 2000). **(Grade A, Level Ia)**

C - It is not recommended, however, that treatment of PTSD, including medication treatment, be instituted and continued only at the primary care setting, over a long term (Khouzam & Donnelly, 2001). **(Grade C, Level IV)**

A - Studies of cognitive behaviour therapy (CBT) have shown the most effective results in the treatment of PTSD. 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 (Ballenger et al., 2000; Davidson & Parker, 2001). **(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 ("Practice guideline for the treatment of patients with panic disorder," 1998). **(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 (Lader & Bond, 1998). **(Grade B, Level IIa)**

A - For panic disorder, recent evidence supports the use of combined cognitive behaviour therapy with medication as superior to either therapy alone in the longer term maintenance phase (Barlow et al., 2000). **(Grade A, Level Ib)**

Anxiety and Coexisting Conditions

A - Depression, when coexisting with anxiety, should be treated aggressively (Rapaport, 2001; Essau, Conradt, & Petermann, 2002). **(Grade A, Level Ia)**

A - Antidepressants have good antianxiety properties and should be the medication of choice in comorbid depression and anxiety. Some SSRIs and venlafaxine have demonstrated efficacy for treatment of comorbid depression and anxiety (Ballenger, 1999; Silverstone & Salinas, 2001). **(Grade A, Level Ib)**

B - Alcohol/substance abuse should be concurrently treated with the anxiety disorder (Tomasson & Vaglum, 1996; LaBounty et al., 1992; Tollefson, Montague-Clouse, & Tollefson, 1992). **(Grade B, Level IIb)**

GPP - Benzodiazepines prescribed for anxiety may be abused by some patients with comorbid alcohol/substance abuse/dependence and are best avoided where possible (Posternak & Mueller, 2001). **(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 (Rickels & Schweizer, 1998). **(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 (Mavissakalian & Perel, 2001). **(Grade A, Level Ib)**

B - Medication should be continued in 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 (Ravizza et al., 1996). **(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 (Michelson et al., 1999; Walker et al., 2000). **(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 (Ost, 1989). **(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 (Pecknold et al., 1988). **(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 (Noyes et al, 1991). **(Grade B, Level IIB)**

A - Gradual tapering of dosage of medication is recommended in discontinuing benzodiazepines after long-term treatment of anxiety disorder (Voshaar et al., 2003). **(Grade A, Level Ib)**

A - Cognitive behaviour therapy may facilitate the tapering of benzodiazepines (Otto et al., 1993). **(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 SSRI discontinuation, more so with a shorter acting SSRI, such as paroxetine (Lejoyeux & Ades, 1997). **(Grade B, Level IIB)**

Grades of Recommendations

Grade 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.

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Level III: Evidence obtained from well-designed nonexperimental descriptive studies, such as comparative studies, correlation studies and case studies

Level IV: Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities

CLINICAL ALGORITHM(S)

Two clinical algorithms are provided in the original guideline document for:

- Diagnosing Anxiety Disorders
- Treatment of Anxiety Disorders

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

[References open in a new window](#)

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations")

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

- 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.
- Early recognition of anxiety 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.

POTENTIAL HARMS

Potential Side Effects and Adverse Reactions of Psychotherapeutic Medications

Benzodiazepines

- Dependence, tolerance, 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). In elderly, risk of confusion and falls. Symptoms decrease after continued use.
- Paradoxical excitement can occur.

Selective serotonin reuptake inhibitors (SSRIs): Sexual side effect; cost may be higher compared with other medication classes.

Special Instructions: Initial feeling of increased anxiety may occur with SSRIs. Therefore initial dose should be lower than normally prescribed for depression and increased slowly. If discontinued after long-term use, taper dose over several weeks. Use with caution in patients with hepatic or renal dysfunction and in patients with seizure disorders.

- *Citalopram*: Dry mouth, nausea, insomnia, sexual dysfunction, sweating, tremor, diarrhea, somnolence, and dyspepsia.
- *Fluoxetine*: Dose related reactions: nervousness and anxiety, insomnia. Other reactions are headache, nausea, diarrhea, anorexia, blurred vision, sexual dysfunction, drowsiness, sleep disturbance, abnormal dreams, and mania.
- *Fluvoxamine*: Headache, somnolence, insomnia, dizziness, nervousness, nausea, diarrhea, muscle weakness, palpitations, yawning, sexual dysfunction, and tremors.
- *Paroxetine*: Dose related reactions: Somnolence, asthenia, dizziness, tremor, and nausea. Other reactions are headache, insomnia, nervousness, anxiety, dry mouth, constipation, diarrhea, sexual dysfunction, oropharyngeal disorders, and myopathy.
- *Sertraline*: Headache, somnolence, drowsiness, fatigue, dizziness, insomnia, tremor, anxiety, paresthesia, agitation, sexual dysfunction, nausea, dry mouth, diarrhea, constipation, and abnormal vision.

Serotonin and Norepinephrine Reuptake Inhibitor (SNRI)

- *Venlafaxine*: Dose related reactions: vasodilation and hypertension. Other reactions are headache, somnolence, dizziness, insomnia, nervousness, nausea, anorexia, constipation, diarrhea, sexual dysfunction, anxiety, abnormal dream, yawning, tremor, and blurred vision.

- Special Instructions: If discontinued after long-term use, taper dose over several weeks. Use with caution in renal and hepatic impairment.

Tricyclic Antidepressants (TCAs)

- *Clomipramine and imipramine*: 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, and weight gain. Risk of cardiovascular and anticholinergic side effects are greater for the elderly or patients with general medical problems. TCAs are suboptimal for suicidal patients because an overdose may be fatal.
- Special Instructions: do not stop medication abruptly; taper dose over several weeks. Use with caution in patients with urinary retention, prostatic hyperplasia, chronic constipation, untreated angle-closure glaucoma, cardiovascular disease, history of epilepsy, diabetes mellitus, and impaired hepatic function. Elderly patients may be sensitive to side effects; lower dose should be used.

Antihistamine

- *Hydroxyzine* Drowsiness, sedation, dizziness, and lassitude which may diminish over time. Headache, psychomotor impairment, muscarinic side effects, (e.g., dry mouth, blurred vision, urinary retention, constipation, gastroesophageal reflux disease), nausea/vomiting, sweating, and myalgia.

Beta Blockers

- *Atenolol and propranolol*: Adverse reactions are not usually significant when only taken on an "as needed" basis. Cardiovascular effects (e.g., bradycardia, hypotension. In patient's with preexisting cardiovascular disorders: heart block, heart failure), bronchospasm, fatigue, depression, dizziness, and sleep disturbances. May interfere with carbohydrate and lipid metabolism and cause a rash.
- Special Instructions: use with caution in patients with asthma, chronic obstructive pulmonary disease, and diabetes mellitus.

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

- 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.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

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 comorbid depression or alcohol/substance abuse/dependence is documented
5. Percentage of patients with anxiety disorders in whom antidepressant medication was prescribed

IMPLEMENTATION TOOLS

Clinical Algorithm
Patient Resources

For information about [availability](#), see the "Availability of Companion Documents" and "Patient Resources" fields below.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Getting Better
Living with Illness

IOM DOMAIN

Effectiveness
Patient-centeredness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

Singapore Ministry of Health, National Medical Research Council. Anxiety disorders. Singapore: Singapore Ministry of Health; 2003 Nov. 69 p. [74 references]

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003 Nov

GUIDELINE DEVELOPER(S)

National Medical Research Council (Singapore Ministry of Health) - National Government Agency [Non-U.S.]
Singapore Ministry of Health - National Government Agency [Non-U.S.]

SOURCE(S) OF FUNDING

Singapore Ministry of Health (MOH)

GUIDELINE COMMITTEE

Workgroup on Anxiety Disorders

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Workgroup Members: Associate Professor Calvin Fones, Chief, Department of Psychological Medicine, National University Hospital (Chairman); 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; Dr Tay Liam Kai, Psychiatric Care Clinic, Mt Elizabeth Medical Centre; Dr Yap Hwa Ling, Division of Psychological Medicine, Changi General Hospital

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the [Singapore Ministry of Health Web site](#).

Print copies: Available from the Singapore Ministry of Health, College of Medicine Building, Mezzanine Floor 16 College Rd, Singapore 169854.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

The following is available:

- Anxiety disorders. Singapore: Singapore Ministry of Health; 2004. 7 p.

Electronic copies: Available in Portable Document Format (PDF) from the [Singapore Ministry of Health Web site](#).

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

NGC STATUS

This NGC summary was completed by ECRI on July 28, 2004. This summary was updated by ECRI on August 15, 2005, following the U.S. Food and Drug Administration advisory on antidepressant medications. This summary was updated by ECRI on October 3, 2005, following the U.S. Food and Drug Administration advisory on Paxil (paroxetine). This summary was updated by ECRI on December 12, 2005, following the U.S. Food and Drug Administration advisory on Paroxetine HCL - Paxil and generic paroxetine. This summary was updated by ECRI on May 31, 2006 following the U.S. Food and Drug Administration advisory on Paxil (paroxetine hydrochloride). This summary was updated by ECRI on November 22, 2006, following the FDA advisory on Effexor (venlafaxine HCl). This summary was updated by ECRI Institute on November 6, 2007, following the U.S. Food and Drug Administration advisory on Antidepressant drugs.

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