For better
mental health

Making sense of antidepressants

Making sense of antidepressants

The different types of antidepressant

This booklet is aimed at anyone interested in learning more about antidepressants. It starts with general information that applies to all antidepressants, then gives information specific to the different types of antidepressant (such as tricyclics, SSRIs and MAOIs), followed by details specific to the individual drugs. It's therefore important to read the general as well as the specific information in order to get all the information about the drug you are taking.

What should I know before taking these drugs?

The law says that you have the right to make an informed decision about which treatment to have, and whether or not to accept the treatment a doctor suggests. To consent, properly, you need to have enough information to understand the nature, likely effects and risks of the treatment, including its chance of success, and any alternatives to it.

Generally, you can only receive treatment that you have specifically agreed to. Once you have given your consent, it isn't final and you can always change your mind. This consent to treatment is fundamental, and treatment given without it can amount to assault and negligence. To find out more about when treatment can be given without consent, see *Mind rights guide 3: consent to medical treatment*. (Details of this, and other publications mentioned here, may be found under *Further reading,* on p. 42.)

Patient information leaflets

People who are prescribed medication as outpatients, or from their GP, should find with it an information sheet called a patient information leaflet (PIL), in accordance with a European Union directive. Inpatients may have to ask for it, specifically. The EU directive sets out what information should be included in the leaflet, and in what order.

It starts with the precise ingredients of the medicine, including the active ingredient, the drug, and the extra contents that hold it together as a tablet or capsule, such as maize starch, gelatine, cellulose and colourings. This information is important because some people may be allergic to one of the ingredients, such as lactose. The leaflet gives the name of the pharmaceutical company that made the drug. It explains what the drug is prescribed for, any conditions which mean you should avoid it, and anything else you should know before taking it. The leaflet states whether the drug is dangerous with other medicines, and, if so, which types. There are details about how to take it: by mouth or other means, at what time of day, when to take it in relation to meals (if necessary), the usual dose levels, and what to do if you take too much or forget to take it. Next, comes the list of possible side effects, and then the storage instructions.

The final item on the leaflet tells you that it contains only the most important information you need to know about the medicine, and that if you need to know more, you should ask your doctor or your pharmacist. Pharmacists are drug specialists, and may be more knowledgeable about your drugs than the doctor who prescribes them. They may be more aware of possible side effects, and also possible interactions with other drugs. This is when a drug changes the effect of other drugs you are taking, makes them less effective, or causes additional side effects. Pharmacists are usually very willing to discuss drugs with patients, and some high-street chemists have space set aside where you can talk privately.

This is a lot of information to include in the PIL, so it's often printed in very small type, on a piece of paper that is folded many times, which may get thrown away with the packaging, by mistake. If you do not receive this information with your medicine, you should ask for it from the person who makes up your prescription.

Many people would like to have all this information in advance and not after they have obtained the drugs. The following are questions you might like to raise with your doctor when she or he gives you a prescription for a drug:

- What is the name of the drug, and what is it for?
- How often do I have to take it?
- If I am taking any other drugs, will it be all right to take them together?
- Will I still be able to drive?
- What are the most likely side effects, and what should I do if I get them?
- Do I have to take it at any particular time of day? For example, if it is likely to make me sleepy, can I take it at night rather than in the morning? If it is likely to make me feel sick, can I take it with or after food?
- When I want to stop taking it, am I likely to have any problems with withdrawal?

You may well think of other questions you wish to ask.

What are the causes of depression?

There are a number of theories about the causes of depression; social, psychological and physical factors all play their part. Very often, doctors tell people with depression that they are suffering from a chemical imbalance, as if this were the sole cause of the depression. This ignores what may cause that imbalance in the first place. Any simple explanation that reduces the causes to any one theory is likely to be incomplete. It's probable that upsetting life events themselves trigger chemical changes in the brain.

Medication may help to normalise the chemistry and so lift the depression, but it may not provide a complete solution. Further information on depression, its causes and the different treatment options can be found in Mind's booklet *Understanding depression* (see *Further reading,* on p. 42.)

What other treatments are there?

Drugs and electroconvulsive therapy (ECT) are often the only form of help offered to people diagnosed with depression. The most common treatment, by far, is antidepressant drugs. But antidepressants alone can't relieve life problems or prevent natural human emotional reactions.

The National Institute for Clinical Excellence (NICE) is developing guidelines on the treatment of depression, which are due to be published in May 2004. The initial papers suggest that antidepressants should not be used as a first treatment for mild to moderate depression, and that other treatments should be offered, including talking treatments and exercise regimes, as these may be as effective as drug treatment. They also suggest that people who are experiencing long-term physical illness or difficult life events should be screened for depression and offered treatment as appropriate. They suggest that SSRIs should be used first, in preference to other kinds (see p. 26).

Psychiatric research indicates that:

- Antidepressants can be effective for 70 per cent of people who have them prescribed. However, the value of these findings is weakened by the fact that in 40 per cent of people, a dummy drug (placebo) is just as effective. In other words, the psychological impact of just being given something that's meant to help you appears to be beneficial.
- In milder depressions, short-term psychotherapy (a talking treatment) is as effective as drugs (see *Understanding talking treatments*, details p. 42).
- One study comparing standard GP care, drug treatment from a psychiatrist, cognitive behaviour therapy (a particular type of talking treatment) and social work counselling found that specialist referral, particularly for cognitive behaviour therapy, produced the best results.

- A high proportion of people with depression recover spontaneously without treatment.
- Some research studies show that tricyclic antidepressants are frequently prescribed at doses that are too low to be effective. This also occurs, but less commonly, with some prescriptions for SSRIs. But, adverse effects significantly increase with dose.

A herbal remedy, St John's wort (hypericum) has been found helpful for mild to moderate depression. It's worth remembering, however, that many standard medicines are based on plant extracts, and just because something is a herb, it doesn't mean that it's necessarily safer than other medicines, or free from side effects. Do not take St John's wort with SSRI antidepressants, as there is evidence of adverse interaction.

For those whose depression may be related to housing, financial or other social problems, practical resolution of these difficulties might be the most appropriate way of shifting their depression.

How do antidepressants work?

Nerve cells, or neurons, communicate with one another by means of chemicals called neurotransmitters, which are released by one neuron and interact with receptors on another. Their action is terminated either by being taken back up into the neuron that released them (re-uptake), or by the action of enzymes, which break them down. Depression is thought to be associated with low levels of certain neurotransmitters, particularly noradrenaline (also known as norepinephrine) and serotonin (also called 5-hydroxytryptamine or 5-HT). Most antidepressant drugs are therefore designed to prolong the effects of the neurotransmitters, either by blocking their re-uptake into the neuron that released them, or by holding up the action of the enzyme that would break them down.

Most neurotransmitters have actions at several different sites in the brain, and in other parts of the body, as well. This means that drugs that interfere with their actions will have side effects caused by the effect of the same neurotransmitters in other areas. As we learn more about the specific actions of different neurotransmitters, we can classify their receptors into different subtypes, depending on what response they trigger. For example, noradrenaline receptors are classified as alpha and beta receptors, and many people are familiar with the term 'beta blockers' for drugs that block beta receptors and therefore reduce the effect of noradrenaline at these sites. In designing new antidepressants, the aim is usually to target the drug only on receptors directly involved with depression, to avoid changing the action of the neurotransmitter at other sites.

What sort of side effects can occur?

A significant number of people who are prescribed these drugs stop taking them because of unpleasant and worrying side effects. If you are already depressed, struggling with some of the drugs' adverse effects can make you feel even more distressed, especially as the worst of these effects tends to occur at the beginning of treatment, before the drugs have started to lift the depression.

You may not experience any of the adverse effects listed in this booklet, or the ones that affect you may be no more than a minor inconvenience, which you consider an acceptable price to pay for the benefits the drugs give you. However, if they do cause troublesome or unpleasant side effects, don't hesitate to tell your doctor, if necessary by letter. You are the best judge as to whether or not the drugs are working for you.

Many antidepressants are very dangerous if more than the prescribed dose is taken. They should be prescribed in small amounts only, taken with great care and stored out of reach of children.

It's very important not to increase the dose above that prescribed. Doctors should keep in close contact with you, especially at the beginning of your treatment. You should be able to visit your doctor to discuss any adverse effects you experience.

There is a warning from the Committee on Safety of Medicines about low blood sodium levels (hyponatraemia) associated with all antidepressants. This mainly affects elderly people. Signs are drowsiness, confusion or convulsions. Antidepressants may affect driving and other skilled tasks. Drugs that cause a dry mouth may cause tooth decay as a secondary effect. Saliva is important in protecting against tooth decay, and there have been several reports of people developing dental problems, especially after long-term use of tricyclic and related antidepressants.

If someone is so depressed that they sometimes feel suicidal, it might be advisable for a relative or close friend to help the user to look after their tablets so the right dose is taken at the right time.

How long do they take to start working?

Most antidepressants take two to four weeks to take effect, although this may not be the case for some of the newest drugs. Some doctors have attempted to speed up the response to antidepressants by combining them with pindolol (a beta blocker). So far, the results of these trials have been mixed. For some people, the combination produced a faster and more effective response; for others pindolol made no difference. However, it has been suggested that for people who have not found an antidepressant helpful, this approach might be worth trying, perhaps before resorting to lithium or electroconvulsive therapy. Most common adverse effects of pindolol are low blood pressure, headache, nausea, diarrhoea and increased irritability.

When shouldn't I take antidepressants?

Pregnant and nursing mothers

Although few drugs have been proved to cause birth defects, great caution is necessary with drugs during pregnancy. A balance has to be struck between the needs of the mother-to-be and the possible risk to the unborn child, particularly in the first three months of pregnancy. After the birth, a nursing mother is likely to pass any drugs she is taking to her baby through her breast milk.

Newer drugs carry a higher risk than drugs that have been in use longer, as less is known about them. Doxepin (Sinequan), in particular, should be avoided in breastfeeding.

Antidepressants are powerful drugs, and very little is known about their effect on unborn children or babies being breast fed. Tricyclic antidepressants given in late pregnancy have been associated with withdrawal symptoms in newborn babies. Rapid heartbeat, irritability, muscle spasms, restlessness, sleeplessness, fever and fits have been reported.

When a woman who is pregnant or who is breastfeeding is suffering from depression, every alternative to drugs should be explored. With help and support, drugs may be unnecessary.

Children and antidepressants

Antidepressant drugs are not recommended for the treatment of depression in children under 16. The following tricyclics are licensed for the treatment of bedwetting: amitriptyline, imipramine and nortriptyline. (See, also, Selective Serotonin Re-uptake Inhibitors (SSRIs), on p. 26, for information about children.)

Drug interaction
If you are prescribed antidepressants, it's important to inform your doctor about any drugs you are taking, as antidepressants can interact with a number of different types of drug, and some combinations can be dangerous. Where combinations of psychiatric drugs are known to interact, these have been listed further in this booklet. Sometimes, a number of interacting psychiatric drugs are prescribed together, which can add to the adverse effects of the individual drugs.

Alcohol
People taking antidepressants should be careful about drinking alcohol. Alcohol interacts with most antidepressants, increasing sedation and affecting the ability to perform skilled tasks even further. It can make elderly people more prone to falls and confusion. It's therefore wise to ask your doctor or pharmacist whether it's safe to drink alcohol.

How long should I stay on antidepressants?

Studies show that staying on antidepressants for six months after they have become effective can help prevent further episodes of depression. Some studies suggest that most people aren't being given sufficient antidepressants for long enough. The BNF recommends that people should be maintained at the effective dose for at least four to six months after the depression has lifted. If treatment stops too soon, the depression is likely to come back.

In recurrent depression, maintenance therapy with an effective dose may need to continue for several years (information about 'maintenance' doses is included under the individual drugs, starting on p. 15). Don't suddenly reduce the dose or stop altogether (see opposite). You should discuss with your doctor how long to remain on your antidepressants.

Are antidepressants addictive?

When people develop a craving for a particular drug, for example because it gives them a 'high', they often start to increase the dose they take in order to experience the same pleasurable sensations. A drug that causes craving is said to be addictive. Antidepressants are not thought to be physically addictive in this way. However, after taking them for some time, some people do become 'tolerant' of the drug and report needing to take higher doses to achieve the same effect.

The antidepressants don't usually produce the sort of 'buzz' that results in cravings. However, people can get slightly high from the stimulant effect of the MAOI antidepressant tranylcypromine. A few people take larger doses than prescribed in order to keep getting the mild high. This is dangerous because tranylcypromine (see p. 24) can be very poisonous when people take more than the prescribed dose; also, because there is a greater risk of adverse interactions with other drugs or substances in food (see p. 22). There is a risk of dependency with all MAOIs. (This means that people are likely to experience side effects upon withdrawal.)

A tolerance to one of the tricyclic antidepressants, amoxapine, has been reported, possibly caused by a mild stimulant or 'high' effect (see p. 18). Taking amoxapine may therefore carry a particular risk of physical dependency. It's also important to be aware that any drug can become a psychological habit.

How easy is it to come off them?

Withdrawal or 'discontinuation' reactions can occur with all major types of antidepressant. Problems are more likely to occur after abrupt withdrawal and longer courses of treatment. Reactions usually start suddenly within a few days of stopping the antidepressant (or, less commonly, of reducing its dose), and usually disappear within one day to three weeks.

The probability of withdrawal problems, and the symptoms, vary, depending on the type of antidepressant. Common symptoms include gastric problems (nausea, vomiting, abdominal pain or diarrhoea), loss of appetite, sleep disturbance (insomnia, vivid dreams or nightmares), general discomfort (sweating, lethargy or headaches), and mood changes (low mood, hypomania – 'high' moods – panic, anxiety or irritability) and extreme restlessness. With SSRIs the commonest symptoms appear to be dizziness, light-headedness, numbness, tingling and sensations that resemble having electric shocks. In a minority of people, discontinuation reactions are severe and very troublesome.

The BNF recommends that if antidepressants have been prescribed continuously for eight weeks, or more, they should not be stopped abruptly, but should be reduced gradually over four weeks. Some reports suggest that tapering off the dose may not be necessary when switching between SSRIs. If discontinuation reactions are severe, the antidepressant may need to be restarted and the dose tapered off very gradually.

A listing of possible withdrawal symptoms that you may experience can be found under the relevant group of antidepressants or the individual drug, if appropriate. This information may help you to distinguish a brief and temporary withdrawal period from what may otherwise be mistaken for a re-emergence of the earlier depression or distress.

All information about drug doses mentioned in this booklet is taken from recommendations in *The British National Formulary (BNF)* and in *The Associated British Pharmaceutical Industry Data Sheet Compendium*. Sometimes, higher maximum doses can be given in hospital under close supervision. It is very dangerous to exceed the prescribed dose. To help you find individual drugs by name, there is an index at the back of this booklet. The trade names of the drugs are in brackets after the general name.

Tricyclic and related antidepressants

This group of antidepressants is given for depression with no obvious cause, or where depression is associated with physiological changes such as loss of appetite and sleep disturbance. Tricyclics are so named because of their chemical structure, and have been in use since the 1960s. They prolong the action of both the neurotransmitters noradrenaline and serotonin. Related drugs (such as, maprotiline, mianserin and trazodone) have a similar chemical structure and action to the tricyclics. Differences between the two types mainly relate to the adverse effects. The tricyclic drugs have a broader chemical action and also affect another transmitter system, causing side effects to the heart and circulatory system. They have 'anticholinergic' or 'antimuscarinic' effects: drowsiness, dry mouth, blurred vision, constipation, rapid heartbeat, difficulty passing water and sweating.

Cautions

This group can cause drowsiness and so may affect the ability to perform skilled tasks, such as driving or operating machinery. Some drugs in this group are more sedating than others, and some have fewer effects than others on the heart and circulatory system. Other differences are as indicated for the individual drugs listed.

Elderly people find the adverse effects of tricyclics a particular problem, as low blood pressure can lead to dizziness and falls, so gradual introduction is very important. This group of antidepressants should not be given to people who have had a recent heart attack, have heart block, manic episodes or severe liver disease. They should be used with caution in people with diabetes, heart, liver or thyroid disease, the eye disease glaucoma, and for anyone already experiencing problems passing water. Special difficulties arise when antidepressants are used in the treatment of psychosis. If given to people with epilepsy, this group of antidepressants can make people more likely to have fits, and they should not be used in conjunction with ECT or with anaesthetics. It is very dangerous to exceed the prescribed dose.

Drug interactions

If this group of antidepressants is taken with some major tranquillisers, such as chlorpromazine (Largactil) the adverse effects can become much worse. If they are taken with minor tranquillisers or sleeping pills, such as diazepam (Valium), the sedative effect increases. This group of drugs should not be taken for at least two weeks after stopping MAOI antidepressants (see p. 22). There is also evidence of significant adverse interaction between tricyclics and SSRIs (see p. 27 for more details). If you are taking any other drugs you should discuss this with your doctor.

Withdrawal

Don't suddenly stop your tablets for no good reason. Do taper the dose down gradually in discussion with your doctor. Following these guidelines will help minimise any withdrawal symptoms. People withdrawing may experience the following more common symptoms: a flu-like pattern, which can include nausea, vomiting, abdominal pain, loss of appetite, diarrhoea, generally feeling unwell, chills, weakness, tiredness, sweating, and headache. Jitteriness, anxiety, agitation and panicky feelings may occur.

Sleep disturbance may be a problem – difficulty getting to sleep, followed by very vivid dreams early in the night, which can be frightening. People may experience general restlessness. There are a few reports of people developing disturbed and extremely excitable (manic) behaviour. On rare occasions, if the drug is stopped abruptly, panic attacks may occur. (See, in particular, p. 13, amitriptyline, below, and imipramine, on p. 19.)

Tricyclics

Amitriptyline hydrochloride (Elavil, and also in the compounds Triptafen and Triptafen-M)

Adult dose: 50-75mg daily initially, in divided doses or as a single dose at bedtime; increased gradually as needed to a maximum dose of 150mg. *Elderly and adolescent dose:* 30-75mg. *Children:* may be used to treat bedwetting for a maximum of three months. *Side effects:* (commonest first), dry mouth, sedation, drowsiness, blurred vision, constipation, nausea, difficulty passing water. Heart and circulatory system effects: changes in heart rhythm, rapid heartbeat, low blood pressure on standing, fainting (particularly at high doses and in elderly people). Sweating, tremor, rashes and allergic reactions, disturbed behaviour (particularly in children), manic episodes, confusion (particularly in the elderly), reduced sexual arousal and interference with sexual function, blood sugar changes and weight changes (usually gain). Hormone-related effects: enlargement of testicles, breast development and secretion of milk. Fits, movement disorders, fever, blood disorders, low blood sodium levels, abnormal liver function. *Withdrawal:* an estimated 80 per cent of people may experience withdrawal symptoms, as this has the strongest antimuscarinic action (see p. 15). Children may find these symptoms particularly distressing.

Amoxapine (Asendis)

Amoxapine has some neuroleptic effects (like a major tranquilliser), and is thought to block the neurotransmitter dopamine. Reviewers tend to regard its potentially adverse effects as outweighing its benefits. Claims that it acts more quickly than other antidepressants have been queried. *Adult dose:* 100-150mg daily up to a maximum 300mg daily in divided doses or as a single dose at bedtime. Usually 150-250mg daily. *Elderly dose:* 25mg twice daily initially, increased after five to seven days to a maximum 50mg three times daily. *Side effects:* similar to those caused by amitriptyline, although less sedating, but includes a possible risk of developing *tardive dyskinesia*, a movement disorder that may be irreversible (see Mind's booklet *Making sense of antipyschotics [major tranquillisers]*). Interference with menstruation, breast enlargement and secretion of breast milk in women have been reported. Rarely: fits (which may be difficult to control) especially when using doses higher than those recommended. *Caution:* one study suggests that people may show tolerance to the therapeutic effects of this drug after an initial response (see p. 13). *Withdrawal:* abrupt withdrawal after long-term treatment can lead to gastric troubles, excessive sweating and increased anxiety (refer to p. 16).

Clomipramine (Anafranil)

Clomipramine is also given for obsessional states, when the doses given may be higher than for depression. *Adult dose:* 10mg daily initially, increasing gradually as necessary to 30-150mg maximum daily. Usual maintenance dose 30-50mg daily. *Elderly dose:* 10mg daily initially, increased to 30-50mg daily. *Side effects:* similar to amitriptyline, but claimed to be less sedating. *Drug interactions:* see p. 23.

Dosulepin/dothiepin (Prothiaden)

Adult dose: 75mg daily initially, increased as necessary up to a maximum 150mg daily. *Elderly dose:* 50-75mg. *Side effects:* similar to amitriptyline.

Doxepin (Sinequan, Xepin)
Adult dose: 75mg daily initially, in three divided doses, increased as necessary up to a maximum of 300mg daily in three divided doses (up to 100mg at one dose). *Elderly dose:* 10-50mg daily initially. 30-50mg daily may be enough. *Side effects:* similar to those caused by amitriptyline. *Caution:* avoid while breastfeeding (see p. 11).

Imipramine (Tofranil)
Adult dose: 75mg daily initially, in divided doses, increased gradually as necessary up to a maximum 150-200mg (up to 300mg in hospital patients). Up to 150mg may be given as a single dose at bedtime. *Elderly dose:* 10mg daily initially, increased gradually to 30-50mg daily. *Children:* may be given to children over six years old for bedwetting. *Side effects:* similar to amitriptyline, but less sedating. *Withdrawal:* studies show that 21-55 per cent of people experience gastric and other bodily discomforts.

Lofepramine (Gamanil, Lomont)
Adult dose: 140-210mg daily in divided doses. *Elderly dose:* elderly people may respond to lower doses. *Side effects:* like amitriptyline, but less sedating. Reports of liver disorders. *Caution:* to be avoided in people with liver or severe kidney disorders.

Nortriptyline (Allegron; also in the compound Motival)
Adult dose: low dose initially, increasing gradually as necessary up to 75-100mg daily in divided doses or as a single dose. (Blood to be monitored if dose is any higher). Maximum dose 150mg in hospital patients. *Elderly:* 30-50mg initially in divided doses. *Children:* may be used for bedwetting for a maximum of three months. *Side effects:* similar to those caused by amitriptyline, but less sedating.

Trimipramine (Surmontil)
Adult dose: 50-75mg daily initially, as a single dose two hours before bedtime, or as 25mg at midday and 50mg in the evening, increasing as necessary up to a maximum dose of 300mg daily for four to six weeks. *Elderly dose:* 10-25mg three times daily initially, half the adult maintenance dose may suffice. *Side effects:* similar to amitriptyline, but may be more sedating.

Tricyclic-related antidepressants

Maprotiline hydrochloride (Ludiomil)
Adult dose: 25-75mg daily initially, in three divided doses or a single dose at bedtime. Increased gradually as necessary to a maximum dose of 150mg daily. *Elderly dose:* 30mg daily initially. Half the usual adult dose should suffice. *Side effects:* similar to amitriptyline, but said to be fewer antimuscarinic effects (see p. 15). Skin rashes are common and there is increased risk of fits at higher doses. Careful supervision from a doctor is advised.

Mianserin hydrochloride
Adult dose: 30-40mg daily initially, in divided doses or as a single dose at bedtime. Increased gradually as necessary. Usual dose range 30-90mg. *Elderly dose:* 30mg daily initially. *Side effects:* similar to amitriptyline, but said to be fewer and milder antimuscarinic effects (see p. 15) and effects on the heart and circulatory system. Other unwanted effects may include jaundice, arthritis, pain in the joints and a flu-like syndrome. Caution: in rare cases may cause serious blood disorders, especially in the elderly. Blood tests every four weeks recommended during the first three months of treatment. See your doctor if a fever, sore throat, sore mouth or other infection develops.

Trazodone hydrochloride (Molipaxin)

Adult dose: 150mg daily in divided doses after food or as a single dose at bedtime, increased as necessary up to 300mg daily. Hospital patients up to a maximum of 600mg daily in divided doses. *Elderly dose:* 100mg daily. *Side effects:* similar to amitriptyline, but claimed to be fewer antimuscarinic effects (see p. 15) and effects on the heart and circulatory system; may be more sedating. *Caution:* a rare but distressing and serious adverse effect in males is persistent erection – when the BNF recommends the drug should immediately be stopped.

Noradrenergic and Specific Serotonergic Antidepressants (NaSSAs)

Mirtazapine (Zispin)

Mirtazapine was first licensed for use in the UK in 1997. It is similar to the tricyclics, in that it affects both the noradrenaline and the serotonin systems, but it is more selective, stimulating only one type of serotonin receptor. It should have fewer side effects than the older drugs. *Adult and elderly dose*: 15mg daily initially, increasing according to response up to 45mg daily as a single dose at bedtime or in two divided doses. *Side effects:* (most common) increased appetite and weight gain, sedation. Less common: raised liver enzymes, jaundice (see caution). Rarely: oedema (fluid retention causing puffiness), low blood pressure on standing, skin rash, tremor, muscle spasms, reversible blood disorders. *Caution:* avoid in pregnancy and breastfeeding. Should be avoided or used with caution in people who have epilepsy, liver or kidney disease, low blood pressure, a history of urinary retention, angle-closure glaucoma, diabetes mellitus, psychotic illnesses, and a history of manic depression (bipolar disorder). Patients should report any fever, sore throat, mouth ulcers or other signs of infection during treatment, and blood tests should be carried out. If patients become jaundiced, treatment should not continue. *Withdrawal:* avoid abrupt withdrawal.

Monoamine-oxidase Inhibitors (MAOIs)

MAOIs work on the same neurotransmitters as the tricyclics, but act by blocking the enzymes that break down the chemical messengers noradrenaline and serotonin and thus ending their action (see p. 8). Blocking the enzymes enables the transmitters to accumulate and carry on working. Because of their side effects, fewer MAOIs tend to be prescribed and, usually, when other antidepressants (tricyclics or SSRIs) have failed. It may take three to five weeks for MAOIs to work.

Avoiding certain food and drink

Most MAOIs currently available can affect the way that certain foods are digested and can cause them to become poisonous. You should be very careful about what you eat and drink (you will be given a treatment card with advice on what to avoid). Steer clear of anything that is not fresh, which has been fermented, pickled, cured, hung, dried and matured. This is because when food is exposed to the air, a substance called tyramine, which causes this dangerous interaction with MAOIs, rises to high levels. Excluded foods include: matured cheeses; game; protein extracts such as Marmite, Bovril or Oxo; alcohol (especially red wine); non-alcoholic beer and lager, overripe fruits; broad bean pods and banana skins. If you do eat or drink any of these and they disagree with you, you should immediately inform your doctor. It may result in a dangerous rise in blood pressure and severe headache. Fortunately, serious incidents and deaths are rare.

When MAOIs are not suitable

MAOIs should usually be avoided by people who are prone to agitation or who have liver, kidney or heart disease, epilepsy, diabetes, and blood disorders. They should not be given to children, and only with great caution, if at all, to the elderly. Tranylcypromine is the most hazardous, because of its stimulant effect (see p. 13, and opposite).

Drug interactions with MAOIs

It may be dangerous to take MAOIs at the same time as certain other prescribed or over-the-counter medicines, whether these are tablets, capsules, nose drops, inhalations or suppositories. Cough mixtures and cold treatments should be avoided. Always check with your GP first. Do not use with the following psychiatric drugs:

- Tricyclic and other antidepressants. It is essential to have a gap after stopping these before starting MAOIs. Leave at least one week after SSRIs; five weeks after fluoxetine (Prozac); two weeks after paroxetine (Seroxat) and sertraline (Lustral). Always wait at least 14 days after finishing a course of MAOIs before starting a different antidepressant. It is particularly dangerous to combine clomipramine (Anafranil) and tranylcypromine.
- Buspirone (Buspar) given for anxiety.
- Carbamazepine (Tegretol) given for manic depression or epilepsy.
- Barbiturates – because their effects may be heightened.
- Certain antipsychotic drugs (major tranquillisers) prescribed for severe mental distress, such as hallucinations and delusions, because their effects may be heightened.

Withdrawing from MAOIs

This is a similar experience to coming off tricyclics (see p. 16). It is important to taper the dose down gradually, in discussion with your doctor. Do continue with food and drink restrictions for two weeks after stopping completely. Avoid abrupt withdrawal, unless there's good reason, because fits may occur. There have been rare reports of abrupt withdrawal resulting in hallucinations or delusions. People may have difficulty coming off tranylcypromine because of its stimulant effect. (See also p. 13).

Phenelzine (Nardil)

Adult dose: 15mg three times daily, increased if necessary to four times daily after two weeks. Then reduce to lowest possible maintenance dose; 15mg on alternate days may be enough. Hospital patients may be given a maximum of 30mg three times daily. *Side effects:* (commonest first) low blood pressure on standing and dizziness. Drowsiness, insomnia, headache, weakness and tiredness, dry mouth, constipation and other gastric disturbances, oedema (puffiness), muscle spasms and jerks, raised liver enzymes, agitation and tremors, nervousness, feelings of excitement, disturbances of heart rhythm, blurred vision, wobbling eye movement, difficulty in passing water, sweating, fits, rashes, blood disorders, interference with sexual function, weight gain with appetite changes. Psychotic episodes with mania, confusion and hallucinations may occur in some vulnerable people. Rare reports of jaundice and of liver poisoning.

Isocarboxazid

Adult dose: 30mg daily initially, in single or divided doses, increased after four weeks if necessary to a maximum of 60mg daily for up to six weeks under close supervision only. Then reduced to usual maintenance dose 10-20mg daily (but 40mg daily may be necessary). *Side effects:* similar to phenelzine.

Tranylcypromine

Adult dose: 10mg twice daily initially (not later than 3pm), increasing the second dose to 20mg after one week, if necessary. Doses above 30mg daily under close supervision only. Usual maintenance dose 10mg daily. *Side effects:* see phenelzine. Also, insomnia (if given in the evening). Hypertensive crisis (high blood pressure) with a throbbing headache requiring that treatment ends is more likely than with other MAOIs. Liver damage occurs less frequently than with phenelzine. *Caution:* see p. 13, and drug interaction (p. 23). *Withdrawal:* because of its stimulant effect, people may have difficulty coming off it.

Reversible MAOI (RIMA)

Moclobemide (Manerix)

Moclobemide, used for major depression, derives from the MAOI group, but differs from others because it is 'reversible'. This means that there is much less risk of a tyramine crisis arising (see p. 22), although the BNF warns against eating large amounts of food high in tyramine (large amounts of mature cheese, yeast extracts or fermented soya products). The tablets should be taken after meals. *Adult dose:* 300mg daily initially, in divided doses after food, adjusted according to response; usual range 150-600mg daily. *Side effects:* sleep disturbance, dizziness, nausea, headache (listed on the datasheet as transient), restlessness, and agitation. Confusional states have been noticed, which have disappeared rapidly when the drug was stopped. Rarely: raised liver enzymes. *Drug interactions:* may be less likely than with older MAOIs, but patients should check with their doctors before taking it with any other medications (including those bought over the counter). Moclobemide should not be given with another antidepressant. Because its effect is short, no treatment-free period is necessary after stopping it. However, leave at least a week's gap before starting moclobemide after taking tricyclics, SSRIs, or related antidepressants. (After paroxetine and sertraline, leave at least two weeks, and after fluoxetine at least five weeks.) After taking an older MAOI, leave a week. *Caution:* these should not be given to people who are agitated or excited or to people who swing between depression and mania. They should not be given to people with overactive thyroid, severe liver impairment or anyone acutely confused or with phaeochromocytoma. Do not use during pregnancy or breastfeeding. *Withdrawal:* see p. 23.

Selective Serotonin Re-uptake Inhibitors (SSRIs)

SSRIs are a type of antidepressant marketed in the UK since 1989. They block the re-uptake of serotonin into the nerve cell that released it, thereby prolonging its action (see p. 8). This group of drugs, and especially fluoxetine (Prozac) has received enormous media interest in the UK and USA, resulting in its image as a 'life style' drug. Several books have been written about it in this vein. However, the reality is that these drugs are antidepressants, available on prescription, and possibly no more effective than the tricyclics in treating depression. They have at least as many possible side effects listed in the BNF as the others.

SSRIs and children and teenagers under 18

None of these drugs has ever been licensed for anyone under the age of 18, but they have been widely prescribed for this age group. In December 2003, the MHRA issued guidance stating that no SSRIs should be given to this age group except fluoxetine (Prozac), which should only be given on the advice of a child psychiatrist. Only if a child can't tolerate fluoxetine can another SSRI be used, on the advice of a child psychiatrist. Research evidence suggests paroxetine, sertraline and citalopram are not effective in this age group and are more prone to cause side effects, including suicidal feelings, in young people than in adults. (Escitalopram and fluvoxamine have not been studied in this age group.) This guidance also applies to venlafaxine (see p. 32).

Side effects of SSRIs

The most common side effects include gastric disturbance, such as nausea, headaches, restlessness, anxiety, and sleep problems. It may also cause a variety of sexual difficulties. The most commonly reported in men are reduced sexual desire, prolonged erection, failed erection, delayed ejaculation and lack of orgasm. In women, the effects are more varied and may include spontaneous orgasm, delayed or lack of orgasm (associated with the drug fluoxetine) or increased libido (with fluvoxamine).

Such problems may be treatable by lowering the dose, changing to an alternative drug or stopping the drug for a while. (These drugs are sometimes used to treat sexual difficulties, such as premature ejaculation). For more details about side effects, refer to the list of individual drugs, starting on p. 29.

In addition to the side effects, the BNF also lists effects that have been reported in association with SSRIs, but where a causal link has not been proved. These include abnormal bleeding, blood disorders, stroke, raised levels of the hormone prolactin (leading to breast tenderness and possibly milk production), pancreatitis (a disorder of the pancreas), suicidal thoughts, vaginal bleeding on withdrawal, violent behaviour, and hair loss.

There have also been reports in the press associating suicides and incidents when people have become uncharacteristically violent with their use of SSRIs. It has been suggested that suicidal and violent thoughts associated with SSRIs may be preceded by akathisia – a feeling of mental restlessness and agitation that causes great unease, and is more commonly associated with antipsychotic medication. Anyone who experiences such a sensation while taking an SSRI should discuss this with their doctor, promptly, and be aware of the feelings that may be associated with it. The Committee on the Safety of Medicines has largely discounted this as far as fluoxetine, at least, is concerned (see also p. 29).

Dangerous drug interactions

There are risks if SSRIs are taken with other antidepressants including MAOIs (or within two weeks of stopping MAOIs). It's essential to have at least a one-week gap after stopping SSRIs before starting MAOIs (with fluoxetine, at least five weeks and for paroxetine and sertraline at least two weeks).

There is evidence of significant adverse interaction between SSRIs and tricyclic antidepressants. All currently available SSRIs (except, perhaps, citalopram) may raise the blood levels of tricyclics, and therefore increase the risk of serious side effects. Such interactions may occur when drugs are changed from an SSRI to a tricyclic, and this should therefore be done with caution, starting with a low dose of tricyclic and increasing gradually.

If SSRIs are given with other antidepressants including MAOIs, tryptophan and lithium, there is a risk of serotonin syndrome developing. This is serious and potentially fatal. The symptoms are: hyperthermia (high temperature), tremor and convulsions (fits), agitation and muscle spasms.

There are possible hazards if SSRIs and antipsychotic drugs are prescribed together; in particular: fluoxetine with haloperidol; and fluvoxamine with clozapine. Some SSRIs may increase levels of carbamazepine with risk of carbamazepine levels rising to toxic levels. Check with your doctor or pharmacist for further information if you are prescribed drugs together, or closely following one another, in case of possible interactions.

Withdrawal from SSRIs

The BNF states that all SSRIs should be withdrawn slowly if possible. (For transient symptoms you may experience, see the section on withdrawing from trycyclics, on p. 16.) The BNF lists specific withdrawal symptoms for paroxetine (Seroxat) (see p. 31). The particular problem may be its short half-life (the time it takes for the amount of drug in the blood to be reduced by half). Fluoxetine (Prozac) has a long half-life, which means it takes a long time for the body to clear the drug completely, and so withdrawal is more gradual than it would be for paroxetine. Withdrawal symptoms vary from person to person; some may not be affected at all, while others will have great difficulty stopping the drug because of the severity of the effects.

Citalopram (Cipramil)

This drug has been available in the UK since 1995. The active ingredient is escitalopram, which was introduced as a new drug in 2002. *Adult dose:* 20mg daily as a single dose in the morning or evening, increased if necessary. 40mg tablets available for people with severe depression. For panic disorder: 10mg daily initially, increased to 20mg after one week; usual dose 20-30mg daily. Maximum dose should be 60mg daily. *Elderly dose:* maximum of 40mg daily. *Side effects:* (most common) nausea, sweating, tremor, drowsiness and dry mouth (see fluoxetine, below). *Cautions:* see fluoxetine, and general information on p. 26. *Drug interactions:* may have fewer interactions with other drugs than other SSRIs (see p. 27 and also general information on SSRIs, starting on p. 26).

Escitalopram (Cipralex)

This was licensed as a new drug in 2002, although it is the active ingredient of citalopram, and so is almost identical. *Adult dose:* for depression, 10mg daily, increased as necessary to a maximum of 20mg daily. For panic attacks, the starting dose is 5mg, which may be increased to 10mg after one week. Again, the maximum daily dose is 20mg. *Elderly dose:* doses should be halved. *Side effects:* (most common) nausea, diarrhoea or constipation, decreased appetite; loss of libido (women), ejaculation problems and impotence; insomnia, dizziness (see fluoxetine, below). *Cautions:* see fluoxetine. *Drug interactions:* see citalopram.

Fluoxetine (Oxactin, Prozac)

The patent for Prozac has now expired. This means that the drug (fluoxetine) can now be made by other drug companies, and may be marketed under its generic name of fluoxetine, and may also be given other trade names. These versions will not look the same as Prozac, and the inactive ingredients may be different, but the active ingredient (fluoxetine) will be exactly the same.

Adult dose: 20mg daily for depression should be enough. 60mg daily if given for the eating problem bulimia nervosa. For obsessive-compulsive disorder: 20mg daily initially; if there is no response after several weeks, the dose may be increased but may result in more side effects. Maximum dose 60mg daily. *Side effects:* (most common) gastric problems, including nausea, vomiting, indigestion, abdominal pain, diarrhoea, constipation, loss of appetite with weight loss and possible changes in blood sugar. Less common: allergic reactions, including rashes (when the BNF recommends treatment should be stopped), breathing difficulties, dry mouth, nervousness, anxiety, headache, insomnia, palpitations, tremor, confusion, dizziness, low blood pressure, hypomania or mania, fits, drowsiness, weakness, fever, sexual problems (see p. 26), sweating, movement disorders, a pattern of symptoms that resembles neuroleptic malignant syndrome (high temperature, rigidity, jerking muscles, extreme agitation that can progress to delirium and coma), low blood sodium levels. Abnormal liver function tests have been reported. Other effects have been reported, including claims that fluoxetine causes suicidal ideas, which have been largely discounted by recent research and the Committee on Safety of Medicines (see p. 27). *Caution:* fluoxetine should be given with caution to people with heart disease, those having ECT, or with a history of mania or liver or kidney disease, or to anyone with epilepsy (when it should be discontinued if fits develop). Avoid it during pregnancy or while breastfeeding. Fluoxetine may impair ability to drive or operate machinery. *Drug interactions:* MAOIs should not be given until at least five weeks after stopping fluoxetine. (See also p. 27.)

Fluvoxamine (Faverin)

Adult dose: 100mg daily up to a maximum of 300mg daily (over 100mg daily should be given in divided doses). Fluvoxamine can also be given for obsessive-compulsive disorder, but if there is no improvement within 10 weeks, it should be reviewed. *Side effects and cautions:* see fluoxetine, and other general information on p. 26. Fluvoxamine may slow the heart rate. In rare cases it may increase liver enzymes (the BNF then recommends drug should be stopped). Production of breast milk is reported. *Drug interactions:* see fluoxetine, and general information on p. 27. It also interacts with the asthma drugs theophylline and aminophylline. Consult your doctor or pharmacist if this applies. *Withdrawal:* avoid abrupt withdrawal.

Paroxetine (Seroxat)

Adult dose: 20mg daily, increasing, if necessary, by 10mg stages to a maximum of 50mg daily. Normally taken in the morning. For obsessive-compulsive disorder (OCD): 20mg each morning, initially increasing by 10mg stages weekly to a usual dose of 40mg and a maximum dose of 60mg. For panic disorder: as for OCD, but maximum of 50mg. *Elderly dose:* 20m daily up to a maximum of 40mg. *Side effects and caution:* see under fluoxetine and information on p. 26 (including the MHRA guidance that this drug should not be used in children and young people under 18). May worsen the symptoms of panic disorders initially. The Committee on the Safety of Medicines has received more reports of neuromuscular reactions (involuntary movements of mouth and face) than for other SSRIs. A 1993 Drug Safety Research Unit report revealed a higher rate of male sexual dysfunction than with other SSRIs. *Drug interactions:* see general information on p. 27. MAOIs should not be used within two weeks of stopping paroxetine.

Withdrawal: more yellow-card reports of withdrawal symptoms to the Committee on Safety of Medicines than for other SSRIs. Lists these temporary effects: dizziness, numbness, pins and needles, anxiety, disturbed sleep (and vivid dreams), agitation, tremor, nausea, sweating and confusion if stopped abruptly (see p. 28).

Sertraline (Lustral)
Adult dose: 50mg daily initially, increased if necessary in 50mg stages over several weeks to a maximum dose of 200mg daily, then reduced to usual maintenance dose of 50mg daily. Doses of 150mg or more should not be used for more than eight weeks. *Side effects and cautions:* see general information, on p. 26, and fluoxetine on p. 29. *Drug interactions:* see p. 27. After stopping sertraline, MAOIs should not be taken within seven days.

SSRI-related antidepressants

Venlafaxine (Efexor and Efexor XL)
Venlafaxine slows the re-uptake of both noradrenaline and serotonin (see p. 8) and thus prolongs their action. It is claimed to be the first SNRI antidepressant (serotonin-noradrenaline re-uptake inhibitor), which has a more selective action than the tricyclics. *Adult dose:* 75mg daily initially, in two divided doses, increased if necessary after several weeks to 150mg daily in two divided doses. For severe depression (and those in hospital) 150mg daily initially in two divided doses, increased if necessary in steps of up to 75mg every two to three days to a maximum of 375mg daily, then gradually reduced. Efexor XL is a modified release form, available as 75mg and 150mg, enabling the daily dose to be taken all at once. Manufacturers suggest new users start on 75mg once daily, increasing after two weeks to 150mg if necessary. Maximum dose 225mg daily. Best taken at the same time each day.

Side effects: nausea, headaches, insomnia, sleepiness, dry mouth, dizziness, constipation, weakness, sweating, and nervousness. Fits may occur (the BNF then advises discontinuing) and, occasionally, low blood pressure. (Nausea may occur less with the modified release form of drug.) Other reported effects include: loss of appetite, indigestion, abdominal pain, anxiety, visual disturbances, dilatation of blood vessels, vomiting, tremor, abnormal dreams, tingling sensations, chills, high blood pressure, palpitations, weight changes, agitation, muscle tension, rash, low blood sodium levels. There have also been reports of reversible increase in liver enzymes and alterations in blood cholesterol. If a rash develops contact your doctor. There has been a fairly high number of reports of sexual side effects, including lack of orgasm, ejaculation problems, impotence and spontaneous erection without sexual desire (priapism). Driving and other skilled tasks may be affected. *Drug interactions:* the BNF warns it's potentially hazardous to prescribe this drug together with other antidepressants. *Caution:* should be used with caution in people who have had a heart attack or have unstable heart disease (blood pressure should be monitored if taking more than 200mg daily), in people with a history of epilepsy, liver or kidney disease and in those who have abused drugs. It should not be given to those with severe kidney or liver disease, or in pregnancy or while breastfeeding. For information regarding the MHRA guidance that this drug should not be used in children and young people under 18, see p. 26. *Withdrawal:* BNF advises avoiding abrupt withdrawal. If taken for over a week, withdraw over a few days; if taken for more than six weeks, withdraw over one week at least. Withdrawal symptoms include: dizziness, vertigo, nausea, light-headedness, fatigue, headache, insomnia, agitation, abdominal cramps, and chills.

Noradrenaline Re-uptake Inhibitor (NARI)

Reboxetine (Edronax)

Reboxetine, was first licensed in the UK in 1997 and is supposed to act more quickly than other antidepressants, although the evidence for this is weak. It may have fewer antimuscarinic effects (see p. 15). It's suggested that it may suit those who have not responded to, or who can't tolerate, SSRIs or tricyclic antidepressants. *Adult dose:* 4mg twice daily increased if necessary after three to four weeks to 10mg daily in divided doses, to a maximum of 12mg daily. *Side effects:* insomnia, sweating, dizziness, low blood pressure on standing, vertigo, tingling in the skin, impotence, difficulty with urination (mainly men), dry mouth, constipation, rapid heart beat, reduced blood potassium, especially in the elderly. *Drug interactions:* reboxetine should not be started until two weeks after stopping an MAOI antidepressant, and an MAOI should not be started until at least one week after stopping reboxetine. Manufacturers advise against its use with heart drugs, antipsychotics, tricyclic antidepressants, cyclosporin, and some antifungal drugs and antibiotics. It's very important your doctor knows about all of the medications you are taking (including over-the-counter remedies). Its use with other antidepressants has not been evaluated. *Caution:* not recommended for elderly people. Reboxetine should be avoided or used with caution in people with severe kidney disease, liver disease, bipolar disorder, a history of epilepsy, urinary retention and glaucoma. It should be avoided in pregnancy and while breastfeeding.

Combination or compound drugs

It's possible for doctors to prescribe tablets that combine the actions of two groups of drugs, for example antidepressants and antipsychotics, or antidepressants and minor tranquillisers. However, the BNF does not recommend this, mainly because the doses of the component parts can't be adjusted to individual needs. It may be preferable to prescribe the two kinds of drugs separately.

Caution with compound drugs

Combined drugs of this kind can cause the side effects of each component part to become worse and more frequent. The side effects of antipsychotics may include: trembling hands, dry mouth and stiffening muscles as well as other side effects that may be serious enough to require treatment with other drugs. When taken over a period of years, major tranquillisers may cause *tardive dyskenesia*, a condition in which the person develops uncontrollable movements of the face, body and limbs, which may be permanent and for which there is, as yet, no proven treatment. It is extremely unlikely that any of these problems will arise with the low doses found in Motival and Triptafen, but it's nonetheless a risk that can be avoided (see also *Making sense of antipsychotics (major tranquillisers)*, details on p. 42). People who have been taking a combination drug for more than a few months should ask their doctor to take a fresh look at their needs. The following drugs combine antidepressants with a major tranquilliser in these proportions:

Motival: 500 micrograms fluphenazine hydrochloride; 10mg nortriptyline.
Triptafen: 25mg amitriptyline hydrochloride; 2mg perphenazine.
Triptafen-M: 10mg amitriptyline hydrochloride; 2mg perphenazine.

Other drugs for treating depression

Carbamazepine (Tegretol)

Carbamazepine is sometimes used for manic depression (bipolar disorder) when lithium has not been effective. (See *Further reading*, on p. 42, for more information.)

Flupentixol/flupenthixol (Fluanxol)

This is a low-dose preparation of an antipsychotic, which is used in higher doses to treat severe mental distress such as schizophrenia. It should be used for short-term treatment only. As this drug tends to take effect quickly, if there is no improvement within one week, manufacturers advise that treatment be stopped. (See p. 28 for risks of antipsychotics.) *Adult dose:* 1mg initially in the morning, increasing after one week to 2mg if necessary. Maximum dose 3mg daily in divided doses, not later than 4pm. *Elderly dose:* 0.5mg initially, increasing to 1mg if necessary. Maximum: 2mg daily in divided doses, not later than 4pm. *Side effects:* restlessness, insomnia, and overactive and excitable behaviour. Rarely: dizziness, tremor, visual disturbances, headache, raised blood prolactin levels (a hormone involved in producing breast milk), movement disorders. If movement disorders occur, the drug should be stopped. *Drug interactions:* unwanted effects may be increased if given with other antidepressants. Taken with sleeping pills or anti-anxiety drugs, sedation will increase. Avoid alcohol as this also provokes drowsiness. *Caution:* skilled tasks such as driving can be affected. Should be avoided in excitable, overactive or manic people and used with caution in people with Parkinson's disease, liver, kidney or heart disease or dementia. *Withdrawal:* should be stopped gradually.

Lithium (Camcolit, Liskonum, Priadel)

Mainly used for bipolar disorder, but may also be given as a preventive therapy where there are repeated episodes of severe depression. (See p. 27 about dangerous interactions and also *Further reading,* on p. 42, for more information).

Tryptophan/L-tryptophan (Optimax)

Tryptophan was re-introduced for 'exceptional cases' of treatment-resistant depression in 1994. It can only be prescribed by hospital specialists for people 'who have had severe and disabling depression continuously for more than two years'. Both patient and prescribing doctor must be registered with the manufacturer. Tryptophan is an amino acid present in the normal diet in small quantities. Used as an antidepressant since the 1970s, the Committee on Safety of Medicines then withdrew it from general use in 1990 because it was associated with a serious illness eosinophilia-myalgia syndrome (EMS). This is a blood disorder bringing severe muscle pain, joint pain, fever, swelling and skin rash, which may involve the lungs and central nervous system. The company warns that EMS is 'a multi-system disorder, which is usually reversible, but rarely fatal'. It states that various investigations have not as yet precisely identified the cause, which may have been associated with a contaminated batch of the drug. It recommends blood monitoring (for eosinophil, a particular white blood cell) and monitoring for any muscular symptoms. Safety questionnaires are issued to the prescriber every three months to begin with, and thereafter six-monthly. The Committee on Safety of Medicines reviews the information. *Adult dose:* 1g three times daily to a maximum of 6g daily. *Elderly dose:* a lower dose may be appropriate, especially for those with kidney or liver disease. *Side effects:* drowsiness, nausea, headache, light-headedness, eosinophilia-myalgia syndrome (see above). *Drug interactions:* the BNF warns that prescribing Optimax with other antidepressants may be hazardous. They specify MAOIs and SSRIs; yet also indicate it should only be used as an adjunct to other antidepressant medication. *Caution*: drug manufacturers point out that it is only available under the limited circumstances previously mentioned, and from hospital specialists. It should not be given to people who have had EMS following tryptophan use. Manufacturers advise against using it in pregnancy or while breastfeeding.

Index of drug names

References

British National Formularly 42 (September 2001)
'Effectiveness of antidepressants: meta-analysis of dose-effect relationships in randomised clinical trials' P. Bollini, S. Pampallona, G. Tibaldi, B. Kupelnick, C. Munizza (*British Journal of Psychiatry* 1999) 174, 297-303
'Emergence of antidepressant-induced suicidality' D. Healy (*Primary Care Psychiatry* 2000) 6, 23-28
'MHRA press releases on paroxetine and venlafaxine' Openmind 76 (August/September 1995)
'Selective serotonin reuptake inhibitors and tricyclic antidepressants in combination, interactions and therapeutic uses' D. Taylor (*British Journal of Psychiatry* 1995) 167, 575-580
'Size does matter: a study of antidepressant prescribing in a general hospital' A. J. Carson, P. Shah (*Psychiatric Bulletin* 2000) 24, 23-25
'Spiral of violence blamed on Prozac' A. Browne (*The Observer*, March 12, 2000)
'The fluoxetine and suicide controversy – a review of the evidence' D. Healy (Prozac Survivors website)

Useful organisations

Mind
Mind is the leading mental health organisation in England and Wales, providing a unique range of services through its local associations, to enable people with experience of mental distress to have a better quality of life. For more information about any mental health issues, including details of your nearest local Mind association, contact the Mind website: www.mind.org.uk or Mind*info*line on 0845 766 0163.

British Association for Behavioural and Cognitive Psychotherapies (BABCP)
PO Box 9
Accrington BB5 0XB
tel. 01254 875 277
fax: 01254 239 114
email: babcp@babcp.com
web: www.babcp.com
Can provide details of accredited therapists

British Association for Counselling and Psychotherapy (BACP)
BACP House
35–37 Albert Street
Rugby CV21 2SG
tel. 0870 443 5252
web: www.bacp.co.uk
See website or send A5 SAE for details of local practitioners

Carers UK
20–25 Glasshouse Yard
London EC1A 4JT
carers line: 0808 808 7777
tel. 020 7490 8818
email: info@ukcarers.org
web: www.carersonline.org.uk
Information and advice on all aspects of caring

The Manic Depression Fellowship (MDF)
Castle Works
21 St Georges Road
London SE1 6ES
tel. 020 7793 2600
fax: 020 7793 2639
email: mdf@mdf.org.uk
web: www.mdf.org.uk
Works to enable people affected by manic depression to take control of their lives

UK Council for Psychotherapy (UKCP)
167–169 Great Portland Street
London W1N 5PF
tel. 020 7436 3002
fax: 020 7436 3013
email: ukcp@psychotherapy.org.uk
web: www.psychotherapy.org.uk
The umbrella organisation for psychotherapy in the UK. Maintains a voluntary register of qualified psychotherapists

United Kingdom Psychiatric Pharmacy Group
helpline: 020 7919 2999
Helpline run by pharmacists to answer queries related to psychiatric drugs

Further reading and order form

- ☐ *Drugs used in the treatment of mental health disorders: FAQs* S. Bazire (Academic Publishing Services 2002) £8.95
- ☐ *How to cope with sleep problems* (Mind 2003) £1
- ☐ *How to look after yourself* (Mind 2002) £1
- ☐ *How to rebuild your life after breakdown* (Mind 2000) £1
- ☐ *Inside out: a guide to the self-management of manic depression* (Manic Depression Fellowship 1995) £3
- ☐ *Keyfacts: genetics and mental health* (Mind 2001) £5.50
- ☐ *Making sense of antipsychotics (major tranquillisers)* (Mind 2003) £3.50
- ☐ *Making sense of cognitive behaviour therapy* (Mind 2001) £3.50
- ☐ *Making sense of herbal remedies* (Mind 2000) £3.50
- ☐ *Making sense of homeopathy* (Mind 2001) £3.50
- ☐ *Making sense of lithium* (Mind 2004) £3.50
- ☐ *Making sense of sleeping pills* (Mind 2000) £3.50
- ☐ *The Mental Health Act 1983 – an outline guide* (Mind 2003) £1
- ☐ *The Mind guide to food and mood* (Mind 2000) £1
- ☐ *The Mind guide to managing stress* (Mind 2003) £1
- ☐ *Mind rights guide 1: civil admission to hospital* (Mind 2003) £1
- ☐ *Mind rights guide 2: mental health and the police* (Mind 1995) £1
- ☐ *Mind rights guide 3: consent to medical treatment* (Mind 2004) £1
- ☐ *Mind rights guide 4: discharge from hospital* (Mind 2003) £1
- ☐ *Mind rights guide 5: mental health and the courts* (Mind 1995) £1
- ☐ *Mind rights guide 7: managing your finances* (Mind 1999) £1
- ☐ *Toxic psychiatry: a psychiatrist speaks out* P. Breggin (HarperCollins 1993) £9.99
- ☐ *Understanding anxiety* (Mind 2003) £1
- ☐ *Understanding depression* (Mind 2004) £1
- ☐ *Understanding manic depression* (Mind 2003) £1
- ☐ *Understanding mental illness* (Mind 2004) £1
- ☐ *Understanding obsessive-compulsive disorder* (Mind 2002) £1
- ☐ *Understanding self-harm* (Mind 2003) £1
- ☐ *Understanding talking treatments* (Mind 2002) £1
- ☐ *Your drug may be your problem* P. Breggin, D. Cohen (Perseus 2000) £13.99

For a catalogue of publications from Mind, send an A4 SAE to the address below.

If you would like to order any of the titles listed here, please photocopy or tear out these pages, and indicate in the appropriate boxes the number of each title that you require.

Please add 10 per cent for postage and packing, and enclose a cheque for the whole amount, payable to Mind. Return your completed order form together with your cheque to:

Mind Publications
15–19 Broadway
London E15 4BQ
tel. 0844 448 4448
fax: 020 8534 6399
email: publications@mind.org.uk
web: www.mind.org.uk
(Allow 28 days for delivery.)

Please send me the titles marked opposite. I enclose a cheque (including 10 per cent for p&p) payable to Mind for £

Name

Address

Postcode

Tel.

Mind works for a better life for everyone with experience of mental distress

Mind does this by:

- advancing the views, needs and ambitions of people with experience of mental distress
- promoting inclusion through challenging discrimination
- influencing policy through campaigning and education
- inspiring the development of quality services, which reflect expressed need and diversity
- achieving equal civil and legal rights through campaigning and education.

The values and principles which underpin Mind's work are:
autonomy, equality, knowledge, participation and respect.

For details of your nearest Mind association and of local services contact Mind's helpline, Mind*info*Line: 0845 766 0163 Monday to Friday 9.15am to 5.15pm. Speech-impaired or Deaf enquirers can contact us on the same number (if you are using BT Textdirect, add the prefix 18001). For interpretation, Mind*info*line has access to 100 languages via Language Line.

Scottish Association for Mental Health tel. 0141 568 7000

Northern Ireland Association for Mental Health tel. 028 9032 8474

This book was revised by K. Darton
First published by Mind in 1992 © Mind 2004

ISBN: 0-900557-95-8

Mind (National Association for Mental Health)
15-19 Broadway
London E15 4BQ
tel: 020 8519 2122
fax: 020 8522 1725
web: www.mind.org.uk

mind

For better mental health