Indications

Anxiety encompasses a range of conditions including generalised anxiety disorder (GAD), obsessive compulsive disorder (OCD), post-traumatic stress disorder (PTSD), social phobia, and panic disorder. Different medications are effective for different types of anxiety.

Fear and anxiety are normal emotions which stop us doing something dangerous; help us escape from danger; and enable us to learn to avoid future danger (whether physical or psychological / social) e.g. fight / flight / freeze. The type and degree of response varies according to the situation and the individual person. Fear is usually an acute response whilst anxiety is more long-term “anticipatory fear”. Anxiety becomes a disorder when it occurs for no good reason (or no detectable reason at all) and/or it interferes with daily living.

**Physical symptoms of anxiety include:** palpitations, sweating, pale complexion, dry mouth, muscle tension and pains, trembling, numbness or tingling in fingers, toes or lips, breathing fast, dizziness, faintness, indigestion, frequent urination, nausea, stomach cramps, diarrhoea.

**Emotional symptoms include:** Feeling worried all the time, tiredness, poor concentration, irritability, poor sleep, and depression. Managing the symptoms through medication or psychological treatments can ease the experience of anxiety.

Anxiety can be caused and/or worsened by: drug use e.g. excessive caffeine, amphetamines; metabolic disorders e.g. thyrotoxicosis, hyperglycaemia; drug / alcohol withdrawal.

Pharmacology

The key neurotransmitters involved in anxiety are GABA and 5-Hydroxytryptophan (5-HT or Serotonin) but others e.g. noradrenaline and endogenous opioids also play a role.

All antidepressants have some efficacy in anxiety disorders but not all are licensed. MAOI antidepressants are effective in phobias but rarely used due to dietary restrictions. SSRI antidepressants are the drug treatment of choice for most anxiety disorders. For information on antidepressants see the practice leaflet on depression.

**Benzodiazepines** enhance the actions of GABA are often used in the short term for acute anxiety or to manage symptoms until the antidepressant or other treatment takes effect. Their effectiveness is limited by the risks of tolerance and dependence.

**Beta blockers** are used to treat specific symptoms i.e. tremor and are therefore useful in performance anxiety but banned in some competitive sports.

**Pregabalin** reduces neurotransmitter release in excitatory neuronal pathways and can be very effective in GAD but there is evidence of the potential for misuse and diversion.

**Buspirone** may have limited efficacy in GAD.
Psychological therapies e.g. Cognitive Behavioural Therapy (CBT) for GAD, Graded Exposure Therapy for Phobias, or Eye Movement Desensitisation and Reprocessing (EMDR) for PTSD are often more effective either alone or in combination with medication. The choice of whether to use one or the other, or both, often depends on the patient’s preferences and the availability of local services. Relaxation and meditation can be very helpful.

**Efficacy of Treatments:**

<table>
<thead>
<tr>
<th></th>
<th>Generalised Anxiety Disorder (GAD)</th>
<th>Panic Disorder</th>
<th>Obsessive Compulsive Disorder (OCD)</th>
<th>Phobias</th>
<th>Social Phobia</th>
<th>Post-Traumatic Stress Disorder (PTSD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzodiazepines</td>
<td>+++</td>
<td>+</td>
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<tr>
<td>Beta Blockers</td>
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<td>+++</td>
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<tr>
<td>SSRIs</td>
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<tr>
<td>SNRIs</td>
<td>+++</td>
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<tr>
<td>MAOIs</td>
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<td>+</td>
<td>+++</td>
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<tr>
<td>Pregabalin</td>
<td>+++</td>
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<tr>
<td>Buspirone</td>
<td>++</td>
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</tbody>
</table>

**How Pharmacists can input into the care of patients with anxiety:**

**At the start of Treatment**

- Check any pre-treatment tests have been done e.g. ECG, BP and blood tests if indicated.
- Advise on lifestyle modification (reducing caffeine, improving sleep, exercise, diet etc).
- Most treatments do not work straight away but will start to take effect after 2-3 weeks. Refer back to the prescriber if there is no benefit after 4 weeks.
- Antidepressants are not addictive - craving and tolerance do not occur. However, if treatment is stopped suddenly after a period of treatment (8 weeks or more) then acute discontinuation effects (e.g. headache, nausea, anxiety, insomnia, pins and needles sensations) may be experienced.
- Benzodiazepines should be used in the short term or when required only due to the risk of tolerance and dependence, they treat symptoms rather than the underlying condition.
- Occasionally a patient may initially feel worse on initiation for example an increase in anxiety levels or thoughts of self-harm/suicide. This is particularly important in adolescents and younger adults. Ensure patients are aware to seek help and additional support if this occurs.

**During treatment**

- Advise patients on likely side effects and how these might be usefully managed. Advise that alcohol will cause additional sedation and will affect their road safety. Anxiety and panic may affect concentration so it may be better to stop driving until they are feeling better.
• Respond to or make patient aware of circumstances that require further action to be taken (see below for ‘red flags’).
• Together with the patient report any serious adverse event through the MHRA yellow card reporting system.
• Advise patient that most treatments need to be taken on an ongoing basis rather than PRN when feeling anxious. Ongoing treatment also is advised after recovery in many cases.

Stopping Treatment

• To minimise any unpleasant discontinuation (withdrawal) symptoms antidepressants and benzodiazepines are usually reduced and stopped gradually under the guidance of the prescriber. There is potential for seizure risk with sudden withdrawal of pregabalin and beta blockers should not be stopped suddenly.
• Patients who experience a good clinical response to an antidepressant for GAD should continue the medication for at least 12 months to prevent relapse or recurrence.

Common side effects and their management (See also practice leaflet on depression)

• Sedation - Don't drive or use machinery. Discuss with your doctor if you can take your medication at different times of the day.
• Insomnia - Make sure you take SSRIs/SNRIs in the morning.
• Sleep disturbance and nightmares – can occur with beta blockers.
• Increased anxiety - This may happen early on in treatment with an SSRI and should ease off over a few weeks. A lower starting dose may help.
• Suicidal ideas or thoughts of self-harm – may occur early in treatment with an antidepressant, particularly in younger people. Contact your doctor immediately and speak to someone who can support you if you notice this.
• Nausea / upset stomach - Take your SSRI with or after food. If you are sick or have diarrhoea for more than a day, contact your doctor. This tends to wear off after a few days or a week or so.
• Dizziness - Don't stand up too quickly. Try and lie or sit down if you feel it coming on. Don't drive.

Red Flags that require urgent intervention

• Possible hyponatraemia (dizziness, drowsiness, cramps and confusion).
• Possible blood dyscrasias (fever, sore throat, stomatitis, and signs of infection).
• Signs of serotonin syndrome (restlessness, tremor, shivering, confusion).
• Signs of respiratory depression with benzodiazepines (changes in breathing pattern, slowing, increased heart rate) or deteriorating asthma control with beta blockers.
• Hypertensive crisis in patient on MAOI (pain and stiffness in the neck, angina like chest pain and occipital radiating headache). This is a medical emergency.
• Priapism can occur with SSRIs and require urgent intervention to avoid lasting penile damage.
• Thoughts of self-harm or suicide.
Drug and other interactions (See practice leaflet on depression for key antidepressant interactions)

<table>
<thead>
<tr>
<th>Anxiolytic Agent</th>
<th>Important Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benzodiazepines</td>
<td>Increased sedative effects with other sedating medications and alcohol.</td>
</tr>
<tr>
<td>Beta blockers</td>
<td>Enhanced hypotensive effects with calcium channel blockers, diuretics, phenothiazines (e.g. chlorpromazine, trifluoperazine, fluphenazine, prochlorperazine).</td>
</tr>
<tr>
<td>Pregabalin</td>
<td>Convulsive threshold lowered with tricyclic antidepressants, antipsychotics and orlistat – not usually of significance unless used for epilepsy.</td>
</tr>
<tr>
<td>Buspirone</td>
<td>Risk of serotonin syndrome when combined with antidepressants. Buspirone levels increased by large amounts of grapefruit.</td>
</tr>
</tbody>
</table>

Ensure you check for any additional interactions in Appendix 1 of the BNF

More patient and professional information available at:

- Choice and Medication website via your local Mental Health Trust
- www.patient.co.uk
- www.rcpsych.ac.uk

References and other useful resources:

NICE GAD and panic disorder in adults (CG113, 2011) [https://www.nice.org.uk/guidance/cg113](https://www.nice.org.uk/guidance/cg113)

NICE Social anxiety disorder (CG159, 2013) [https://www.nice.org.uk/guidance/cg159](https://www.nice.org.uk/guidance/cg159)

NICE PTSD in adults and children (CG26, 2005) [https://www.nice.org.uk/guidance/cg26](https://www.nice.org.uk/guidance/cg26)

NICE OCD and BDM (CG31, 2005) [https://www.nice.org.uk/guidance/cg31](https://www.nice.org.uk/guidance/cg31)