EVIDENCE-BASED GUIDELINES FOR THE PHARMACOLOGICAL TREATMENT OF ANXIETY DISORDERS: RECOMMENDATIONS FROM THE BRITISH ASSOCIATION FOR PSYCHOPHARMACOLOGY

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ABSTRACT

These British Association for Psychopharmacology guidelines cover the range and aims of treatment for anxiety disorders. They are based explicitly on the available evidence and are presented as recommendations to aid clinical decision-making in primary and secondary medical care. They may also serve as a source of information for patients and their carers. The recommendations are presented together with a more detailed review of the available evidence. A consensus meeting involving experts in anxiety disorders reviewed the main subject areas and considered the strength of evidence and its clinical implications. The guidelines were constructed after extensive feedback from participants and interested parties. The strength of supporting evidence for recommendations was rated. The guidelines cover the diagnosis of anxiety disorders and key steps in clinical management, including acute treatment, relapse prevention and approaches for patients who do not respond to first-line treatments.

Key words

Anticonvulsants, antidepressants, antipsychotics, anxiety disorders, anxiolytics, benzodiazepines, cognitive behaviour therapy, evidence-based guidelines, generalised anxiety disorder, obsessive-compulsive disorder, panic disorder, post-traumatic stress disorder, simple phobia, social phobia, SSRI, treatment, venlafaxine.

INTRODUCTION

The British Association for Psychopharmacology (BAP) aims to advance education and research in the science of psychopharmacology, by arranging scientific meetings, fostering research and teaching, encouraging publication of research results and providing guidance and information to the public and professions on matters relevant to psychopharmacology (www.bap.org.uk). As an important part of this process the BAP has published a series of evidence-based guidelines for the use of drugs in psychiatric disorders with the emphasis on producing comprehensive but concise and useable guidelines based on a review of the evidence (Anderson *et al.*, 2000; Goodwin *et al.*, 2003; Lingford-Hughes *et al.*, 2004).

Anxiety symptoms and disorders are common in community settings, and in primary and secondary medical care. The personal and societal burden associated with anxiety disorders is considerable, but many people who might benefit from treatment are not recognised or treated. Likely factors include the range of anxiety disorders, their comorbidity with other disorders (particularly depression), lack of awareness of anxiety disorders by sufferers and practitioners, poor confidence by many practitioners in their treatment, and the relative lack of research. Conversely, some patients receive unnecessary or inappropriate treatment. Hence there is much room for improvement in the recognition and management of patients with anxiety disorders; we hope these guidelines will contribute to this process.

METHODOLOGY

Guidelines are systematically derived statements that aim to inform individual patient and clinician decisions. Recommendations regarding treatment can be graded according to the strength of scientific evidence, and if possible are derived from systematic reviews and randomized controlled trials (RCTs). The principal recommendations apply to the management of *average* patients, and therefore can be expected to apply much of the time: for this reason, we use expressions such as 'clinicians *should* consider…' in the summary tables. We accept that there are many patients and many clinical decision points where unthinking adherence to treatment recommendations may be potentially harmful. In situations where the evidence is weaker we have noted management options, being aware that implementation will depend upon clinician experience, patient clinical features and preference, and local circumstance (Haynes *et al*., 2002). Some of our recommendations may be regarded as standards of clinical care that are driven by ethical considerations or custom and practice: these standards are intended to be applied rigidly.

Guideline process

These guidelines are the final result of a British Association for Psychopharmacology (BAP) consensus meeting on 20-21 May 2004 which included experts in the field and representatives of user groups (all those who attended are listed in the acknowledgments). Brief presentations were made on key areas, with greatest emphasis on systematic reviews and RCTs. This was followed by discussion of important issues, in order to identify areas of consensus or uncertainty. A literature review was then performed to validate the consensus points. This was circulated to the participants and other interested parties, together with a

summary of the recommendations and their strength, based on the level of evidence. Wherever possible feedback was incorporated into the final version of the guidelines. Given the range and depth of the subject area it was not possible for all participants in the wider group to achieve full consensus on all points.

Literature Search

All the consensus points and the guideline recommendations can be linked to relevant evidence through the literature review. It was not possible to perform a systematic review of all possible data from primary sources. Existing systematic reviews and RCTS were identified from MEDLINE and EMBASE searches and from the Cochrane Database, as well as from recent previous guidelines (Ballenger *et al*., 1998 [a], 1998 [b]; Ballenger *et al*., 2001; Bandelow *et al.*, 2002; Allgulander *et al*., 2003; Greist *et al.*, 2003; Pollack *et al.*, 2003; Stein *et al.*, 2004; Van Ameringen *et al.*, 2003; Ballenger *et al*., 2004) through cross-referencing, and by discussion with experts in the field.

STRENGTH OF EVIDENCE AND RECOMMENDATIONS FOR GUIDELINES

As in previous BAP guidelines, the categories of evidence for causal relationships and grading of recommendations are taken from the methodology of the North of England Evidence-Based Guideline Development Project undertaken by the Centre for Health Services Research, University of Newcastle upon Tyne and Centre for Health Economics, University of York (Shekelle *et al*., 1999).

Evidence categories

Evidence categories are adapted from the US Agency for Health Care Policy and Research Classification (US Department of Health and Human Services, 1992). Six categories are available, when considering causal relationships and treatments, and we have proposed four categories for observational findings and associations (See Table 1).

INSERT TABLE ONE ABOUT HERE

Strength of recommendations

Recommendations are graded as shown in Table 1. Weaker levels of recommendations (B, C or D) do not necessarily imply a reduced level of clinical importance. As in previous recommendations (Goodwin *et al.*, 2003) we have included a category S (representing a standard of care), denoting a recommendation that incorporates an important clinical consensus on good practice rather than factual evidence.

RANGE AND AIM OF THE GUIDELINES

We anticipate that the content of the guidelines will be relevant to all doctors treating patients with anxiety disorders, in primary and secondary medical care settings. Each of the principal disorders - generalised anxiety disorder (GAD), panic disorder (PD), social phobia (also known as social anxiety disorder, SAD),

post-traumatic stress disorder (PTSD), and obsessive-compulsive disorder (OCD) - is considered in turn, following key steps in management (acute treatment; continuation treatment; prevention of relapse; combination with psychological approaches; treatment resistance).

We anticipate that the guidelines will prove most useful in informing treatment decisions in primary and secondary care regarding pharmacological management in patients aged between 18-65 years. The type and prevalence of anxiety disorders changes during childhood and adolescence (Costello *et al*., 2003) and the mean age of onset of adult patients with anxiety disorders varies between diagnoses. Nevertheless many adult patients describe an onset of symptoms in childhood or adolescence, and certain recommendations (for example those pertaining to obsessive-compulsive disorder) will be potentially applicable to adolescent patients. Similarly, recommendations that are applicable to adult patients do not necessarily become invalid once they exceed their sixty-fifth birthday.

We have considered those guidelines developed by the National Institute for Clinical Excellence for generalised anxiety disorder, panic disorder, post-traumatic stress disorder, and obsessive-compulsive disorder (NICE, www.nice.org.uk), and those from other organisations, such as the recent statements from the World Federation of Societies of Biological Psychiatry (Bandelow *et al.*, 2002) and the World Council on Anxiety (Allgulander *et al*., 2003; Greist *et al.*, 2003; Pollack *et al.*, 2003; Stein *et al.*, 2003; Van Ameringen *et al.*, 2003).

There is often a tension between existing established clinical practice and the possible implications of new research for changing practice. Existing practice may be accepted on the basis of prolonged clinical experience and by extension of a related proven indication; new treatments may have superior efficacy to placebo in methodologically robust RCTs, but lack comparator data against current treatment. We have highlighted where this tension is greatest, but do not wish to impose specific treatment recommendations that may prove premature.

EPIDEMIOLOGY OF ANXIETY SYMPTOMS AND DISORDERS

Anxiety symptoms are common in the general population and in primary and secondary medical care. Symptoms may be mild, transient and without associated impairment in social and occupational function, but many patients are troubled by severe and persistent symptoms that cause significant personal distress, impair function and reduce quality of life. To meet the diagnosis of an anxiety disorder, patients have to experience a certain number of symptoms for more than a minimum specified period, the symptoms causing significant distress, with an associated impairment in everyday function. Most research has used the diagnostic categories for anxiety disorders in the Fourth Edition of the Diagnostic and Statistical Manual (DSM-IV) (American Psychiatric Association, 1994) which are broadly similar to those in the Tenth Edition of the International Classification of Diseases (ICD-10) (World Health Organisation, 1992); we give simplified versions of the disorders in Table 2.

INSERT TABLE TWO ABOUT HERE

Epidemiological studies in the general population aged 18-65 years (I) indicate that when taken together anxiety disorders have a 12-month period prevalence of approximately 15%, and a lifetime prevalence of approximately 21% (Wittchen and Jacobi, 2005). Individual disorders are less frequent, with estimated 12-month prevalence rates ranging between 0.3% (OCD) and 7.6% (specific phobia), and estimated lifetime prevalence rates between 0.8% (OCD) and 13.2% (specific phobia) (Table 3). The age and sex distribution of individual disorders varies: for example, specific phobias are markedly more common in women than men across all age bands, whereas panic disorder is almost as frequent in men and women aged 51-65 years. Due to this variation within individual anxiety disorders, the pattern for all disorders taken together is fairly constant with an overall female: male ratio of approximately 2:1 across the age range. Studies in primary care suggest approximately 50% significantly improve over 6-16 months (II) (Ronalds *et al*., 1997; Ormel *et al*., 1991, 1993) but complete recovery is relative rare. Severity, duration of illness and ongoing social adversity were associated with lack of improvement (II) (Ronalds *et al*., 1997). Long-term follow-up of participants in 8 studies of cognitive behavior therapy (CBT) for anxiety disorders found that 52% had at least one diagnosis, with significant levels of comorbidity and health scores comparable to the lowest 10% of the population (Durham *et al*, 2005). A US longitudinal study indicates that the likelihood of recovery from GAD is significantly less than that of recovering from major depression (II) (Yonkers *et al*., 2000).

INSERT TABLES THREE AND FOUR ABOUT HERE

Co-existing depressive symptoms are common, particularly in patients with severe anxiety, and many patients simultaneously fulfil diagnostic criteria for anxiety and depressive disorders, this pattern often being named ‘co-morbidity’. Cross-sectional studies in European community and clinical settings (Fehm *et al*, 2005; Goodwin *et al*, 2005; Lieb *et al*, 2005) and in UK primary medical care (Nease and Aikens, 2003) reveal a significant correlation between measures of anxiety and depressive symptom severity. Epidemiological studies indicate that approximately 62% of subjects with an anxiety disorder fulfil diagnostic criteria for another psychiatric disorder, most commonly depression, which is present in around 33.5% of subjects with any disorder being considerably more common in subjects with GAD and social phobia (I) (Wittchen and Jacobi, 2005). In practice the presence of marked co-existing depressive symptoms is an important consideration in treatment decisions in primary and secondary medical care. Where the anxiety symptoms are present within the context of a depressive disorder, drug treatment of the depression is effective in improving anxiety (Anderson *et al*., 2000) . Where depression follows or is comorbid with an anxiety disorder it is generally indicative of greater severity and associated with poorer prognosis (II) (Albus and Scheibe, 1993; Brown *et al*., 1995; Cowley *et al*., 1996; Shalev *et al*., 1998; Martinsen *et al*., 1998; Rief *et al*., 2000; Erwin *et al*., 2002). Clinical practice has been to direct treatment towards the depressive disorder in the first instance, choosing treatments that also have action against the

symptoms of the anxiety disorder; this has been shown to improve outcome in OCD, with better response to sertraline than desipramine (Ib) (Hoehn-Saric *et al*., 2000).

DETECTION AND DIAGNOSIS OF ANXIETY DISORDERS

In drawing up the guidelines we are aware that there are often practical and conceptual difficulties in delineating specific anxiety disorders, ranging from overlap with milder degrees of depression ('mixed anxiety and depression') to co-morbidity between anxiety disorders. The diagnosis of some anxiety disorders has also been criticised, with comments relating to potential legal implications (e.g. PTSD) or so-called medicalisation of normal variation (e.g. social phobia). Nevertheless the current diagnostic classification provides a useful clinical delineation of distressing and debilitating symptom clusters that, crucially for an evidence-based approach, has been used for patient selection in treatment trials and therefore allows assessment of clinical benefit.

From relatively sparse evidence, the detection of a mental health problem in patients with anxiety disorders in primary care varies between studies, but is probably similar to that for depression with values ranging from 56 % to 92%, the differing disorders varying in recognition rates (I) (Tiemens *et al*., 1996; Wittchen *et al*., 2003; Ormel *et al*., 1990; Ronalds *et al*., 1997). Co-morbidity of anxiety with depression improves the detection of mental health problems (Sartorius *et al*., 1996; Wittchen *et al*., 2002). However correct identification of which anxiety disorder is present and subsequent active treatment may be less good for anxiety disorders than for depression (Wittchen *et al*., 2002).

Screening questions and self-report questionnaires are fairly sensitive but not very specific, making the value of routine screening for anxiety disorders questionable (Goldberg and Bridges, 1987, Dowell *et al*., 1990, Lewis and Wessely 1990; Parkerson & Broadhead, 1997; Bjelland *et al*., 2002; Wittchen and Boyer, 1998). The Hospital Anxiety and Depression Scale (Zigmond and Snaith, 1983) is a widely used brief self-report scale with anxiety and depression sub-scales (7 items each); it has sensitivity and specificity of about 0.8 for both sub-scales using a cut-off of 8 or above (Bjelland *et al*., 2002) making it reasonable for use in high risk populations. The World Health Organisation has recently published guidance on the identification and management of mental health problems in primary health care (World Health Organisation, 2004). A suggested simple algorithm for initial delineation of anxiety disorder subtypes is suggested in Figure 1.

INSERT FIGURE ONE ABOUT HERE

GENERAL ISSUES IN THE TREATMENT OF ANXIETY DISORDERS

When to treat

Anxiety symptoms exist on a continuum and many people with milder degrees of anxiety, particularly of recent onset and associated with stressful life events but with little disability will experience an improvement without specific intervention (II) (Mann *et al*., 1981). In milder forms of depression the benefit of antidepressant treatment over placebo is difficult to demonstrate (Ia) (Khan *et al*., 2005) and the same is likely to be true of anxiety disorders. Randomised controlled trials across a range of anxiety disorders often demonstrate a high placebo response (e.g. Oosterbaan *et al*., 2001; Huppert *et al*., 2004) indicating that non-specific effects can play a large part in improvement. However the chronic nature and associated disability of many disorders means that most patients who fulfil diagnostic criteria for an anxiety disorder are likely to benefit from some form of treatment.

This need for treatment is determined by the severity and persistence of symptoms, the presence of comorbid mental disorder or physical illness, the level of disability and impact on social functioning, concomitant medication, and a history of good response to, or poor tolerability of, previous treatment approaches. Because randomised controlled trials are generally performed in rather restricted patient groups with little comorbidity or other features commonly seen in conventional clinical samples, study findings may not necessarily simplify treatment decisions in primary or secondary care. Choice of treatment is affected by the patient characteristics (such as previous response or contraindications), the evidence base supporting its use, patient and physician preference, and the local availability of that proposed intervention (IV) (Haynes *et al*., 2002). Although there is considerable overlap between effective therapies for the different anxiety disorders there are also differences (discussed in the individual sections) and separate evidence bases for treating each disorder (Ib). For this reason identifying individual disorders is helpful.

The principal options include a range of pharmacological treatments, psychological therapies based on exposure and cognitive methods, and self-help strategies.

Pharmacological treatments

Many patients are cautious about starting psychotropic drug treatment, fearing problems such as unwanted sedation or the development of physical or psychological dependence, and doctors should discuss the relative benefits and risks of proposed interventions before initiating a treatment prescription. It should be emphasised that response is not immediate; that transient worsening of symptoms can sometimes occur; that prolonged courses are needed to maintain an initial treatment response and minimise the risk of relapse; and that antidepressants (when used) are not “addictive” (Nutt, 2003).

The selection of a particular drug class (and of a specific drug within that class) should be determined principally by the evidence base supporting its use, and also by whether the patient has previous experience of treatment with that compound. The absence of a licensed indication does not necessarily mean an

absence of evidence for the proposed treatment intervention. Conversely it should not be assumed that all drugs within a class are likely to be efficacious in the treatment of a particular anxiety disorder, when one member of that class has proven efficacy. The presence of significant coexisting depressive symptoms should guide treatment choice towards prescription of antidepressant drugs rather than benzodiazepines. The major adverse effects and problems associated with prescription of psychotropic drugs mentioned in the sections on treatment of individual anxiety disorders are summarised in Table 5.

INSERT TABLE FIVE ABOUT HERE

Selective serotonin reuptake inhibitors and venlafaxine

Selective serotonin reuptake inhibitors (SSRIs) have broad spectrum anxiolytic efficacy and are generally well tolerated, and for this reason generally represent the first-line pharmacological treatment approach in anxiety disorders. However SSRIs have potentially troublesome adverse effects, including initial increased nervousness, insomnia, and nausea (Ib) (Baldwin and Birtwistle, 1998) and sexual dysfunction (Ib) (Baldwin, 2004). When stopped abruptly, most SSRIs can produce a discontinuation syndrome characterised by dizziness, insomnia and flu-like symptoms (Ib) (Schatzberg *et al*., 1997). The serotonin-noradrenaline reuptake inhibitor (SNRI) venlafaxine is also associated with discontinuation symptoms after abrupt withdrawal (Ib) (Silverstone and Ravindran, 1999).

The United Kingdom Committee on Safety of Medicines (CSM) recommends that patients are monitored frequently and carefully when starting or increasing the dosage of SSRI and other antidepressant treatments (CSM, 2004), and recent guidance from the National Institute of Clinical Excellence (NICE, 2004) on the treatment of panic disorder and generalised anxiety disorder recommends that patients are reviewed at fortnightly intervals in the first six weeks of treatment. Due to concerns about its potential safety in overdose, the CSM currently recommends that venlafaxine treatment should only be initiated by specialist mental health practitioners, requires pre-treatment ECG and blood pressure measurement, and is avoided in patients with cardiac disease, electrolyte imbalances or hypertension (IV) (CSM, 2004). Current advice regarding the relative safety of antidepressants after overdose has however been questioned (Nutt, 2005a).

Tricyclic antidepressants and monoamine oxidase inhibitors

Certain tricyclic antidepressants (TCAs) are efficacious in some anxiety disorders, but are associated with a greater burden of adverse effects than either SSRIs or venlafaxine, and for this reason TCAs should only be used after non-response to or poor tolerance of SSRI or SNRI treatment. TCAs should be avoided in patients considered at risk of suicide, due to their potential cardiac and CNS toxicity after overdose (Nutt, 2005a). Stopping TCAs abruptly can also cause a discontinuation syndrome, and pharmacokinetic interactions can limit their use in patients taking concomitant medication. The irreversible monoamine oxidase inhibitor (MAOI) phenelzine has proven efficacy in panic disorder and SAD, but side effects and

the need to follow dietary restrictions limit its use, and it should only be considered when patients have not responded to or proved intolerant of other treatment approaches. Moclobemide has some efficacy in panic disorder and social phobia, and the reversibility of its action reduces the need for dietary restrictions.

Benzodiazepines

Some benzodiazepines have proven efficacy in panic disorder, GAD and social phobia, but they can cause troublesome sedation in acute treatment, and dependence can occur (especially in predisposed patients) with longer-term use (Royal College of Psychiatrists, 2005). Discontinuation symptoms have their peak severity at 2 days for short half-life and 4-7 days for long-half life benzodiazepines (Rickels *et al*., 1990). As they have limited efficacy in relieving depressive symptoms (Ib) (Rickels *et al*., 1991), antidepressants should be preferred in patients with significant co-morbid depression. Benzodiazepines will usually be reserved for the treatment of patients who have not responded to at least two treatments (such as after non-response to both an SSRI and a psychological treatment) but concerns about potential problems in long term use should not prevent their use in patients with persistent, severe, distressing, and impairing anxiety symptoms (Nutt, 2005b).

Other agents

The side effect burden and currently limited evidence base for antipsychotic drugs in the treatment of anxiety disorders (with efficacy mainly for certain antipsychotics after non-response to SSRI treatment in OCD) means they have only a limited role in overall patient management (El-Khayat and Baldwin, 1998). Certain non-benzodiazepine anticonvulsant drugs have proven efficacy in some anxiety disorders (principally GAD and social phobia) but there have been few randomised controlled trials and the potential for development of tolerance or dependence with prolonged use in anxiety disorders is not certain (Ashton and Young, 2003): for these reasons, anticonvulsants would normally be restricted for use in patients who have not responded to or proved intolerant of treatments with a more substantial evidence base.

Psychological treatments

Many patients have a preference for psychological treatments over pharmacological approaches. Certain forms of psychotherapy, such as exposure therapy, cognitive therapy and cognitive-behaviour therapy (CBT), have proven efficacy in the treatment of anxiety disorders; but others, such as psychodynamic psychotherapy, have not been found superior to control interventions, or have not been subject to controlled investigations. Many evaluations of the efficacy of psychological treatments have not employed an optimal psychological placebo control treatment: the use of waiting list controls is inadequate. As with pharmacological approaches, it should be emphasised that response is not immediate; that transient

worsening of symptoms can sometimes occur; that prolonged courses are often needed to maintain an initial treatment response; that dependence on the therapist may occur, with problems when treatment is stopped; and that encouraging short-term outcomes are no guarantee of good outcomes over the longer-term.

In general, the efficacy of psychological and pharmacological approaches is similar in the acute treatment of anxiety disorders. In some studies, relapse rates are lower after an initial response to cognitive therapy with exposure than after response to drug treatment. For these reasons, patients should be offered a choice of treatment approaches, selection being affected by patient clinical features, needs and preference, and by the local availability of services able to offer evidence-based psychological interventions. It is uncertain whether combining psychological and pharmacological treatments is associated with greater efficacy, than either treatment given alone. As such it may be best to plan sequential steps in patient management (National Institute for Clinical Excellence, 2004). Previous concerns that prescription of psychotropic drugs might reduce the efficacy of psychological treatment are probably unfounded (Lader and Bond, 1998).

When psychological treatment is recommended, it should be only be delivered by suitably trained and supervised staff, able to demonstrate that their clinical practice adheres to evidence-based treatment protocols (National Institute for Clinical Excellence, 2004). The relative scarcity of such individuals reduces the range of treatment options open to patients and doctors.

A general range of 8-20 hours of sessions of CBT may be needed in the treatment of anxiety disorders. In GAD and panic disorder, a typical treatment course consists of approximately 16-20 hours, up to half of which can be conducted by the patient in supervised 'homework' sessions, over a period of approximately four months (National Institute for Clinical Excellence, 2004). In PTSD, a standard course of psychological treatment might involve 8-12 sessions of trauma-focused CBT, delivered at weekly intervals (National Institute for Clinical Excellence, 2005). In OCD, a typical initial treatment course might include approximately 16 hours of intervention based on exposure and response prevention, with longer and more intensive treatment in housebound patients (National Institute for Clinical Excellence, 2005).

The role of self-help and other approaches in anxiety disorders

Patient preference and the sub-optimal effects of pharmacological or psychological treatment approaches have encouraged the development of a range of self-help techniques and therapies in anxiety disorders. Many patients and their carers derive considerable support from local self-help groups and national self-help organisations (such as the United Kingdom organisations the National Phobics Society, No Panic, and

Obsessive Action). There have been relatively few randomised controlled trials of the efficacy and acceptability of self-help approaches and few studies have been conducted in diagnostically homogenous groups, with reliable outcome measures and robust statistical analysis.

A systematic review of six randomised controlled trials indicates that self-help is efficacious in primary care patients with mixed anxiety disorders, greater efficacy being seen with more detailed instruction in use of self-help manuals (Ia) (van Boeijen *et al*., 2005). Bibliotherapy (use of self-help books) appears efficacious in patients with 'clinically significant emotional disorders', but the efficacy of self-help groups in this population is not established (Ia) (den Boer *et al*., 2004). A systematic review of complementary therapies finds some evidence for the efficacy of bibliotherapy (in specific phobia), relaxation training (in GAD and panic disorder), exercise (in GAD) and use of Kava [now withdrawn due to hepatotoxicity] (in GAD) (Ia) (Jorm *et al*., 2004). A systematic review of counselling for primary care patients with emotional problems (including anxiety, depression, and 'stress') indicates that the short-term (but not long-term) efficacy of counselling was greater than that of standard general practitioner care, with or without antidepressant treatment (Ia) (Bower *et al*., 2001).

In discrete anxiety disorders, there is some evidence for the efficacy of a broad range of interventions, including bibliotherapy (Ib) (Lidren *et al*., 1994), exercise therapy (Ib) (Broocks *et al*., 1998) and Internet-based computerised cognitive therapy (Ib) (Carlbring *et al*., 2003) in panic disorder; and computer-guided behaviour therapy (Ib) (Greist *et al*., 2002) and possibly yogic meditation (Ib) (Shannahoff-Khalsa *et al*., 1999) in OCD. The efficacy of self-help techniques in other anxiety disorders has not been examined extensively: it was no more efficacious than repeated assessment in post-traumatic stress disorder (Ehlers *et al*., 2003). The UK National Institute for Clinical Excellence concluded that there was insufficient evidence to recommend the general introduction of computerised cognitive behaviour therapy for anxiety symptoms or disorders (Ia) (NICE, 2002).

Cost-effectiveness of treatment

Anxiety disorders are associated with a substantial economic burden, both for the health system and (especially) for the wider society in terms of productivity losses (I) (Souetre *et al*., 1994; Salvador-Carulla *et al*., 1995; Rice and Miller, 1998; Greenberg *et al*., 1999; Andlin-Sobocki & Wittchen, 2005), but there have been few evaluations of the cost-effectiveness of treatment in anxiety disorders. Treatment costs account for a small proportion of the overall costs of health care (Durham *et al* , 2005). An economic evaluation of the cost-effectiveness of differing forms of secondary care provision for Vietnam veterans with PTSD found higher levels of patient satisfaction, reduced overall costs and reduced likelihood of symptomatic relapse with short-stay, compared to long-stay inpatient provision (Ib) (Fontana and Rosenheck, 1997). A randomised controlled trial of a collaborative care intervention (education, surgery visits from a psychiatrist) in United States primary care patients with panic disorder found that patients

subject to such intervention experienced proportionately more anxiety-free days over 12 months at reduced overall costs compared to a 'treatment as usual' control group (Ib) (Katon *et al*., 2002). A randomised controlled trial of computerised CBT versus standard care in United Kingdom primary care patients with depression and/or anxiety disorders found that outcomes were improved (Ib) (Proudfoot *et al*., 2004), service costs were higher but lost employment costs lower in the intervention group (Ib) (McCrone *et al*., 2004). The computerised CBT appeared to be cost-effective by broad (health system-wide and societal) criteria. Decision modeling indicates that venlafaxine is more cost-effective than diazepam in the treatment of generalised anxiety disorder (IIb)(Guest *et al.,* 2005). In general, economic models suggest that evidence-based treatment of anxiety disorders would produce greater population health gain at a similar cost to current care (II) (e.g. Patel *et al*., 2002; Issakidis *et al*., 2004; NICE, 2005) – consequences which are likely to be seen as a cost-effective use of resources.

GENERALISED ANXIETY DISORDER (GAD)

Recognition and diagnosis

Although generalised anxiety disorder (GAD) is amongst the most common mental disorders in primary care, and is associated with increased use of health services, it is often not recognized (I); possibly because only a minority of patients present with anxiety symptoms (most patients with present physical symptoms), and doctors tend to overlook anxiety unless it is a presenting complaint (I) (Ormel *et al*., 1990). The disability associated with GAD is similar to that with major depression (I) (Wittchen *et al*, 2000). Patients with 'co-morbid' depression and GAD have a more severe and prolonged course of illness and greater functional impairment (I) (Kessler *et al*., 1999), and a greater chance of being recognized as having mental health problems, though not necessarily as having GAD (Weiller *et al*., 1998; Wittchen *et al*, 2002).

Acute treatment

Systematic reviews and placebo-controlled RCTs indicate that some SSRIs (escitalopram, paroxetine and sertraline), the SNRI venlafaxine, some benzodiazepines (alprazolam and diazepam), the tricyclic imipramine, and the 5-HT_{1A} partial agonist buspirone are all efficacious in acute treatment (Ia) (National Institute for Clinical Excellence, 2004; Baldwin and Polkinghorn, 2005; Kapczinski *et al*., 2003, Mitte *et al*., 2005). Other compounds with proven efficacy (Ib) include the antipsychotic trifluoperazine (Mendels *et al*., 1986), the antihistamine hydroxyzine (Lader and Scotto, 1998; Llorca *et al*., 2002), the anticonvulsant pregabalin (Feltner *et al*., 2003), and the sigma-site ligand opipramol (Möller *et al*., 2001). Treatments with unproven efficacy in GAD include the beta-blocker propranolol (Ib) (Meibach *et al*., 1987).

There have been few comparator-controlled studies, and most reveal no significant differences in efficacy between active compounds (Mitte *et al*., 2005): however, escitalopram (20 mg/day) has been found significantly superior to paroxetine (20 mg/day) (Ib) (Baldwin *et al.*, 2004), and venlafaxine (75-225 mg/day) superior to fluoxetine (20-60 mg/day) on some outcome measures in patients with co-morbid GAD and major depression (Ib) (Silverstone and Salinas, 2001). Psychological symptoms of anxiety may respond better to antidepressant drugs than to benzodiazepines (Baldwin and Polkinghorn, 2005; Meoni *et al*, 2004). Fixed-dose RCTs provide some evidence of a dose-response relationship with escitalopram, paroxetine and venlafaxine (Ib) (Baldwin *et al*., 2004; Rickels *et al.*, 2003; Allgulander *et al*., 2001; Rickels *et al*., 2000).

Long term treatment

Double-blind studies indicate that continuing with SSRI or SNRI treatment is associated with an increase in overall response rates (Ib): from 8 to 24 weeks with escitalopram or paroxetine (Bielski *et al*., 2004); from 4 to 12 weeks with sertraline (Allgulander *et al*., 2004) and from 8 to 24 weeks with venlafaxine (Montgomery *et al*., 2002). Placebo-controlled relapse-prevention studies in patients who have responded to previous acute treatment reveal a significant advantage for staying on active medication (escitalopram or

paroxetine), compared to switching to placebo, for up to six months (Ib) (Stocchi *et al*., 2003; Allgulander *et al*., 2005).

Comparative efficacy of psychological, pharmacological, and combination treatments

Drug or psychological treatments, delivered singly, have broadly similar efficacy in acute treatment (Ia) (National Institute for Clinical Excellence, 2004; Gould *et al*., 1997). Relapse rates are lower with cognitive behaviour therapy than with other forms of psychological treatment (Ib) (Fisher and Durham, 1999; Durham *et al*., 2003), but the comparative efficacy of drug and psychological approaches over the long-term is not established. It is uncertain whether combining drug and psychological treatments is associated with greater overall efficacy than with either treatment, given alone (Ib) (Lader and Bond, 1998; Power *et al*., 1990; Durham and Turvey, 1987).

When initial treatments prove unhelpful

There is no clear evidence for an increase in response with dose escalation after an initial non-response to a lower dose. Switching between treatments with proven efficacy may be helpful (National Institute for Clinical Excellence, 2004).

PANIC DISORDER (with and without agoraphobia)

Recognition and diagnosis

Patients with panic disorder are often not recognized in primary or secondary medical care, despite their considerable use of emergency, cardiac, gastrointestinal, neurological and mental health services (I) (Roy-Byrne *et al*., 1999). There is considerable co-morbidity with other anxiety disorders, bipolar disorder and major depression; co-morbid panic and depression being associated with greater disability and impairment, and increased use of health services (I) (Roy-Byrne *et al*., 2000). Accurate diagnosis is dependent upon establishing the presence of initially unexpected panic attacks (with comparative freedom from anxiety between attacks) and the associated concern, worry or change in behaviour due to the anticipated risk of further attacks. In primary and secondary medical care, very few patients fulfill diagnostic criteria for agoraphobia without panic disorder; in coexisting panic and agoraphobia, some (II) (Langs *et al*., 2000; Goisman *et al*., 1995) but not all (II) (Amering *et al*., 1997; Lelliott *et al*., 1989) studies suggest agoraphobia is a consequence of the severity of a primary panic disorder.

Acute treatment

Systematic reviews demonstrate that a range of pharmacological, psychological and combination interventions are effective in panic disorder (Ia) (Van Balkom *et al*., 1997; Bakker *et al*., 1998). Randomised double-blind placebo-controlled trials of antidepressants indicate that all SSRIs (Ia) (escitalopram, citalopram, fluoxetine, fluvoxamine, paroxetine and sertraline); some TCAs (Ia) (clomipramine, imipramine); and some benzodiazepines (Ia) (alprazolam, clonazepam, diazepam and lorazepam) are efficacious in acute treatment (Otto *et al*., 2001; Den Boer, 1998). Other antidepressants with proven efficacy include the SNRI venlafaxine (Ib) (Pollack *et al*., 2004), the selective noradrenaline reuptake inhibitor reboxetine (Ib) (Versiani *et al*., 2002), and the MAOI brofaromine (no longer in development) (Ib) (Van Vliet *et al*., 1993).

Comparator-controlled studies provide some evidence for efficacy of mirtazapine (Ib)(Ribeiro *et al*., 2001) and moclobemide (Ib) (Tiller *et al*., 1999); and suggest that escitalopram is superior to citalopram (Ib) (Stahl *et al*., 2003), and some SSRIs (paroxetine, fluvoxamine) to some noradrenaline reuptake inhibitors (reboxetine, maprotiline) (Ib) (Bertani *et al*., 2004; Den Boer *et al*., 1988). The side effect burden associated with SSRI treatment in panic disorder is somewhat less than that with other classes of psychotropic drug (Ib) (Baldwin and Birtwistle, 1998). Treatments with unproven efficacy in panic disorder include the beta-blocker propranolol (Ib) (Munjack *et al*., 1989); buspirone (Ib) (Sheehan *et al*., 1988); and antihistamines or antipsychotics (IV) (National Institute for Clinical Excellence, 2004). Fixed-dose RCTs with SSRIs provide only limited evidence of a dose-response relationship, for fluoxetine (Ib) (Michelson *et al*., 1998); and for paroxetine (Ib) (Ballenger *et al.*, 1998).

Long-term treatment

Double-blind studies indicate that continuing SSRI or clomipramine treatment from 12 weeks to 52 weeks is associated with an increase in overall treatment response rates (Ib) (Lecrubier and Judge, 1997; Lepola *et al*., 1998), (IV) (Ballenger *et al*., 1998). Placebo-controlled and other relapse-prevention studies in patients who have responded to previous acute treatment reveal a significant advantage for staying on active medication (fluoxetine, paroxetine, sertraline, imipramine), compared to switching to placebo for up to six months (Ib) (Michelson *et al*., 1999; Dannon *et al*., 2004; Rapaport *et al*., 2001; Mavissakalian and Perel, 1999).

Comparative efficacy of psychological, pharmacological, and combination treatments

Pooled analyses and randomised controlled trials indicate that drug and psychological treatments, delivered singly, have broadly similar efficacy in acute treatment, and suggest CBT may be superior to TCAs in preventing symptomatic relapse (Ia) (Van Balkom *et al*., 1997). Overall, it is uncertain whether combining drug and psychological treatments is associated with greater overall efficacy than with either treatment, given alone (Ia) (Ib) (Van Balkom *et al*., 1997; Barlow *et al*., 2000). Combination treatment with exposure was superior to imipramine given alone (Mavissakalian *et al.,* 1983). Combination treatment with paroxetine was superior to psychological treatment alone, in studies of bibliotherapy (Ib) (Dannon *et al.*, 2002), 'very brief' CBT (Ib) (Stein *et al*., 2000) and basic CBT (Ib) (Oehrberg *et al*., 1995); and buspirone may enhance the short-term efficacy of CBT (Ib) (Cottraux *et al.*, 1995).

When initial treatments prove unhelpful

There is no clear evidence for the benefit of dose escalation after an initial non-response to low doses. Switching between treatments with proven efficacy may be helpful (National Institute for Clinical Excellence, 2004). Augmentation of CBT with paroxetine may be superior to continuing with CBT alone, in patients who did not previously respond over 15 sessions (Kampmann *et al*., 2002); and augmentation of fluoxetine with pindolol was superior to continued monotherapy with fluoxetine (Hirschmann *et al*., 2000). The addition of group CBT may be beneficial in non-responders to pharmacological approaches (Otto *et al*., 1999; Pollack *et al.*, 1994; Heldt *et al*., 2003). There is only limited evidence for augmentation strategies involving benzodiazepines, mood stabilizers or antipsychotic drugs.

SOCIAL PHOBIA (also known as social anxiety disorder)

Recognition and diagnosis

Social phobia is often not recognized in primary medical care (I), where it is often misconstrued as shyness (Weiller *et al*., 1996). It can be distinguished from shyness by the levels of personal distress and associated social and occupational impairment (I) (Stein *et al*., 2000). The generalised sub-type is associated with greater disability and higher co-morbidity but patients with the non-generalised form can also be substantially impaired (I) (Kessler *et al.*, 1998; Eng *et al.*, 2000). Distinguishing social phobia from avoidant personality disorder is difficult and many patients fulfill diagnostic criteria for both conditions (I) (McGlashan *et al*., 2000). Patients can present with symptoms arising from co-morbid conditions (especially depression), rather than with characteristic social anxiety and avoidance (IV) (Lecrubier *et al*, 2000). Many patients use alcohol and drugs of misuse in an attempt to relieve symptoms (I) (Patel *et al*, 2002).

Acute treatment

Systematic reviews and placebo-controlled RCTs indicate that a range of treatment approaches are efficacious: including CBT (Ia) (Heimberg, 2002), SSRIs (escitalopram, fluoxetine, fluvoxamine, paroxetine and sertraline), the SNRI venlafaxine, the MAOI phenelzine, and the RIMA moclobemide. Some benzodiazepines (bromazepam and clonazepam) and anticonvulsants (gabapentin and pregabalin) and the antipsychotic olanzapine are also efficacious in acute treatment (Ia) (Blanco *et al*., 2003); (Ib) (Pande *et al*., 2004; Davidson et al., 2004[a]; Davidson et al., 2004[b]; Lader *et al.*, 2004). Treatments with unproven efficacy in generalised social phobia include the TCA imipramine, buspirone, and the beta-blocker atenolol (Ib) (Blanco *et al*., 2003). There have been few comparator-controlled studies: escitalopram (20 mg/day) has been found superior to paroxetine (20 mg/day) (Lader *et a.l*, 2004), whereas venlafaxine (75-225 mg/day) and paroxetine (20-50 mg/day) had similar efficacy in two placebo-controlled studies (Allgulander *et al.*, 2004; Liebowitz *et al*., 2005). Fixed-dose RCTs do not provide convincing evidence of a dose-response relationship (Ib) (Liebowitz *et al.*, 2002; Lader *et al.*, 2004). Post-hoc analysis of the RCT database with paroxetine indicates that many non-responders to treatment at eight weeks become responders with four further weeks of double-blind treatment (Stein *et al.*, 2002).

Long-term treatment

Double-blind studies indicate that continuing SSRI or SNRI treatment from 12 weeks to 24 weeks is associated with an increase in overall treatment response rates (Ib) (Stein *et al.*, 2003; Lader *et al.*, 2004; Stein *et al*., 2005). Placebo-controlled relapse-prevention studies in patients who have responded to previous acute treatment reveal a significant advantage for staying on active medication (clonazepam, escitalopram, paroxetine, sertraline), compared with switching to placebo for up to six months (Ib) (Blanco *et al*., 2003).

Comparative efficacy of pharmacological, psychological and combination treatments

Drug and psychological treatments, delivered singly, have broadly similar efficacy in acute treatment (Ia) (Heimberg *et al*, 1998; Otto *et al.*, 2000; Blomhoff *et al*., 2001; Davidson *et al.*, 2004). However, acute treatment with cognitive therapy (group or individual) may be associated with reduced risk of symptomatic relapse at follow-up (Ib) (Liebowitz *et al*., 1999; Clark *et al*., 2003; Haug *et al*., 2003). It is uncertain whether combining drug and psychological treatments is associated with greater overall efficacy than with either treatment, given alone (Ib) (Blomhoff *et al*., 2001; Clark *et al*., 2003; Davidson *et al*., 2004).

When initial treatments prove unhelpful

There is no clear evidence for the benefit of dose escalation after an initial non-response. Switching between treatments with proven efficacy may be helpful (IIb) (Altamura *et al.*, 1999). Open-label augmentation of SSRI treatment with buspirone has been reported as beneficial (IIb) (Van Ameringen *et al.*, 1996), but a placebo-controlled pindolol augmentation study with paroxetine treatment indicates that the addition of pindolol was not associated with greater treatment efficacy (Ib) (Stein *et al*., 2001).

SIMPLE PHOBIA (also known as specific [or isolated] phobia)

Recognition and diagnosis

Specific fears of objects, animals, people or situations are widespread (having a lifetime prevalence of 49.5% in the National Co-morbidity Survey), but only a minority (24.2%) of affected individuals reach diagnostic criteria for simple phobia (I) (Kessler *et al*., 1994). The presence of multiple fears is associated with increasing impairment, and co-morbidity with other anxiety disorders (I) (Kessler *et al*., 1994). Many patients with specific fears only present for treatment at the time of changes in domestic or occupational responsibilities.

Treatment

Most specific fears respond to simple psychological approaches, based on exposure techniques. In vivo exposure with participant modelling appears superior to imaginal exposure (Ib) (Ost *et al*., 1997). Most patients respond to psychological approaches, and only few will require other treatment interventions (D). Limited data suggest that paroxetine (Ib) (Benjamin *et al*., 2000) and some benzodiazepines (III) (Uhlenhuth *et al*., 1999) are efficacious in acute treatment of simple phobia. It is unclear whether concomitant use of benzodiazepines enhances or reduces the efficacy of behavioural approaches.

POST-TRAUMATIC STRESS DISORDER (PTSD)

Recognition and diagnosis

The findings of the US National Comorbidity Survey indicate that exposure to traumatic events was common (60.7% of men and 51.2% of women reported exposure to at least one traumatic event) but post-traumatic stress disorder (PTSD) had a lower lifetime prevalence (7.8%) indicating that many are resilient to traumatic adversity (I) (Kessler *et al*., 1995). It shows considerable co-morbidity with other anxiety disorders, depression, and alcohol abuse or dependence, and is associated with increased use of health services, but is often not recognized in primary or secondary care, possibly due to unfamiliarity with the diagnostic criteria. Diagnosis can be established through a history of exposure to trauma (actual or threatened death, serious injury, or threats to the physical integrity of the self or others); a response of intense fear, helplessness or horror; re-experiencing symptoms (commonly intrusive recollections, flashbacks or dreams); avoidance symptoms (such as efforts to avoid activities or thoughts associated with the trauma); and hyper-arousal symptoms (including disturbed sleep, hypervigilance and an exaggerated startle response).

Prevention of post-traumatic symptoms

There is theoretical scope for preventing the emergence of post-traumatic symptoms in people subject to major trauma. Acute administration of propranolol (160 mg/day) was superior to placebo in reducing subsequent post-traumatic symptoms and physiological hyper-activity to reminders of trauma, but not the emergence of PTSD, at 1 month (Ib) (Pitman *et al*., 2002); and a naturalistic study suggests acute administration of propranolol (120 mg/day) prevented the emergence of syndromal PTSD at 2 months (IIa) (Vaiva *et al*., 2003). Acute intravenous administration of hydrocortisone was superior to placebo in preventing emergence of post-traumatic symptoms, both in intensive care patients with septic shock (median interval, 31 months), and in patients undergoing cardiac surgery (interval, 6 months) (Ib) (Schelling *et al*., 2001; 2004). By contrast, early administration of benzodiazepines after trauma may not prevent the emergence of post-traumatic symptoms (IIa) (Gelpin *et al*, 1996). The psychological approach with best evidence of efficacy in prevention of chronic post-traumatic symptoms is trauma-focused CBT, when provided within 6 months of the incident (Ia): approaches with limited efficacy include debriefing, relaxation and supportive psychotherapy (National Institute for Clinical Excellence, 2004).

Acute treatment of chronic PTSD

Systematic reviews demonstrate that a range of pharmacological and psychological approaches are efficacious in acute treatment of PTSD (Ia) (Van Etten and Taylor, 1998; Friedman *et al*., 2000; Stein *et al*., 2004; National Institute for Clinical Excellence, 2005). Randomised placebo-controlled trials provide evidence for the efficacy of some antidepressants (the SSRIs fluoxetine, paroxetine and sertraline; the TCAs amitriptyline and imipramine; the MAOIs phenelzine and brofaromine; and mirtazapine) on some outcome measures (Ia), but the clinical relevance of drug-placebo differences is debatable (National

Institute for Clinical Excellence, 2005). In addition, there is evidence for the efficacy of venlafaxine (Ib) (Davidson *et al*., 2004), nefazodone (Davis *et al*, 2004) and the anticonvulsant lamotrigine (Ib) (Hertzberg *et al*., 1999). A comparator- and placebo-controlled study suggests phenelzine was superior to imipramine, in relieving avoidance symptoms (Ib) (Kosten *et al*., 1991). It is uncertain whether there is a dose-response relationship with any of the compounds with evidence of efficacy. Psychological approaches with proven efficacy include individual trauma-focused CBT and eye movement desensitization and reprocessing (EMDR) (Ia) (Van Etten and Taylor, 1998; National Institute for Clinical Excellence, 2005). Non trauma-focussed psychological treatments and group therapies have not been shown to have proven efficacy, but neither have they been shown to be harmful (Ia) (National Institute for Clinical Excellence, 2005).

Long-term treatment

After a response to acute treatment, continuing with venlafaxine (Ib) (Davidson et al., 2004) or sertraline (IIb) (Londborg *et al*., 2001) treatment over 6 months is associated with a gradual increase in overall treatment response. Placebo-controlled relapse-prevention studies in patients who have responded to previous acute treatment reveal a significant advantage for staying on active medication, for fluoxetine (Ib) (Martenyi *et al*., 2002; Davidson *et al*, 2005) and sertraline (Ib) (Davidson *et al*., 2001).

Comparative efficacy of psychological and drug treatments

There have been very few direct comparisons of the efficacy of psychological and pharmacological treatments, in either acute or long-term treatment. A small unblinded 12-week comparison of paroxetine and trauma-focused CBT (IIa) (Frommberger *et al*., 2004) suggested that CBT may have certain advantages, in reducing post-traumatic and depressive symptoms.

When initial treatments prove unhelpful

There is no clear evidence for dose escalation after an initial non-response. Switching between treatments with proven efficacy may be helpful although there is little evidence (National Institute for Clinical Excellence, 2005). In placebo-controlled augmentation studies in patients who have not responded to antidepressant treatment, there is evidence for the efficacy of the atypical antipsychotic drugs olanzapine (Ib) (Stein *et al*., 2002) and risperidone (in patients with co-existing psychotic symptoms, or aggression) (Ia) (Hamner *et al*., 2003; Monelly *et al*., 2003). An uncontrolled small study suggests that augmentation with the anticonvulsant tiagabine may be beneficial, after initial non-response (IIb) (Taylor, 2003).

OBSESSIVE-COMPULSIVE DISORDER (OCD)

Recognition and diagnosis

Obsessive-compulsive disorder has a lifetime prevalence of approximately 2.0% (I) (Weissman *et al*., 1994). The content of obsessions varies little between countries or cultures (I) (Sasson *et al.*, 1997). The disorder typically follows a chronic course, waxing and waning in severity; and substantial co-morbidity with major depression and anxiety disorders(I) (Rasmussen and Eisen, 1990) and tic disorders (I) (Zohar *et al*., 1992). Distinguishing OCD from obsessive-compulsive personality disorder is difficult and patients may fulfill diagnostic criteria for both conditions (I) (Albert *et al*., 2004). Patients can present with symptoms arising from co-morbid conditions (especially bipolar disorder and major depression), rather than with obsessional ruminations and compulsive rituals (IV) (Angst *et al*, 2000).

Acute treatment

Systematic reviews and meta-analyses of randomised placebo-controlled trials indicate that the TCA clomipramine and the SSRIs (citalopram, fluoxetine, fluvoxamine, paroxetine and sertraline) are efficacious in acute treatment. Psychological approaches with proven efficacy in acute treatment include behaviour therapy based on exposure techniques and cognitive therapy (Ia) (Kobak *et al*., 1998).

The efficacy of clomipramine appears marginally superior to that of SSRIs in meta-analysis (Ia) (Ackerman and Greenland, 2002); though not in randomised controlled trials, in which the tolerability of SSRIs is generally superior (Ia) (Fineberg and Gale, 2005).

Fixed-dose comparator studies provide inconsistent evidence for a dose-response relationship with SSRIs, higher doses being associated with greater efficacy in some (Ib) (Montgomery *et al.*, 1993; Wheadon *et al.*, 1993, Hollander *et al.*, 2003) but not all evaluations (Ib) (Tollefson *et al.*, 1994; Greist *et al.*, 1995; Montgomery *et al.*, 2001).

Long term treatment

Long-term (up to 12 months) double-blind studies demonstrate an advantage for continuing with medication, in patients who have responded to acute treatment (Ib) (Katz *et al*., 1990; Tollefson *et al*., 1994; Greist *et al*., 1995). Most (but not all) placebo-controlled relapse-prevention studies in patients who have responded to previous acute treatment reveal a significant advantage for staying on active medication (clomipramine; paroxetine; sertraline; and fluoxetine, at higher dose), compared to switching to placebo (Ia) (Fineberg and Gale, 2005).

Comparative efficacy of psychological and drug treatments

There is some evidence that combination treatment is superior to psychological approaches or serotonergic antidepressant treatment, when given alone. The evidence for enhanced efficacy of exposure therapy with

clomipramine compared to exposure alone is inconsistent (Ib) (Marks *et al*., 1988; Foa *et al*., 2005), but fluvoxamine has been shown to enhance the efficacy of exposure therapy (Ia) (Cottraux *et al*., 1993) and multi-modal CBT (Ia) (Hohagen *et al*., 1998). Some studies have suggested that relapse rates are greater after initial treatment with a pharmacological rather than with a psychological intervention (Ib) (Simpson *et al*., 2004).

When initial treatments prove unhelpful

Switching between pharmacological or psychological treatments with proven efficacy may be helpful in some patients, as may increasing dosage, tolerability permitting. Randomised double-blind or single-blind (Atmaca *et al*., 2002) placebo-controlled augmentation studies indicate that haloperidol (Ib) (McDougle *et al*., 1994), risperidone (Ib) (McDougle *et al*., 2000; Hollander *et al*., 2003; Erzegovesi *et al*., 2005) and quetiapine (Ib) (Atmaca *et al*., 2002; Denys *et al*., 2004) are all efficacious in patients who have not responded to initial treatment with SSRIs: the evidence for augmentation with pindolol is mixed (Ib) (Blier and Bergeron, 1996; Dannon *et al*., 2000). Intravenous infusion of clomipramine also appears efficacious after non-response to oral clomipramine, but the necessary arrangements for monitoring limit its usefulness in clinical practice (Fallon *et al*., 1998). By contrast, placebo-controlled or comparator-controlled (Pigott *et al*., 1991) studies indicate that augmentation treatment with lithium (Ib) (McDougle *et al*., 1991; Pigott *et al*., 1991), buspirone (Ib) (Pigott *et al*., 1992; Grady *et al*., 1993), liothyronine (Ib) (Pigott *et al*., 1991), desipramine (Ib) (Barr *et al*., 1997) or inositol (Ib) (Fux *et al*., 1999) is not efficacious. Potential but as yet not fully proven approaches in treatment-resistant OCD include higher-dose SSRI monotherapy; combination SSRI-clomipramine treatment; augmentation with other atypical antipsychotics, CNS-penetrating triptans, immunoglobulins and plasmapharesis (IV) (Husted and Shapira, 2004). Other potential approaches include deep brain stimulation (IIb) (Nuttin *et al*., 2003); and neurosurgical approaches, including anterior capsulotomy, limbic leucotomy and cingulotomy (III) (Royal College of Psychiatrists, 2000).

SPECIAL CONSIDERATIONS

Children and adolescents

Certain anxiety disorders (social phobia and obsessive-compulsive disorder) have a typical age of onset of symptoms in adolescence, and many young people are substantially disabled by distressing, persistent and severe anxiety symptoms (I) (Rasmussen and Eisen, 1990; Faravelli *et al*., 2000; Weissman *et al*., 1994). There have been comparatively few controlled evaluations of the benefits and risks of psychotropic drug treatment in young people, but randomised placebo-controlled trials in children and adolescents indicate that SSRIs and clomipramine are efficacious in OCD (Ib) (Geller *et al*., 2003), and paroxetine in social phobia (Ib) (Wagner *et al*., 2004). The treatment response in OCD is similar in adult (18-65 years) and younger (6-17 years) clinical samples (Ia) (Fineberg *et al*., 2004).

The United Kingdom Committee on Safety of Medicines has stated that the balance of risks and benefits for the treatment of depressive illness in people under the age of 18 years is judged to be unfavourable for some SSRIs (escitalopram, citalopram, paroxetine and sertraline), mirtazapine and venlafaxine (IV) (Committee on Safety of Medicines, 2004), and has advised caution when treating adults aged 18-30 years with SSRIs. These recommendations do not apply to the treatment of children and adolescents with anxiety disorders, because the risk of self-harm is less and the therapeutic benefits greater. Nevertheless, careful monitoring is advisable, due to possible diagnostic uncertainty, the presence of co-morbid depression, problems associated with estimating the optimal dosage, and the difficulties young people might have in describing untoward effects of psychotropic drug treatment. It may be preferable to reserve pharmacological treatments for patients who do not respond to evidence-based psychological approaches.

Elderly patients

Many elderly patients are troubled by anxiety symptoms, though anxiety disorders in those over 65 years may be less common than in younger samples (I) (Flint, 1994; Schaub and Linden, 2000), and there have been few controlled investigations in this patient group. Placebo-controlled studies indicate that venlafaxine is efficacious in elderly patients with GAD (Ia) (Katz *et al*., 2002), and citalopram in patients with a range of anxiety disorders (Ib) (Lenze *et al*., 2005).

Pharmacological treatment of anxiety disorders in patients with cardiac disease or epilepsy

TCAs are best avoided in patients with cardiac disease: they can increase heart rate, induce orthostatic hypotension, slow cardiac conduction, and have significant quinidine-like effects on conduction within the myocardium. Other type 1A antiarrhythmics (quinidine, moricizine) carry an increased risk of mortality in patients with ventricular arrhythmias and ischaemic heart disease, and TCAs should be regarded as relatively contraindicated in these situations: by contrast, the SSRIs have minimal effects on cardiovascular function and may have potentially beneficial effects on platelet aggregation (Davies *et al*., 2004; Roose,

2003). The UK CSM currently recommends that venlafaxine is avoided in patients with cardiac disease, electrolyte imbalances or hypertension (IV) (Committee on Safety of Medicines, 2004).

Most antidepressants can lower the seizure threshold. The antidepressants amoxapine and maprotiline (and bupropion, marketed in the US as an antidepressant) probably have the most marked proconvulsant properties and should be avoided in epileptic patients (Kanner, 2003): the lack of evidence of efficacy in anxiety disorders means prescription of these drugs should be avoided. Pharmacokinetic interactions between antidepressants and anticonvulsants are not uncommon – for example, carbamazepine can increase the metabolism of TCAs, whereas fluoxetine can inhibit the metabolism of some anticonvulsants: it is always advisable to establish the potential for untoward drug-drug interactions when treating epileptic patients with anxiety disorders.

Pregnant and breastfeeding women

In general, most doctors would consider withdrawing psychotropic drugs in pregnant women (particularly in the first trimester), but it is sometimes necessary to continue treatment, in patients with severe anxiety disorders. Many studies have indicated that TCAs and fluoxetine may be safe when taken during the first trimester, but their potential teratogenicity and effects on development after delivery is less certain. The findings of a prospective controlled study suggest that long-term pre-natal exposure to fluoxetine or TCAs does not adversely affect cognition, language development or temperament (II) (Nulman *et al*., 2002).

A recent systematic review and pooled analysis indicates that plasma levels of paroxetine and sertraline (and the TCA nortriptyline) in breast-fed infants levels are usually undetectable, whereas citalopram and fluoxetine produce infant plasma levels that are above 10% of the maternal plasma level (in 22% and 17% of infants, respectively) (II) (Weissman AM *et al.*, 2004). The principal concern when treating parents with responsibility for infants is probably to avoid the use of excessively sedating compounds (principally TCAs, but also mianserin, mirtazapine and trazodone).

Referral to secondary care mental health services

Patients should be referred to secondary care mental health services when the primary care practitioner feels insufficiently experienced to manage the patient's condition; when two or more attempts at treatment have not resulted in sustained improvement; when there are severe coexisting depressive symptoms or a risk of suicide; when comorbid physical illness and concomitantly prescribed treatments could interact with prescribed psychotropic medication; and when proposed interventions are not available within primary care services.

Note

Enquiries about data held by pharmaceutical companies and referenced here should be directed to the medical department of the relevant company.

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The patient organisations National Phobics Society and No Panic were represented at the meeting. Observers were also present from the Janssen, Roche, Lundbeck, and Wyeth pharmaceutical companies.

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Table 1. Categories of evidence and strength of recommendations

Categories of evidence relevant to specific causal relationships and treatments

Ia	Evidence from meta-analysis of RCTs
Ib	Evidence from at least one RCT
IIa	Evidence from at least one controlled study without randomization
IIb	Evidence from at least one other type of quasi-experimental study
III	Evidence from non-experimental descriptive studies, such as comparative studies, correlation studies and case-control studies
IV	Evidence from expert committee reports or opinions and/or clinical experience of respected authorities

Proposed categories of evidence for observational findings and associations

I	Evidence from large representative population samples
II	Evidence from small, well designed but not necessarily representative samples
III	Evidence from non-representative surveys, case reports
IV	Evidence from expert committee reports or opinions and/or clinical experience of respected authorities

Strength of recommendations

A	Directly based on category I evidence
B	Directly based on category II evidence or an extrapolated recommendation from category I evidence
C	Directly based on category III evidence or an extrapolated recommendation from category I or II evidence
D	Directly based on category IV evidence or an extrapolated recommendation from category I, II or III evidence
S	Standard of clinical care

RCT, randomised controlled trial

Table 2. **Short description of the clinical feature of the anxiety disorders**

Derived from the clinical descriptions and diagnostic guidelines in ICD-10 (World Health Organisation, 1992) and DSM-IV (American Psychiatric Association, 1994). More detailed descriptions are available in DSM-IV and ICD-10.

Generalised Anxiety Disorder (GAD)

Generalised anxiety disorder (GAD) is characterised by excessive and inappropriate worrying that is persistent (lasting some months in ICD-10, six months or longer in DSM-IV) and not restricted to particular circumstances. Patients have physical anxiety symptoms and key psychological symptoms (restlessness, fatigue, difficulty concentrating, irritability, muscle tension and disturbed sleep). Can be co-morbid with major depression (but not arise solely in its context), panic disorder, phobic anxiety disorders and OCD in DSM-IV, but must not meet full criteria for these in ICD-10.

Panic Disorder (with or without agoraphobia)

Panic disorder is characterised by recurrent unexpected surges of severe anxiety ('panic attacks'), with varying degrees of anticipatory anxiety between attacks. Panic attacks are discrete periods of intense fear or discomfort, accompanied by at least four physical or psychological anxiety symptoms. Typically panic attacks reach their peak within 10 minutes and last around 30-45 minutes. Most patients develop a fear of having further panic attacks. Around two-thirds of patients with panic disorder develop agoraphobia, defined as fear in places or situations from which escape might be difficult or in which help might not be available, in the event of having a panic attack. These situations include being in a crowd, being outside the home, or using public transport (two situations required in ICD-10): they are either avoided or endured with significant personal distress (avoidance at some stage is required for ICD-10 diagnosis).

Social Phobia (Social Anxiety Disorder)

Social phobia is characterised by a marked, persistent and unreasonable fear of being observed or evaluated negatively by other people, in social or performance situations, associated with physical and psychological anxiety symptoms. Feared situations (such as speaking to unfamiliar people or eating in public) are either avoided or are endured with significant personal distress (avoidance must be prominent for ICD-10 diagnosis).

Specific Phobia

Specific, simple or isolated phobia is characterised by excessive or unreasonable fear of (and restricted to) single people, animals, objects, or situations (for example, flying, dentists, seeing blood, etc.) which are either avoided or are endured with significant personal distress (avoidance must be prominent for ICD-10 diagnosis).

Post-Traumatic Stress Disorder (PTSD)

Post-traumatic stress disorder is characterised by a history of exposure to trauma (actual or threatened death, serious injury, or threats to the physical integrity of the self or others) with a response of intense fear, helplessness or horror; with the later development of re-experiencing symptoms (intrusive recollections, flashbacks or dreams), avoidance symptoms (for example efforts to avoid activities or thoughts associated with the trauma), and hyper-arousal symptoms (including disturbed sleep, hypervigilance and an exaggerated startle response). Must usually be within six months of the exposure to trauma for an ICD-10 diagnosis.

Obsessive-Compulsive Disorder (OCD)

Obsessive-compulsive disorder is characterised by recurrent obsessional ruminations, images or impulses, and/or recurrent physical or mental rituals, which are distressing, time-consuming and cause interference with social and occupational function. Common obsessions relate to contamination, accidents, and religious or sexual matters; common rituals include washing, checking, cleaning, counting and touching.

Table 3.

Epidemiology of anxiety disorders in the general population based on studies in the EU (Wittchen & Jacobi 2005)

Diagnostic group	**12-month estimate**		**Lifetime estimate** (a)	
	%	**(IQR)**	**%**	**(95% CI)**
Any anxiety disorder	**12.0**	**(11.1 – 13.0)**	**21.1**	**(20.5 – 21.6)**
Panic disorder	**1.8**	**(0.7 – 2.2)**	**3.8**	**(3.1 – 4.5)**
Agoraphobia (w.o panic)	**1.3**	**(0.7-2.0)**	**3.8**	**(3.1 – 4.5)**
GAD	**1.7**	**(0.8 – 2.0)**	**5.1**	**(4.3 – 5.9)**
Social phobia	**2.3**	**(1.1 – 4.8)**	**5.8**	**(5.1 – 6.5)**
Specific phobia	**6.4**	**(3.4 – 7.6)**	**13.2**	**(12.8 – 13.6)**
OCD	**0.7**	**(0.5 – 1.1)**	**0.8**	**(0.6 – 1.1)**
PTSD	**1.2**	**(0.9 – 1.3)**	**Not established**	

Panic disorder (with and without agoraphobia); GAD: Generalised Anxiety Disorder; OCD: Obsessive-Compulsive Disorder; PTSD: Post-Traumatic Stress Disorder.

The 12-month estimates and interquartile range (IQR) are based upon EU-community studies reporting either prevalence estimates for established diagnoses of mental disorders (according to DSM-III, DSM-III-R, DSM-IV or ICD-10 criteria) or upon studies employing instruments with explicit diagnostic criteria that allow such inferences. Lifetime estimates are based on a subset of these studies for which lifetime estimates were available (source: Wittchen HU, Jacobi, F (2005). Size and burden of mental disorder in Europe: A critical review and appraisal of studies. Eur J Neuropsychopharmacol *15*: 357-376).

Table 4.

Distribution of anxiety disorders (12-month prevalence) by age and gender

Diagnostic group	Age 18-34		Age 35-49		Age 50-65		Total	
	M	F	M	F	M	F	M	F
Any anxiety disorder *	7.0	17.0	8.0	15.9	8.4	16.2	7.8	16.3
Panic disorder (+/- agoraphobia)	1.0	3.4	2.0	3.4	2.1	2.4	1.7	3.0
Agoraphobia (without panic)	0.9	2.0	1.1	2.9	0.9	4.4	1.0	3.1
GAD	0.5	1.1	0.9	2.9	1.8	2.2	1.0	2.1
Social phobia	1.9	3.1	0.7	2.7	1.4	2.2	1.3	2.7
Specific phobia	4.2	11.9	4.7	9.7	4.6	10.7	4.5	10.8
OCD	0.4	1.0	1.0	0.9	0.3	0.8	0.6	0.9
PTSD	0.4	1.6	0.6	1.4	0.4	1.3	0.5	1.5

* without PTSD

GAD, Generalised Anxiety Disorder; OCD, Obsessive-Compulsive Disorder;
PTSD, Post-Traumatic Stress Disorder.

Based upon community studies reporting either prevalence estimates for established diagnoses of mental disorders (according to DSM-III, DSM-III-R, DSM-IV or ICD-10 criteria) or upon studies employing instruments with explicit diagnostic criteria that allow such inferences.

Wittchen HU, Jacobi, F (2005). Size and burden of mental disorder in Europe: A critical review and appraisal of studies. Eur J Neuropsychopharmacol *15*: 357-376.

Table 5. Summary of potential adverse effects, interactions and other specific problems of named psychotropic drugs used in the treatment of anxiety disorders *

Class	Examples	Potential adverse effects							Specific problems	Inhibition of hepatic enzymes	Toxicity in overdose	Withdrawal symptoms
		'Anti-Ch'	*Sedation*	*Insomnia*	*↓ bp*	*Nausea*	*Sexual problems*	*Weight gain*				
Selective serotonin reuptake inhibitors	citalopram	-	-	+	-	+	+	-	All SSRIs:	-	low	+
	escitalopram	-	-	+	-	+	+	-	a. can increase	-	low	+
	fluoxetine	-	-	+	-	+	+	-	nervousness in first few	++	low	?
	fluvoxamine	-	-	+	-	+	+	-	days of treatment;	++	low	+
	paroxetine	-	-	+	-	+	+	+		++	low	++
	sertraline	-	-	+	-	+	+	-	b. possible increased risk of suicide attempts in depressed children and adolescents.	-	low	+ Usually only transient, when present.
Serotonin-noradrenaline reuptake inhibitors	duloxetine	+	-	+	-	+	+	-	-	-	?	?
	venlafaxine	+	-	+	-	+ (more at higher doses)	+	-	Hypertension. BP and ECG monitoring suggested.	-	medium	++
Selective noradrenaline reuptake inhibitors	maprotiline	+	+	-	-	-	+	++	Seizures	?	high	+
	reboxetine	+	-	-	-		+	-	-	-	low	?
Tricyclic antidepressants	amitriptyline	++	++	-	++	-	+	++	All TCAs:	++	high	+
	clomipramine	++	++	+	++	+	++	+	Potentially cardiotoxic	++	high	+
	desipramine	+	+	+	+	-	+	-	in therapeutic dosage	++	high	+
	imipramine	++	+	+	++	-	+	+	and in overdose.	++	high	+
Monoamine oxidase inhibitors	phenelzine	+	-	+	++	+	+	+	Phenelzine:	-	high	++
	moclobemide	-	-	+	-	+	-	-	Hypertensive crisis with sympathomimetics, Need to follow restricted diet.	-	low	-
Receptor antagonists	mirtazapine	+	++	-	-	-	-	++	Blood dyscrasia (as common as with TCAs)	?	low	-

Class	**Examples**	**Potential adverse effects**							**Specific problems**	**Inhibition of hepatic enzymes**	**Toxicity in overdose**	**Withdrawal symptoms**
		'Anti-Ch'	*Sedation*	*Insomnia*	*↓ bp*	*Nausea*	*Sexual problems*	*Weight gain*				
Benzodiazepines	alprazolam bromazepam clonazepam diazepam lorazepam	- - - - -	++ ++ ++ ++ ++	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	<u>All benzodiazepines:</u> a. can impair attention and memory; b. tolerance and dependence may occur	Minimal effects on hepatic enzymes; pharmaco-dynamic interactions with sedative drugs.	Medium. Can be reversed with flumazenil.	++ ++ + + ++ May persist for long periods.
Conventional neuroleptics	haloperidol trifluoperazine	- +	+ ++	- -	+ +	- -	+ +	+ +	Risk of development of acute and delayed movement disorders.	Many drug interactions.	high high	+ +
Atypical antipsychotics	olanzapine quetiapine risperidone	+ + +	+ ++ +	- - -	+ + +	- - -	+ - +	++ + +	<u>All atypicals:</u> Risk of hyperglycaemia and induction of diabetes mellitus.	+ + +	low low low	? ? ?
Anticonvulsants	gabapentin pregabalin tiagabine	+ - -	+ ++ +	- - -	? - -	+ - -	- - -	+ ? -	Potential for the development of tolerance or dependence is not established.	-	? ? ?	Abrupt withdrawal may possibly precipitate seizures.
Mood stabiliser	lithium	-	-	-	-	+	(-)	++	Narrow therapeutic window necessitates regular blood level monitoring.	-	<u>Acute:</u> medium; <u>Chronic intoxication:</u> high.	Abrupt withdrawal may precipitate mania.

Class	**Examples**	**Potential adverse effects**							**Specific problems**	**Inhibition of hepatic enzymes**	**Toxicity in overdose**	**Withdrawal symptoms**
		'Anti-Ch'	*Sedation*	*Insomnia*	*↓ bp*	*Nausea*	*Sexual problems*	*Weight gain*				
Beta-blockers	pindolol propranolol	+ -	+ +	- -	+ +	- -	+ +	+ +	Avoid in patients with asthma, heart failure, and peripheral vascular disease.	Many drug interactions.	medium	Abrupt withdrawal may precipitate hypertension.
Antihistamines	hydroxyzine	+	+ Fast tolerance	-	-	-	?	+	Little information on benefits and risks.	?	low-medium.	?
5-HT $_{1A}$ agonist	buspirone	+	-	+	-	+	-	-	Little information on benefits and risks.		low	-

Annotations

'Anti-Ch', anticholinergic: refers to symptoms commonly caused by muscarinic receptor blockade (including dry mouth, sweating, blurred vision, constipation and urinary retention), although one ore more of these symptoms may be caused by other mechanisms and does not necessarily imply that the drug binds to muscarinic receptors; ↓ bp, postural hypotension; ++, relatively common or strong; +, may occur or moderately strong; -, absent or weak; ?, unknown or insufficient information.

* Only those psychotropic drugs that are named in the text and currently available for clinical use are considered: naming a drug in this table does not indicate that it has proven efficacy or a license for the treatment of anxiety. The side effect profiles given are not comprehensive and provide approximate comparison only. Details of drugs and potential cautions and interactions should be looked up in a reference book such as the *British National Formulary* (2005).

Table 6.

Generalised Anxiety Disorder: treatment approaches supported by placebo-controlled studies

	SSRIs	TCAs	Benzodiazepines	Others
Acute efficacy	Escitalopram Paroxetine Sertraline	Imipramine	Alprazolam Diazepam	Venlafaxine CBT Buspirone Hydroxyzine Pregabalin Trifluoperazine (Abercarnil) (Opipramol)
Long-term efficacy	Escitalopram Paroxetine	-	-	CBT Venlafaxine
Relapse prevention	Paroxetine Escitalopram	-	-	CBT
Enhances the efficacy of psychological treatment	-	-	Diazepam	-
After non-response	-	-	-	-

Empty cell indicates current absence of published placebo-controlled data.

Table 7.

Panic Disorder: treatment approaches supported by placebo-controlled studies

	SSRIs	TCAs	Benzodiazepines	Others
Acute panic attack	-	-	Alprazolam Lorazepam	-
Acute efficacy	Citalopram Escitalopram Fluoxetine Fluvoxamine Paroxetine Sertraline	Clomipramine Imipramine	Alprazolam Clonazepam Diazepam Lorazepam	CBT Phenelzine Moclobemide* Mirtazapine* Venlafaxine Reboxetine Na valproate (Brofaromine) (Nefazodone)
Long-term efficacy	Citalopram Fluoxetine Paroxetine Sertraline	Clomipramine Imipramine	Alprazolam	Moclobemide* CBT (modest)
Relapse prevention	Fluoxetine Paroxetine Sertraline	Imipramine	-	CBT (modest)
Enhances the efficacy of psychological treatment	Paroxetine	Antidepressants (meta-analysis)	Benzodiazepines (meta-analysis)	Buspirone
After non-response	Paroxetine (prior CBT)	-	-	Pindolol Group-CBT

* comparator-controlled study only

Empty cell indicates current absence of published placebo-controlled data.

Table 8.

Social Phobia: treatment approaches supported by placebo-controlled studies

	SSRIs	TCAs	Benzodiazepines	Others
Acute efficacy	Escitalopram Fluoxetine Fluvoxamine Paroxetine Sertraline	-	Bromazepam Clonazepam	CBT Phenelzine Moclobemide Venlafaxine Gabapentin Pregabalin Olanzapine (Brofaromine)
Long-term efficacy	Escitalopram Fluvoxamine Paroxetine Sertraline	-	-	CBT Phenelzine Moclobemide Venlafaxine
Relapse prevention	Escitalopram Paroxetine Sertraline	-	Clonazepam	CBT
Enhances the efficacy of psychological treatment	Sertraline	-	-	-
After non-response	-	-	-	-

Empty cell indicates current absence of published placebo-controlled data.

Table 9.

Post-Traumatic Stress Disorder: treatment approaches supported by placebo-controlled studies

	SSRIs	TCAs	Benzodiazepines	Others
Prevention of post-traumatic symptoms?	-	-	-	Hydrocortisone Propranolol Trauma-focused CBT
Acute efficacy	Fluoxetine Paroxetine Sertraline	Amitriptyline Imipramine	Alprazolam	Trauma-focused CBT EMDR Brofaromine Phenelzine Lamotrigine Mirtazapine Venlafaxine
Long-term efficacy	Sertraline	-	-	-
Relapse prevention	Fluoxetine Sertraline	-	-	CBT?
Enhances the efficacy of psychological treatment	-	-	-	-
After non-response	-	-	-	Olanzapine * Risperidone *

* placebo-controlled augmentation study

Empty cell indicates current absence of published placebo-controlled data.

Table 10.

Obsessive-Compulsive Disorder: treatment approaches supported by placebo-controlled studies

	SSRIs	TCAs	Benzodiazepines	Others
Acute efficacy	Citalopram Fluoxetine Fluvoxamine Paroxetine Sertraline	Clomipramine Imipramine	Clonazepam?	CBT
Long-term efficacy	Fluoxetine Sertraline	Clomipramine	-	CBT
Relapse prevention	Fluoxetine Paroxetine Sertraline	-	-	-
Enhances the efficacy of psychological treatment	Fluvoxamine	Clomipramine	-	-
After non-response	-	-	Clonazepam	Another SSRI Haloperidol* Risperidone* Quetiapine* Pindolol*

* placebo-controlled augmentation study

Empty cell indicates absence of placebo-controlled data.

Figure 1.

Suggested scheme for exploration of a suspected anxiety disorder