# Psychiatric Medication Information

**A Guide for Patients & Carers** 

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CONTENTS				
Your medication record	3			
Mental illness, medication & driving	4			
Medication as part of treatment	5-7			
Tips to help you take medication regularly	8			
Strategies to deal with common side effects	9			
Common medications in psychiatry	10-13			
Depression	14			
Table of common antidepressants	15			
Antidepressants	16-18			
Bipolar Disorder	19			
Mood stabilisers	20-21			
Common side effects of mood stabilisers	22			
Psychosis	23			
What treatments are available for psychosis	23			
Metabolic monitoring form	24-25			
Antipsychotics	26-28			
Depot / Long acting injections	29			
Possible side effects of antipsychotics	30			
General precautions when taking antipsychotics 31				
Clozapine	32-33			
Common side effects of clozapine	34			
Rare side effects of clozapine	35			
Managing sleep problems	36-41			
Looking after your physical health	42-43			
Smoking and psychiatric medications	43-44			
Substance abuse and dependence	45			
Opiate dependence	45			
Alcohol dependence	46			
Order information	47			
Acknowledgements	48			

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Keeping a diary i	is an easy way to	help you reme	ember your do	octor's instructio
on how much of	each medication	n you should be	taking.	
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	Medications Y	ou Are Currentl	y Taking *	
Date Started/ Dose Changed	Name	Strength	Times Per Day	Comments
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<sup>\*</sup> Cross out medications that have been stopped or changed
You should take this diary to each appointment to share your progress with your doctor.

## **MENTAL ILLNESS, MEDICATION & DRIVING**

It is worth noting that people with certain mental illnesses (e.g. schizophrenia) are obliged to advise their local driving regulatory authority of their condition.

It is also important to note that certain medications can, especially when you first start taking them, impair your ability to drive. If you are starting a new medication or switching to a new medication be aware of this and discuss with your doctor.



In <u>Victoria</u> the law states that: 'you must report any medical condition that could affect your driving and that you may be required to undergo a medical review to assess your ability to drive safely and hold a license.'

Please check with your own State's driving regulatory authority (eg. Victoria - Vicroads, NSW - RTA) to obtain further information.

#### **USEFUL LINKS**

Fact Sheet 'Driving and your health'. All consumers who currently drive or who intend to drive in the future should be provided with a copy of this fact sheet <a href="http://www.austroads.com.au/images/stories/AFTD">http://www.austroads.com.au/images/stories/AFTD</a> Driver Factsheet WEB.pdf

General information regarding assessing fitness to drive can be found at

- VICROADS <a href="http://www.vicroads.vic.gov.au/Home/Licences/Medicalreview/">http://www.vicroads.vic.gov.au/Home/Licences/Medicalreview/</a>
   Fitness+to+drive+changes.htm
- AUSTROADS http://www.austroads.com.au/



## **MEDICATION AS PART OF TREATMENT**

Most of us routinely take medicine for physical illnesses. If we have a cough or cold we use decongestants, throat lozenges or nasal spray. When we get a headache we take an aspirin without giving it a second thought. Many people don't realise that most mental and psychological illnesses often respond to medication. So, medication taken under a doctor's supervision, can play a valuable role in overcoming the symptoms of psychosis, depression, mania, and anxiety disorders. Medication may be a short-term therapy, or it may be required for a lengthy period. In some cases it may be required for many years, or even for life.

Medications are used not just to help get you well, but also to keep you well. This is the same as for many physical illnesses such as diabetes, epilepsy and high blood pressure.

#### FINDING THE RIGHT MEDICATION

Many different drugs have proved useful in the treatment of mental disorders. Finding the right medication and dosage for each individual may require some detective work. Diagnosing the specific disorder will narrow the field of appropriate medication, and your doctor will make the final selection based on individual circumstances and your health history.

Each drug has advantages and disadvantages. Some work faster than others; some remain in the bloodstream longer. Some require several doses daily, others need to be taken only once a day. Medications' effectiveness varies with each individual. We are each unique, and so is our response to medication. Sometimes your doctor will change dosages and switch medications to find the best match between the person and the medicine.

#### WHAT YOUR DOCTOR SHOULD KNOW

A doctor prescribing medication must know more about the person than just the illness being treated, and a complete medical history is essential. To guard against counter-productive or dangerous drug interactions, your doctor must know what other medications (including over-the-counter drugs, herbal remedies, other "natural products" or substances) you are taking or have taken recently. Your doctor also needs to know about other medical problems or conditions that might affect treatment.

#### **RISKY COMBINATIONS**

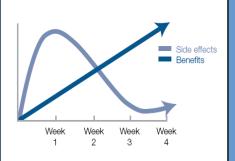
Certain drugs should not be taken together and some drugs can be dangerous when mixed with alcohol, particular foods, or other medications. You must be thorough and honest when your doctor asks about eating habits, health history and other drugs you are taking. Your own past experience with medication is also valuable information.

If you have been successfully treated with a specific drug in the past, that medication or one with similar properties might be preferable to an untried one. Likewise, your doctor would want to avoid prescribing a previously unsuccessful medication. Blood relatives often react to medication in a similar fashion, so experiences of family members can also be useful for the doctor to know.

#### SIDE EFFECTS & OTHER REACTIONS

Most people can take medications commonly used to treat mental and psychological disorders without difficulty, but sometimes there are side effects. Side effects vary with the drug but can range from minor annoyances like dry mouth or drowsiness to more troubling reactions like irregular heartbeat. Fortunately, most side effects disappear in the first week or two of treatment. If the side effects persist, or if they interfere with normal activities, tell your doctor.

Potential side effects should be discussed before medication therapy begins. Knowing what to expect prevents unnecessary concern and alerts you to the kind of reactions that should be reported right away. Be sure to ask the doctor about side effects you might experience with your medication.



The new medication should help you feel better, but you may not notice the benefit straight away. Medication can take some time to start working. In the meantime, you may experience some symptoms that you are not used to. Discuss these with your doctor and within a few weeks they should settle and your treatment will be back on track.

#### **SCHEDULING AND DOSAGE**

Getting the right result from medication depends on taking the right amount at the right time. Dosages and their frequency are determined by the need to ensure a consistent and steady amount of medication in the blood and by the length of time the drug remains active. If sticking to the schedule proves difficult, you should ask your doctor if adjustments can be made. Sometimes it is possible to change the timing of doses, although changes are not always possible. You should not deviate from the prescribed dosages unless instructed by the doctor. People who have forgotten to take their medication at some point in the day are often tempted to 'catch up' and take twice as much as prescribed at the next dose. Doubling up increases the risk of a bad reaction. The proper procedure is to take the right amount.

Believing more is better, some people increase their dosage if their symptoms are not relieved immediately or because previous symptoms have returned. Others under-medicate themselves because they fear side effects. Some people cut back or stop medication on their own because their symptoms have disappeared. Cutting dosages or stopping medications can cause symptoms to return.

#### **SPECIAL CIRCUMSTANCES**

Using medication is more complicated for some groups of people. **Pregnant women and nursing mothers**, for example, must avoid certain drugs because of possible danger to the infant. If you are pregnant or planning pregnancy, tell your doctor. **Young children and the elderly** also need special attention. Because of their lower body weight, youngsters generally are given smaller dosages of medication than adults. Treatment of the elderly may be complicated by co-existing health problems requiring other medications, which may not mix well with the new treatment; again, lower doses are often used in the elderly.

'Pregnant women and nursing mothers,
for example, must avoid certain drugs because
of possible danger to the infant. If you are
pregnant or planning pregnancy, tell your doctor.'

#### TIPS TO HELP YOU TAKE MEDICATION REGULARLY

To help ensure you take your medication try to:

- Take it at a set time every day
- Link it to a regular activity such as brushing your teeth
- Keep a simple medication diary like the one inside the front cover of this booklet or mark it on a calendar when you take it
- Use a blister pack, sachet or dosette box from your pharmacy. These containers can significantly reduce the risk of dosage problems and can help you get the maximum benefit from your medication. Each dose is arranged in a separate compartment which makes it easy to check if the dose has been taken. Speak to your Pharmacist for further information.
- Depots or long-acting injectable preparations can also provide a convenient alterative to take multiple daily oral doses of certain medications.







'Stopping medication requires as much care as starting it.

Medications should be phased out gradually under the direct supervision of your doctor.'

#### **HOW LONG WILL DRUG THERAPY LAST?**

The length of drug therapy will vary with the individual and the severity of the disorder. You are likely to need medication for at least several months. Some people may need medication for a year or longer, even for life in some cases, to keep them well.

Medication therapy generally involves a regular dosage schedule but in cases of mild or infrequent anxiety or agitation you may be prescribed 'PRN' medication to be taken at your discretion when needed.

Stopping medication requires as much care as starting it. Medications should be phased out gradually under the direct supervision of your doctor.

#### STRATEGIES TO DEAL WITH COMMON SIDE EFFECTS

#### Sedation

Tends to be more common on starting a new medication or when the dose is increased quickly. Starting at low doses and increasing the dose slowly can reduce the impact. Giving most of the dose at night may help, or a dose change may be required. If sedation is still troublesome, change to a less sedating medication should be considered.

#### **Weight Gain**

Can be a problem with some medications. Maintaining a healthy diet and getting plenty of exercise is recommended. Your doctor can provide appropriate support for weight management.

#### **Dry Mouth**

Try taking sips of water with a bit of lemon juice in it, lemon and glycerine swabs, sucking ice, sugarless gum etc. If none of these strategies work, ask your pharmacist about artificial saliva

#### Constipation

Can be a persistent problem. A diet high in fibre and drinking plenty of water and getting moderate exercise is recommended. Short-term use of bulk laxatives or stool softeners may be helpful.

#### **Light-headedness**

Dizziness or giddiness on standing can be a particular problem. If you get dizzy on standing, sit down, wait a little, then slowly get up again.

#### Nausea

Can occur in the first weeks of treatment. Taking the medication with food can help. An antinauseant medication may be needed.

#### Uncontrolled urination

Try to avoid drinking fluids in the evening; make sure of adequate voiding at bedtime. If the condition is troublesome, your doctor can review and prescribe particular medications to help with this problem.

## **COMMON MEDICATIONS IN PSYCHIATRY**

Psychiatric Medications can be divided into several distinct groups based on their chemical properties. The following provides an overview:

#### **ANTIPSYCHOTICS**

Are used to treat many mental and psychological disorders such as schizophrenia, mania, psychotic depression and drug-induced psychosis. Depending on the condition being treated, they may be required to be taken for a few months, or in some cases for several years. They may take several weeks to work, and if they are stopped too soon the symptoms they are being used to treat often return.

#### **ANTIDEPRESSANTS**

SSRIs (Selective Serotonin Reuptake Inhibitors) and SNRIS (Serotonin Noradrenaline Reuptake Inhibitors) are now considered first line treatment for depression. Their safety and convenience (they require once-a-day dosing) have made them among the most widely used drugs in the world. The most common side effects which tend to resolve after 3 or 4 weeks are mirch nausea, headaches, restlessness and insomnia. Sexual dysfunction, primarily ejaculatory delay, also has been reported. They may cause sexual dysfunction in females too, particularly difficulty in attaining orgasm.

Noradrenaline and Specific Serotonin Antagonists (NaSSAs) and Noraderenaline Reuptake Inhibitors (NaRIs) are newer antidepressants with unique modes of action. The NaSSAs are associated with sedation and potentially weight gain, while the NaRIs are somewhat energising.

**Tricyclic Antidepressants (TCAs)** were amongst the first effective antidepressants but some are also effective for panic attacks and they may be used in the treatment of chronic pain syndromes. Tricyclics generally take two or three weeks to take effect. Side effects may include weight gain, drowsiness, dry mouth, dizziness and impaired sexual function.

**Vortioxetine** is a novel antidepressant which targets a wide range of brain receptors. It appears to have particular benefit for cognitive (thinking) problems associated with depression.

**Agomelatine**, a melatonergic antidepressant which helps regulate your 'body clock' (circadian rhythm) which may be disrupted in patients with depression. It generally has few side effects.

#### **MOOD STABILISERS**

These are used to reduce the severity of mood swings and may also reduce irritability and aggression. All mood stabilisers require blood tests to monitor levels. Your doctor should also monitor blood, kidney function, thyroid and liver function where appropriate.

**Lithium** is effective in the treatment of moderate to severe mania and in the prevention of bipolar affective disorder, particular manic relapse. Common side-effects including thirst, passing of large volumes of urine and tremor. If dehydration occurs it may become toxic with harmful effects on the kidneys. Early warning signs of lithium toxicity may include nausea/vomiting, worsening tremor and severe drowsiness or confusion. If you have these symptoms and think you might be becoming lithium toxic you should go to your doctor or Emergency Department of the Hospital immediately.

Valproate, Carbamazepine and Lamotrigine are anticonvulsants which also act as effective mood stabilisers. Valcroate can induce nausea, weight gain, tremor and menstrual disturbance in females. Carbamazepine may cause sedation, rash, double vision, dizziness and unsteadiness on the feet. Lamotrigine can cause skin reactions in varying degrees and the risk is increased when combined with valproate and the dose is increased rapidly; it MUST be up-titrated slowly.

#### **ANXIOLYTICS**

**Benzodiazepines** are effective against anxiety and agitation. They are also used for the short term treatment of insomnia. Benzodiazepines are relatively fastacting. Their principle side effect is drowsiness. They have the potential for dependency. There is often a temporary withdrawal syndrome when they are stopped suddenly. For these reasons benzodiazepines are usually only prescribed for a short period of time (less than 2 weeks).

#### **SIDE EFFECT MEDICATIONS**

**Anticholinergic drugs** such as benztropine, benzhexol and tetrabenazine are used to treat side effects of antipsychotic medications, mainly muscle stiffness or tremor. They may cause side effects such as dry mouth, blurred vision and constipation. They should be prescribed with great care for those who suffer from glaucoma or have prostate problems as they can worsen these conditions.

**Beta Blockers** may also be used to reduce side effect symptoms from other medications, such as restlessness or tremor. They also reduce anxiety, blood pressure and slow the heartbeat. They should not be taken by people who suffer from asthma.

Medication Class	Disorder for Which Prescribed
Antipsychotics (First generation) Chlorpromazine, Flupenthixol, Fluphenazine, Haloperidol, Pericyazine, Thioridazine, Trifluoperazine, Zuclopenthixol.	Psychosis Schizophrenia Schizo-affective Disorder Some also indicated for Bipolar Disorder
Antipsychotics (Second generation) Amisulpride, Aripiprazole, Asenapine, Clozapine, Olanzapine, Paliperidone, Quetiapine, Risperidone, Sertindole, Ziprasidone	Psychosis Schizophrenia Schizo-affective Disorder Some also indicated for Bipolar Disorder
Monoamine Oxidase Inhibitors (MAOIs) Phenelzine, Tranylcypromine	Depression
Reversible Inhibitor of Monoamine Oxidase (RIMA): Moclobemide	Depression
Tricyclic Antidepressants (TCAs) Amitriptyline, Clomipramine, Dothiepin, Doxepin, Imipramine, Nortriptyline, Trimipramine	Major Depressive Disorder Obsessive-Compulsive Disorder (OCD) Panic Disorder Generalised Anxiety Disorder
Selective Serotonin Reuptake Inhibitors (SSRIs) Citalopram, Escitalopram, Fluoxetine, Fluvoxamine, Paroxetine, Sertraline	Maic Depressive Disorder  Obsessive Compulsive Disorder (OCD)  Panic Disorder, Generalised Anxiety Disorder
Serotonin Noradrenaline Reuptake Inhibitor (SNRis) Desvenlafaxine, Duloxetine, Venlafaxine.	Major Depressive Disorder Generalised Anxiety Disorder
Noradrenaline and Specific Scrotonin Antagonist (NaSSA) Mirtazapine	Major Depressive Disorder Generalised Anxiety Disorder
Noradrenaline Reuptake Inhibitor (NaRI) Reboxetine	Major Depressive Disorder
<b>Multimodal</b> Vortioxetine	Major Depressive Disorder
Melatonergic Agonist Agomelatine	Major Depressive Disorder
<b>Mood Stabilisers</b> Carbamazepine, Lamotrigine, Lithium, Sodium Valproate, Topiramate	Bipolar Disorder Major Depressive Episode/Disorder( used to augment antidepressants) Sodium Valproate, Carbamazepine and Lamotrigine are also anticonvulsants
Benzodiazepines Alprazolam, Clonazepam, Diazepam, Lorazepam, Oxazepam, Nitrazepam, Temazepam	Insomnia Anxiety Agitation
Non-Benzodiazepine Hypnotic: Zopiclone, Zolpidem	Insomnia
Anticholinergics Benztropine, Benzhexol	Side effects of antipsychotics such as muscle stiffness
Beta Blockers Propranolol	Side effects such as anxiety, restlessness, tremor Performance anxiety

Benefits	Drawbacks
Effective for many people. 2-4 weeks often needed for full response.	Side effects can include restlessness, tremor, muscle stiffness, constipation and weight gain.
Effective for many people, 2-6 weeks often needed for full response. Clozapine reserved for 'treatment resistance.'	Most side effects much milder than with First generation drugs. Sedation and weight gain may be a problem.
Effective for severe depression where other antidepressants have failed.	A strict diet must be adhered to while undergoing treatment and for 2 weeks after stopping the drug
Useful for anxiety or insomnia	Less effective for more severe depression
Effective for many people, 2-4 weeks often needed for good response.	Dry mouth, constituation, blurred vision, dizziness, low blood pressure, moderate weight gain & occasionally difficulty in unincling.
Effective for most people, once daily dosage. Often takes 2-4 weeks for response.	Nausea, insomnia, headache, and nervousness. Reports of delayed ejaculation.
Effective for many people, takes 2-4 every for response, will continue to improve after this.	Nausea, headache, and insomnia may occur. May raise blood pressure, especially at doses above 300mg/day.
Effective for many people, takes 2-4 weeks for response, will continue to improve after this.	Dry mouth, dizziness, sedation, weight gain.
Effective for many people, takes 2-4 weeks for response, will continue to improve after this.	Urinary retention, dry mouth, constipation, sweating, blood pressure increase, insomnia.
Restores restful sleep and improves daytime alertness. Little sexual dysfunction or 'emotional blunting'.	Dizziness, headache, nausea.
Generally few side effects; particular benefit for cognitive symptoms	Nausea, influenza, constipation
Lithium may work within 1-2 days in some people, usually benefits seen within 2 weeks. Valproate & Carbamazepine may work better than Lithium in "rapid cycling" Bipolar Disorder. Lamotrigine is most effective for the depressed phase of Bipolar Disorder.	All mood stabilisers require regular blood monitoring. Lithium may cause side effects such as weight gain, tremor and thirst. Valproate and Carbamazepine may cause sedation and weight gain. Lamotrigine can cause serious skin problems and must be started slowly.
Fast-acting, with most people feeling better in the first week and many feeling the effects from the first day of treatment.	Habit-forming; can cause drowsiness, interfere with concentration, driving and operating machinery.
Fast acting; little 'hangover.'	Can be habit forming; can cause unusual sleep behaviours like sleep-eating; NOT to be used with alcohol.
Enables side effects from antipsychotic medications to be managed.	Can cause dry mouth, blurred vision and constipation.
Enables side effects from antipsychotic medications to be managed.	Can lower blood pressure, may cause dizziness or fainting at first. Not to be taken by asthmatics.

## **DEPRESSION**

Depression affects how people feel about themselves, the world around them and the future. Symptoms of depression include a pervasive depressed mood that is more than ordinary sadness, overall lack of interest in everyday life, loss of self-esteem, reduced energy and concentration, sleeping problems and loss of appetite and weight loss. Often depressed people find it difficult to cope with everyday stress. Depression can last for weeks, months or even years.

There are different types of depression: atypical depression, agitated depression, post-partum depression, psychotic depression and bipolar depression.

# Depression is treatable and effective treatments are available so the earlier you seek help, the better.

#### **Medical treatment for depression**

Antidepressants are often prescribed, alongside with psychological treatment (also known as talking therapies) for moderate or severe depression. They may also be helpful in the treatment of obsessive compulsive disorder, social phobia and post-traumatic stress disorder. Selection of which antidepressant is best for you requires careful discussion with your doctor. Age, chronic illness, pregnancy, breastfeeding and other concurrent medications can influence the selection decision. Different classes of antidepressants work in different ways to restore the imbalance of chemicals in the brain such as serotonic and noradrenaline.

'Antidepressants are generally not recommended for use by themself in people with bipolar disorder as they can trigger mania.'

#### **Benzodiazepines**

Benzodiazepines may be helpful in the first few weeks of treatments of depression and anxiety (especially with an SSRI or SNRI) to help with sleep and agitation. Although they are useful in reducing anxiety, agitation and tension, they are clearly addictive and generally should not be used in the longer term.

#### **Other treatments**

**Psychological treatments** help people with depression to change negative patterns of thinking and improve their coping skills so they are better equipped to deal with life's stresses and conflicts. Psychological therapies may not only help a person to recover, but can also help to prevent the depression from reoccurring.

**Electroconvulsive Therapy (ECT)** is a safe and effective treatment for severe depression. It is generally used after other treatment options have failed. Immediate side effects of ECT may include: loss of memory of events immediately before and after ECT, headache, sore muscles, aching jaw, low blood pressure and confusion. These side effects resolve within a few hours; and in the longer term there is no impact on cognitive function.

Antidepressants are not addictive!

Generic Name	Actions	Common
	and Cautions	Side Effects
Tricyclic Antidepressants (TCAs):	TCAs and Heterocyclic: work by slowing	- over-sedation
Amitriptyline Clomipramine Dothiepin Doxepin Imipramine Nortriptyline Trimipramine Heterocyclic: Mianserin	down reuptake of serotonin and noradren- aline, but also have other effects on the nervous system.  Serotonin Syndrome: If combined with other drugs that can also affect serotonin, such as Tramadol, SSRIs, Venlafaxine, MAOIs, Mirtazapine, there is a risk of 'serotonin syndrome'. Symptoms include: agitation/restlessness, sweating, diar- rhoea, hyperreflexia, lack of coordination, shivering and tremor.	- dry mouth, blurred vision - urinary retention, constipation - sweating - weight gain - dizziness when standing quickly - sexual dysfunction  TCAs can cause serious side effects at doses higher than normal; care is required in people with a history of heart disease
	<u> </u>	
Monoamine Oxidase Inhibitors (MAOIs): Phenelzine Tranylcypromine	MAOI: block the action of monoamine oxidase A and B. Precaution: a potential fatal reaction can occur as a result of eating certain foods or combining with other medicines. A strict diet must be adhered to while undergoing treatment with an MAOI and for 2 weeks after stopping the drug.  See also 'Servionin Syndrome' above	- over-stimulation, restlessness - insomnia, blurred vision iow blood pressure - chronic use may cause liver damage
Reversible Inhibitor of Monoamine	RINA: breck the action of monoamine	- nausea, headaches, dizziness,
Oxidase A (RIMA):	oxidase A enzyme but not irreversibly.	- insomnia
Moclobemide	See also 'Serotonin Syndrome' above	
Selective Serotonin Reuptake	SSRIs: work by slowing down re-absorption	- nausea, indigestion, diarrhoea
Inhibitors (SSRIs):  Citalopram Escitalopram Fluoxetine Fluvoxamine Paroxetine Sertraline	of serotonin (neurotransmitter) in gaps between the nerve cells.  See also 'Serotonin Syndrome' above	- headaches, loss of appetite - nervousness, irritability - excess stimulation in some patients - sleep disturbance therefore morning dosing - drowsiness, tiredness - sexual dysfunction
Serotonin & Noradrenaline Reuptake	SNRIs: work by slowing down the reuptake	- nausea, sedation, drowsiness
Inhibitors (SNRIs):  Venlafaxine Duloxetine	of both serotonin and noradrenaline, but more selectively than other drugs.  See also 'Serotonin Syndrome' above	- dizziness - dry mouth, headaches, sweating
Desvenlafaxine	see also servicium synarome above	
<b>Multimodal</b> Vortioxetine	Increases serotonin levels and also affects a wide range of brain receptors	- nausea - influenza - constipation
Noradrenergic & Specific Serotonin	NaSSAs: block the adrenergic alpha &	- dry mouth, dizziness
Antagonist (NaSSA): Mirtazapine	serotonergic receptors; thus enhance the release of noradrenergic and serotonergic transmission.	- sedation, weight gain
	See also 'Serotonin Syndrome' above	
Noradrenaline Reuptake Inhibitors	NARIs: increase the amount of noradrena-	- urinary retention, dry mouth
(NARIS):  Reboxetine	line in the brain.	<ul> <li>constipation</li> <li>sweating, blood pressure increase</li> <li>insomnia</li> </ul>
	Enhances the effectiveness of melatonin	
Melatonergic Agonist  Agomelatine	receptors and selectively blocks the seroto- nin receptor.	- dizziness, headache and nausea
Agomeratine	пш тесеріот.	

## **ANTIDEPRESSANTS**

It is important not to stop antidepressants immediately you start feeling better as you may relapse.

#### WHY IS IT SO IMPORTANT TO KEEP TAKING THEM?

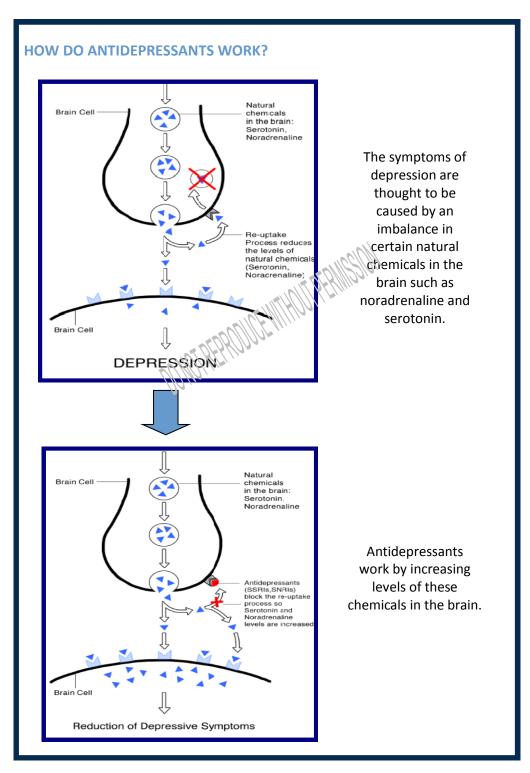
Antidepressants are not addictive. When taken regularly, antidepressants will contribute to the recovery of around 60-70% of patients. It is important that you continue with treatment, as prescribed by their doctor, even beyond the time you begin to feel better: if treatment stops too early, there is a high risk of depression returning, especially within the first six months of stopping treatment.

Antidepressant Discontinuation Reaction such as agitation, headache, fatigue and dysphoria can occur with some antidepressants if they are stopped abruptly.

#### **HOW LONG DO THEY TAKE TO WORK?**

Antidepressants need to reach a certain dose before they begin to work. The level of the dose varies for different antidepressants. For most people a response occurs within about two to three weeks of reaching the required dose. For some people it can take up to eight weeks or a little longer before they start to feel better. It is important to continue taking the medication to allow the best chance of it working.

Do not stop taking the medication without consulting your doctor first



#### WHAT HAPPENS IF I MISS A DOSE?

Take it as soon as possible, as long as it is only a few hours after the usual time. Otherwise, wait until the next dose is due and take it as normal – **do not try to** catch up by doubling the dose.

#### DO ANTIDEPRESSANTS HAVE ANY UNPLEASANT SIDE EFFECTS?

All medicines have side effects even the ones you can buy without a prescription at a pharmacy, supermarket or health food store. The important things to remember are that not everyone experiences side effects. It is important to balance unpleasant side effects against the distress and pain caused by depression. Side effects usually occur early in the treatment, many of them will settle down after a few weeks, when the body has adapted to the medications.

#### **HELPFUL HINTS**

- Taking SSRI with/after food will assist with gastro intestinal discomfort
- Most side effects are early onset and time limited (about 1-2 weeks)
- Benzodiazepines may be useful for short-term treatment (1-2 weeks) for pronounced insomnia or anxiety

#### **GENERAL PRECAUTIONS**

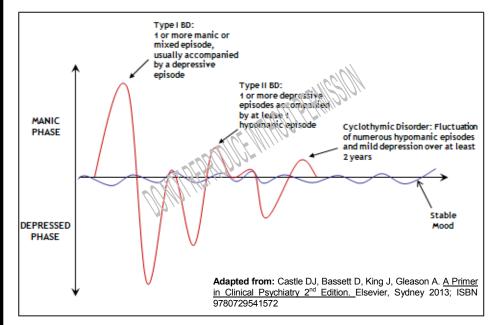
Antidepressants such as paroxetine, venlafaxine, desvenlafaxine and duloxetine should be slowly reduced when ceasing to avoid an antidepressant discontinuation reaction.

Care should be taken in combining antidepressants with other sedative drugs or alcohol as the sedative effects are additive. Care should be taken when driving or operating machinery as reaction times may be slowed.

'It is important to balance unpleasant side effects against the distress and pain caused by depression.'

## **BIPOLAR DISORDER (BD)**

Bipolar disorder is an illness which results in someone experiencing extreme mood changes that sometimes can affect the safety of themselves or others. "Up" mood are called hypomania or mania and are characterise by mood elevation, irritability, excessive energy, and drive and reduced sleep. "Down" moods are depressive episodes which can be very severe in bipolar disorder "mixed states" are when manic and depressive symptoms occur together. There are different types of bipolar disorder:



It is well-known that STRESS, anxiety and the continuous use of alcohol or other drugs in people with BD increases the risk of relapse of their illness. Daily mood monitoring and knowing your triggers and early warning signs are important in relapse prevention.

#### **MEDICATIONS USED TO TREAT BIPOLAR DISORDER**

**Mood stabilisers** including lithium, valproate, carbamazepine, lamotrigine are used to keep your mood level and help prevent swings to higher or lower extremes. **Antipsychotics** are used to treat psychotic symptoms and can help to reduce agitation or distress and aid with sleep. They can also be used as mood stabilizers. **Antidepressants** are sometimes used to treat depressive episodes in bipolar disorder. However, **caution needs to be taken** when prescribing these medications in BD, as there is a risk of lifting a depressive mood into a hypomanic, manic or mixed state.

## **MOOD STABILISERS**

#### WHAT ARE MOOD STABILISERS FOR?

Mood Stabilisers *(MS)* are medications used to reduce the severity of mood swings in bipolar disorder. They are also used to prevent recurrence of episodes. These medicines are a diverse group of drugs that include lithium and the anticonvulsants sodium valproate, carbamazepine and lamotrigine.

#### **HOW DO THEY WORK?**

It is not clear how *MS* work to control episodes of mania or depression. Mood stabilising medications are seldom immediately effective; thus, it is important to continue to take the medication as prescribed and have regular appointments with your doctors so they can check your progress.

#### **HOW LONG DO THEY TAKE TO WORK?**

The dose of *MS* is different for every patient and is based on the amount of drug in the blood as well as the response of treatment. Control of manic symptoms or stabilisation of mood may require up to 14 days of treatment.

#### WHY IS IT SO IMPORTANT TO KEEP TAKING THEM?

Many people with bipolar disorder experience frequent episode of mania and depression. Following the first episode of mania, it is recommended that *MS* be continued for one year. For individuals who have several episodes of mania or depression, *MS* should be continued indefinitely. It is important to continue taking the Mood Stabilisers, as prescribed by your doctor, even beyond the time you begin to feel better: if treatment stops too early, there is a <u>high risk</u> manic or depressive episodes will return.

#### WHAT HAPPENS IF I MISS A DOSE?

Take it as soon as possible, as long as it's only a few hours after the usual time. Otherwise, wait until the next dose is due and take it as normal – **do not try to** catch up by doubling the dose.

#### DO MOOD STABILISERS NEED MONITORING?

Many of the *MS* require blood tests to ensure that the amount of medication is in the right range and effective for you. On the morning of your mood stabiliser blood test, take the morning dose <u>after</u> the test to avoid inaccurate results.

#### DO MOOD STABILISERS HAVE ANY UNPLEASANT SIDE EFFECTS?

All medicines can have side effects — even the ones you can buy without a prescription at a pharmacy, supermarket or health food store. The important things to remember are that not everyone experiences side effects and they usually occur early in the treatment, many of them will settle down after a few weeks, when the body has adapted to the medications.

#### **GENERAL PRECAUTIONS**

Do not stop your **MS** suddenly as this may result in withdrawal symptoms such as anxiety, irritability and emotional liability. MS may impair the mental and physical abilities and reaction time required for driving a car or operating other machinery. Avoid these activities if you feel drcws and slowed down.

'If you are on a mood stabiliser and you plan to become pregnant, or are pregnant, you should contact your doctor as soon as possible for advice regarding your medication'

**Lithium:** It is important to drink 8-12 cups of fluids daily especially during hot weather and during activities that cause you to sweat heavily; and do not change your salt intake during your treatment with lithium. Also avoid the use of non-steroidal anti-inflammatory drugs (e.g. ibuprofen, naproxen) as the blood level of lithium can be affected by them and may result in toxicity. Paracetamol is a safer alternative. Consuming large amount of electrolytes supplement containing sodium (e.g. Ural<sup>®</sup> and Citravescent<sup>®</sup> for urinary tract infection) may reduce the effectiveness of lithium.

**Valproate:** Avoid the use of high dose (greater than 300mg per day) aspirin and related aspirin containing products if you are taking sodium valproate, as it can affect the blood level of this drug. Paracetamol is a safer alternative.

**Carbamazepine:** Avoid drinking grapefruit juice while on carbamazepine as it can affect the level of carbamazepine in your body.

**Lamotrigine:** Rarely, lamotrigine can cause a rash serious enough to result in a medical emergency. However, the risk of this potential serious side effect can be reduced by starting with a low dose and then increasing the dose slowly.

COMMON SIDE FEFFCTS OF M	AOOD CTADII ICEDC

Side Effect	Treatment
Lithium: Increase thirst, frequent urination, nausea, vomiting and diarrhoea, metallic taste. Fatigue, difficulty concentrating Fine muscle tremor, weakness. Dry skin, worsening of acne or psoriasis.	These problems usually reduce with time.  Discuss with your doctor.
Valproate: Nausea, indigestion, weight gain, sedation, trembling hands, transient hair loss.	Discuss with your doctor if these problems become bothersome as this may require an adjustment in your dosage.
Carbamazepine: Unsteadiness or ataxia, drowsiness, dry mouth, blurred vision, headache, ringing in the ears.	Discuss with your doctor. Sour candy and sugarless gums help increase saliva in your mouth. Reading under a bright light or at a distance may help with blurred vision.
Lamotrigine: Headache, drowsiness, tremors, ataxia, blurred vision, constipation, dizziness, double vision or diplopia, dry mouth.	OF MILHON,

## RARE SIDE EFFECTS OF MOOD STABILISERS

Side Effect	Treatment
Lithium: Loss of balance, slurred speech, visual disturbances (e.g. double vision), severe nausea, vomiting, persistent diarrhoea, marked trembling (shaking that interferes with holding a cup), frequently muscle twitching and abnormal general weakness or drowsiness.	Stop taking Lithium immediately and contact your doctor at once, as they may be result of Lithium toxicity.
Anticonvulsants  Valproate, Carbamazepine: Fever, unusual tiredness or weakness, severe nausea, vomiting or drowsiness. Confusion or change in vision, irritability restlessness or agitation. Unusual bruising or bleeding. Yellowing of the skin or eyes, darkening of urine, particularly with Valproate.  Lamotrigine: serious skin rash	If you experience any of these symptoms stop taking the anticonvulsant and contact your doctor immediately.

## **PSYCHOSIS**

Psychosis impairs a person's sense of reality. Psychotic symptoms vary for each person and may change overtime.

Psychotic symptoms include:

- Hallucinations (e.g. hearing voices)
- Delusions (e.g. paranoia)
- Disorganised speech and behaviour

These symptoms can occur in several mental illness disorders such as bipolar disorder, drug-induced psychosis, psychotic depression, and schizophrenia. In schizophrenia there are also often residual 'negative' symptoms such as apathy and social withdrawal.

Psychotic episodes often occurs in 3 phases: prodrome, acute phase and recovery phase. The length of each phase varies from each individual and depends upon effective treatment.

## WHAT TREATMENTS ARE AVAILABLE?

To determine the best treatment options will depend on factors such as personal preference, the apparent cause of the symptoms, how severe the symptoms are and how long they have been present. Treatment should be tailored to the individual. Individual counselling, family support and psychosocial treatments all play an important role in the holistic care of the person with schizophrenia. Avoidance of triggered such as illegal drugs reduce the chance of relapse.

**ANTIPSYCHOTIC MEDICATIONS** are usually recommended as part of the treatment of psychosis to assist in recovery and prevent further relapse. There are a number of antipsychotic medications available and choice needs to be personalized to ensure the best tolerability and efficacy. Where possible, the strategy should be to start the antipsychotic at a low dose and gradually increase to minimize any side effects .

**Benzodiazepines** are often useful as short-term addition to the antipsychotic medication during an acute episode since they reduce agitation, tension and anxiety and help with sleep. However, care should be taken to avoid using them for more than 4 weeks due it their addictive nature.

## ST VINCENT'S MELBOURNE

#### **METABOLIC MONITORING**

MENTAL HEALTH

ST VINCENT'S HOSPITAL MELBOURNE

Version 1 March 2012

#### Instructions for Use.

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## - MENTAL HEALTH - ST VINCENT'S MELBOURNE

## **ANTIPSYCHOTIC MEDICATIONS**

"Antipsychotics" are often effective in controlling psychotic symptoms and enable people to return to normal life. They are able to reduce distressing and disabling symptoms such as hallucinations, disorganized thinking, altered perceptions of reality, mood swings, extreme fearfulness and severe agitation.

There are two groups of antipsychotic medications:

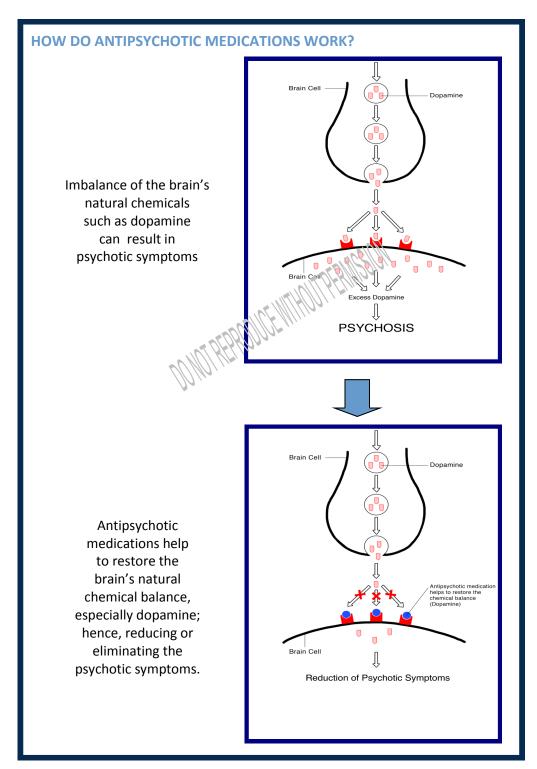
1	cal or n Antipsychotics	Atypica Second Generation	
Chlorpromazine	Fluphenazine	Amisulpride	Aripiprazole
Flupenthixol	Haloperidol	Asenapine	Clozapine
Pericyazine	Thioridazine	Olanzapine	Quetiapine
Trifluoperazine	Zuclopenthixol	Paliperidone	Risperidone
		Sertindole	Ziprasidone

All antipsychotics are effective in reducing or eliminating positive symptoms of psychotic disorders; however, the atypical or second generation antipsychotics generally have fewer side effects than the older agents, especially extrapyramidal side effects such as rigidity, persistent muscle spasm, tremors, and restlessness. Also, they may be effective in improving mood, thinking and motivation.

#### HOW LONG WILL THE ANTIPSYCHOTIC MEDICATIONS TAKE TO WORK?

Antipsychotics begin to relieve agitation and sleep disturbances in about 1 week. Many people see substantial improvement by the fourth to sixth week of treatment.

'Antipsychotics require time to work, do not decrease or increase the dose or stop the antipsychotic without discussing with your doctor first.'



#### HOW LONG SHOULD YOU TAKE THIS MEDICATION?

Following a first episode of psychosis, it is recommended that antipsychotic medication be continued for at least 1-2 years; this decreases the chance of becoming ill again. For individuals that have had a psychotic illness for several years or repeated psychotic episodes, antipsychotic medication should be continued indefinitely. This is similar to someone with diabetes requiring lifelong insulin.

#### WHAT HAPPENS IF A DOSE IS MISSED?

Take it as soon as possible, as long as it is only a few hours after the usual time. Otherwise, wait until the next dose is due and take it as normal – do not try to catch up by doubling the dose.

#### DO THEY INTERACT WITH OTHER MEDICATIONS?

Antipsychotics can change the effect of other medications, or may be affected by other medication. Always check with your doctor or pharmacist before taking other drugs, vitamins, minerals, herbal supplements and alcohol. Always inform any doctor or dentist that you see that you are taking an antipsychotic medication.

#### DO ANTIPSYCHOTICS HAVE ANY UNPLEASANT SIDE EFFECTS?

All medicines have side effects - even the ones you can buy without a prescription at a pharmacy, supermarket or health food store. The important things to remember are that not everyone will have the same unwanted side effects. Side effects usually occur early in the treatment, many of them will settle down after a few weeks, when the body has adapted to the medications.

'Antipsychotic medication should not be stopped abruptly; instead, consult the prescribing doctor or pharmacist about any concerns you have.'

#### **DEPOTS/LONG-ACTING ANTIPSYCHOTIC INJECTIONS**

Depots or long-acting antipsychotic injections (LAI) can be an important option in the context of non-adherence and can help to reduce relapse and readmission to hospital. Where feasible, they should be prescribed when this is the person's preference and as part of a treatment plan in order to maintain wellness.

A test dose of oral antipsychotic may be necessary before to starting LAI preparation to avoid unexpected side effects. It is important to make sure that the intended changeover is completed appropriately. For example, it is necessary to continue oral antipsychotic for at least 3 weeks while starting risperidone LAI; while paliperidone and olanzapine LAIs, which have particular starting schedmay not require the addition of an oral antipsychotic.

Aripiprazole is also available as depot/LAI form. It is usually given every 4 weeks and oral antipsychotic medication should be continued for 2 weeks after the first injection.

Rarely, olanzapine depot/LAI can cause severe sedation, dizziness, weakness, altered speech, increase blood pressure after the injection in some individuals so it is important to monitor for these effects for the 2-3 hours after each dose.

Typical or	Atypical or
First Generation Antipsychotics	Second Generation Antipsychotics
Flupenthixol decanoate (Fluanxol Depot®) Fluphenazine decanoate (Modecate®) Haloperidol decanoate (Haldol®) Zuclopenthixol decanoate (Clopixol Depot®)	Aripiprazole extended release injection (Abilify maintena®) Olanzapine pamoate (Relprevv®) Paliperidone palmitate (Invega-sustenna®) Risperidone microsphere (Risperdal-consta®)

It may take 2 to 4 months for depot/LAI to achieve the desire effects so it is important to review and adjust the dose carefully.

Depots or long-acting injectable preparations can also provide a convenient alterative to multiple daily oral doses of antipsychotics.

## POSSIBLE SIDE EFFECTS OF ANTIPSYCHOTIC MEDICATIONS

Side Effect	Treatment
Muscle spasms, excessive rigidity, shaking, inner restlessness	These symptoms can be controlled with: Anticholinergic agents: benztropine, benzhexol. Beta blockers: propranolol. Benzodiazepines: diazepam, clonazepam, lorazepam.
Drowsiness / Fatigue	This problem usually goes away with time. Use of other drugs that make you drowsy will worsen the problem. Avoid driving a car or operating machinery if drowsiness persists.
Dizziness	Get up from a lying or sitting position slowly; dangle your legs over the edge of the bed for a few minutes before getting up. If dizziness persists or if you feel faint, then contact your doctor.
Dry mouth	Sour candy, ice cubes, possicles, and sugarless gum help increase saliva in your mouth; try to avoid sweet, calorie-laden beverages. Drink water and brush your teeth regularly
Blurred Vision	This usually occurs at start of treatment and may last 1-2 weeks. Reading under a bright light or at a distance may help; a magnifying glass can be of temporary assistance. If the problem continues, discuss with your doctor.
Constipation	Increase bulk foods in your diet, drink plenty of fluids and exercise regularly. A bulk laxative or a stool softener helps regulate the bowels.
Weight Changes	Monitor your food intake. Maintain a healthy diet and try to avoid foods with high fat content. Establish a regular exercise regime. Let your doctor know if you notice a rapid increase in your weight or waist measurement.
Nausea or Heartburn	If this happens, take the medication with food.
Change in Sexual Ability / Desire	Discuss with your doctor about other medications without this side effect and which may be an appropriate alternative for you.

#### **GENERAL PRECAUTIONS**

- Avoid exposure to extreme heat and humidity since antipsychotics may affect your body's ability to regulate temperature changes and blood pressure.
- Antipsychotics may increase the effects of alcohol, making you more sleepy, dizzy and lightheaded.
- Antipsychotics can impair the mental and physical abilities required for driving a car or operating machinery. Avoid these activities if you feel drowsy or slowed down.
- Do not break or crush the medication unless you have been advised to do so by your doctor or pharmacist.
- Antacids interfere with absorption of these drugs in your stomach and therefore may decrease their effect. To avoid this, take the antacid at least 2 hours before or 1 hour after taking your antipsychotic.
- Excessive use of caffeinated beverages (coffee, tea, colas, etc.) can cause anxiety, agitation and restlessness and counteract some of the beneficial effects of your medication.
- Cigarette smoking can change the amount of antipsychotic that remains in your bloodstream, **especially clozapine**, **olanzapine**, **and haloperidol**. Inform your doctor if you make any changes to your current smoking habit.
- Do not stop antipsychotic medication suddenly as this may result in withdrawal symptoms such as nausea, dizziness, sweating, headache, sleeping problems, agitation and tremor, and also result in the return of psychotic symptoms.
- There are differences in effectiveness and side effects between various antipsychotics; if possible, the antipsychotic with the lowest risk of side effects should be selected.
- It is essential to take **ZIPRASIDONE** capsules <u>with food</u> or immediately after food to enhance the availability of Ziprasidone in your blood.
- **ASENAPINE**: if you are taking other medications, asenapine should be taken last. The wafer must be placed under the tongue and allow it to dissolve completely. **DO NOT EAT OR DRINK FOR 10 MINUTES** because eating or drinking during this time will affect how well asenapine works.

## **CLOZAPINE**

#### WHAT IS CLOZAPINE?

Clozapine belongs to the group of medicines known as antipsychotics. This group of medicines is used mainly in the treatment of schizophrenia.

#### **HOW DOES CLOZAPINE WORK?**

Clozapine is used to control symptoms of schizophrenia such as hallucinations, hearing voices and delusionary ideas. Clozapine is used in patients with schizophrenia for whom other antipsychotics have not worked or have caused severe side effects.

#### THINGS YOU MUST DO WHILE YOU ARE TAKING CLOZAPINE

You must have strict and regular blood tests while taking clozapine due to the rare potential problems for your blood cells. After starting on clozapine, you must have a blood test at least once a week for the first 18 weeks of treatment, thereafter at least every 4 weeks for as long as you are taking clozapine, and for one month after stopping the medicine.

#### WHY IS IT SO IMPORTANT TO KEEP TAKING CLOZAPINE?

When taken regularly, clozapine begins to relieve agitation within the first week. Many people see substantial improvement by the fourth to sixth week of treatment. It is important to keep taking your clozapine even if you feel well as it is used not only to get you well, but also to keep you well. This is similar to someone with diabetes requiring lifelong insulin.

#### WHAT HAPPENS IF I MISS A DOSE?

Take it as soon as possible, as long as it is only a few hours after the usual time. Otherwise, wait until the next dose is due and take it as normal – do not try to catch up by doubling the dose. If you have missed taking clozapine for more than two days, you must contact your doctor immediately - do not start taking your regular clozapine dose again without consulting your doctor.

#### WHAT HAPPENS IF I HAVE TAKEN TOO MUCH?

Immediately contact your doctor or the **Poisons Information Centre** (**Tel: 13 11 26**) for advice, or go to your local Emergency Department. Do this even if there are no signs of discomfort or poisoning as you may need urgent medical attention.

#### INTERACTIONS WITH OTHER MEDICATION

Clozapine can change the effect of other medications, or may be affected by other medication. Always check with your doctor or pharmacist before taking other drugs, vitamins, minerals, herbal supplements and alcohol. Cigarette smoking can also change the amount of clozapine that remains in your bloodstream; inform your doctor if you make any changes to your current smoking habit.

#### **CLOZAPINE ALERT CARD**



#### **CLOZAPINE ALERT**

Clozapine is a medication which is used to help control psychotic symptoms such as "hearing voices".

Take your Clozapine as prescribed every day. If any of the following occurs you must inform your doctor immediately or contact SVH-PSY Triage:

- You increase or greatly reduce your smoking habit
- You commence any other medication including OTC
- You forget your medication for more than 48 hours
- If you get a sore throat, thrush or start to bruise or bleed easily

The following side effects may occur:

Drowsiness, fast heart rate, excess saliva, occasional bed wetting, low blood pressure. I slow weight increase - if you experience any of these symptoms, tell your doctor.

Avoid alcohol as it may make you sleepy or dizzy. Marijuana is likely to make you ill again. Be careful with cars and machinery as you may react slower in times of danger.

You should present this card when you attend any of the following:

\*Doctor
\*Pharmacist

\*Dentist
\*Naturopath

#### **GENERAL PRECAUTIONS**

\*If you stop clozapine abruptly, you can experience 'cholinergic rebound' such as excessive sweating, headache, nausea, vomiting and diarrhoea and a relapse of symptoms of psychosis.

- Tell your doctor or pharmacist as soon as possible if you do not feel well while you are taking Clozapine.
- Clozapine may increase the effects of alcohol, making you more sleepy, dizzy and lightheaded.
- Clozapine can impair the mental and physical abilities required for driving a car or operating machinery. Avoid these activities if you feel drowsy or slowed down.
- Excessive use of caffeinated beverages (coffee, tea, colas, etc.) can cause anxiety, agitation and restlessness and can also increase clozapine plasma levels significantly.

## **COMMON SIDE EFFECTS OF CLOZAPINE**

Side Effect	Treatment
Tiredness and drowsiness (sedation) may be troublesome.	Giving most of the dose at night may help, or a dose change may be required. Contact your doctor if symptoms persist.
Weight gain.	Monitor your food intake. Maintain a healthy diet and try to avoid foods with high fat content. Establish a regular exercise regime. Let your doctor know if you notice a rapid increase in your weight or waist measurement.
High temperature can occur in the first couple of weeks of treatment. Sore throat, mouth ulcers, any 'flu-like' symptoms such as swollen glands or other signs of infection.	High temperature usually goes away. Nevertheless, contact your doctor to make sure there are not other causes, such as an infection, especially when the rever continues and you also have other symptoms too.
A fast heart beat even when you are resting is common in the first few weeks of treatment.	It usually goes away. Contact your doctor if it persists or if you experience chest pain or breathlessness at the same time.
Loss of bladder control, especially at night (bed wetting) can occur at any time during treatment.	Changing the night dose of clozapine or limiting fluid intake before bedtime can be helpful. Contact your doctor if symptoms continue.
Dizziness, light-headedness or fainting on standing.	Get up from a lying or sitting position slowly; dangle your legs over the edge of the bed for a few minutes before getting up. If dizziness persists or if you feel faint, then contact your doctor.
Increased saliva production may be bothersome at night.	Contact your doctor, as there are medications that can reduce / overcome this problem.
Constipation can be a persistent problem.	Increase bulk foods in your diet, drink plenty of fluids and exercise regularly. A bulk laxative or a stool softener helps regulate the bowels.
Nausea and vomiting can occur in the first week of treatment.	If this happens, contact your doctor, as an anti-nauseant medication may be required.

## **RARE SIDE EFFECTS OF CLOZAPINE**

Side Effect	Treatment
Agranulocytosis is a blood condition where the number of white blood cells may be reduced. This is important because these white blood cells are needed to fight infection.	There is no way of knowing who is at risk of developing agranulocytosis. However, with regular blood tests it can be detected early. If clozapine is stopped as soon as possible, the white blood cell numbers should return to normal. In some patients, addition of lithium (1 to 2 tablets) may help to restore the white cell and neutrophil numbers to normal.
Myocarditis is a condition where the heart muscle is inflamed or swelling.	If you develop a rast or in egular heartbeat that is present even when you are resting, together with rapid breathing, shortness of breath, chest pain, or dizziness or light-headedness, contact your doctor immediately or go to the Emergency Department at your nearest hospital. You may need to be referred to a cardiologist.
Seizures or fits can occur at any stage in treatment and are often related to the dose or dose increase.	Contact your doctor immediately or go to the Emergency Department at your nearest hospital when seizures occur. Your clozapine dose may need to be reduced or you may need medication to control the seizures.
Diabetes, where blood sugar levels are high.	Contact your doctor immediately if you experience any signs of loss of blood sugar control such as excessive thirst, dry mouth and skin, flushing, loss of appetite, or passing large amounts of urine.

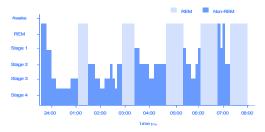
'Always consult the prescribing Doctor or your Pharmacist about any concerns you have.'

'Clozapine should <u>never</u> be stopped suddenly unless your doctor tells you to.'

## MANAGING SLEEP PROBLEMS

#### **NORMAL SLEEP**

On average, adults sleep 6-8 hours per 24 hour cycle. Infants sleep more, as do teenagers. As we get older we need less sleep. Our normal sleep pattern looks something like this figure:



Stages 1-4 are stages of increasingly deep sleep. REM (Rapid Eye Movement) sleep refers to the Rapid Eye Movements that occur. It is also called 'paradoxical' sleep because the muscles are fully relaxed but the brain is still active. Most dreaming takes place during REM sleep.

We spend something like a third of our lives asleep, yet understand relatively little about the purpose of sleep. Studies show that if people are sleep-deprived, they tend to need to "catch up" mostly on REM (dream) sleep. So, instead of REM sleep being maximal towards morning, people who are sleep deprived tend to slip quickly into REM sleep - so-called 'reduced REM latency.'

#### **INSOMNIA**

The technical term for a poor sleep pattern is insomnia. It is usually seen in terms of the sufferer's viewpoint: if he/she thinks their sleep is inadequate or abnormal then they are considered to have insomnia. About a third of adults report insomnia at some time during each year, and around half of these people see their problem as serious. Sleep disturbance increases with age and is more common in women than in men. Even though it is common, many people don't seek help for insomnia, so it often goes untreated. Insomnia is often a sign that something else is wrong in the person's life. However, sometimes it is simply part of their lifestyle, for example:

- Shift workers sleep disorder
- Jet lag syndrome
- Irregular sleep/wake pattern
- Sleep disorders due to alcohol or other drugs (eg. stimulants such as amphetamines)

In other cases, insomnia may be due to a life stressor, such as an exam, a job interview, or work stress. Usually these problems are short-lived (<1 week) and rectify themselve naturally or require short-term treatment only (see 'treatments' below). Sometimes if the stress is more intense (eg. grief) it might last longer (1-3 weeks). Again treatment is usually symptomatic. Of more concern are long-term sleep problems (>1 month). These may be:

#### **Sleep Apnoea Syndrome**

Usually in overweight people, when the air passages collapse during REM sleep, leading to snoring, sudden frequent wakening in the night and sleepiness during the day.

#### **Restless Legs Syndrome**

Difficulty sleeping because one feels an incessant arge to move.

or

#### **Depression**

Difficulty falling asleep & classically waking 3-4hrs before normal waking time.

#### **Anxiety**

Difficulty falling asleep and restless unrefreshing sleep.

Feeling of reduced need for sleep with excessive energy.

#### **Psychosis**

Often results in reverse sleep-wake cycle.

#### **Substance Abuse**

Stimulants decrease sleep; alcohol produces short-term unsatisfactory sleep.

#### **ASSESSMENT**

A 'Sleep Diary' is a very useful way of monitoring sleep patterns. It should include times asleep, time to get to sleep, and any daytime naps. It is also useful to record use of caffeine, meals, alcohol and exercise.

#### **POLYSOMNOGRAPHY**

Is performed in sleep laboratories measuring brain waves, eye movements, muscle movement and airflow.

#### **HELPING YOURSELF GET A GOOD SLEEP**

The general principles of getting a good night's sleep are to establish a regular healthy day/night routine; and ensure bed is associated with sleep rather than being awake.

#### DOs:

- have a regular time for going to bed and for getting up in the morning (even if tired)
- have a darkened, quiet bedroom (or use eyeshades and earplugs)
- relax before bed (having a hot bath, listening to relaxing music, do relaxation)
- have a warm milk drink or herbal tea before retiring for the night.
- if you are lying awake for more than 20mins, get <u>OUT</u> of bed, go to another room, do something relaxing, then back to bed, repeat as necessary.

#### DON'Ts:

- take day-time naps
- lie in late in the morning (even if tired)
- drink tea/coffee within 6 hours of bed time
- eat heavy meals close to bed time
- use alcohol to help sleep
- lie awake in bed for long periods
- watch TV in bed
- use bed for anything other than sleep and sex
- exercise vigorously too close to bed time

Specific relaxation techniques can help; try **Progressive Muscle Relaxation** described over the page.

#### PROGRESSIVE MUSCLE RELAXATION

Sit in a comfortable chair in a quiet room, put your feet flat on the floor and rest your hands in your lap, CLOSE YOUR EYES and do SLOW BREATHING (about 10 breaths per min) for 3mins. After 3 minutes of slow breathing, start the muscle relaxation exercise: tense each of your muscle groups for 10 seconds, then relax for 10 seconds, in the following order:

Hands - clench your hands into fists, then relax.

**Lower arms** - bend your hands up at the wrists, then relax.

**Upper arms** - bend your arms up at the elbow, then relax.

**Shoulders** - lift your shoulders up, then relax

**Neck** - stretch your neck gently to the left, then forward, then right, then to the back in a slow rolling motion, then relax.

Forehead and scalp - raise your evenows, then relax.

**Eyes** - close your eyes tightly, then relax.

Jaw - clench your teeth, then relax.

**Chest** - breathe in deeply, then breathe out and relax.

**Stomach** - pull your tummy in, then relax.

**Upper back** - pull your shoulders forward, then relax.

Lower back - while sitting, roll your back into a smooth arc, then relax.

Buttocks - tighten your buttocks, then relax.

**Thighs** - push your feet firmly into the floor, then relax.

**Calves** - lift your toes off the ground, then relax.

**Feet** - gently curl your toes down, then relax.

Continue slow breathing for 5mins, enjoying the feeling of relaxation.

As you get better at relaxation, it can be more interesting to combine these exercises with memories of relaxing situations (e.g. lying on a beach).

A full session of relaxation takes about 15-20 minutes.

#### WHAT ABOUT MEDICATIONS?

Sometimes all the techniques we try to help us sleep simply don't work. In this case, medications can help re-establish our sleep pattern, but they are <u>not</u> the long-term solution and should generally be used at the lowest effective dose and for a time-limited period (no longer than 10-14 days).

Agents include:

#### **Benzodiazepines**

Short acting e.g.. Temazepam, Oxazepam Longer acting e.g.. Diazepam, Nitrazepam

These agents are addictive and should only be used for short-term treatment (max 10-14 days). Other side effects include muscle relaxation (which can lead to falls), cognitive impairment or hang-over effect (more likely with longer acting agents). These agents suppress REM sleep and when they are stopped REM rebound occurs with a rapid onset of yield dreams.

#### Non-benzodiazepine Hypnotics

#### Zopiclone, Zolpidem

These newer agents have benefits over benzodiazepines because they don't generally cause other effects and they do not usually have 'hangover effects'. They are generally not as addictive as benzodiazepines but <u>are</u> potentially habit forming and should generally be used short-term (10-14 days max.). These agents do not suppress REM sleep.

Zolpidem may be associated with potentially dangerous side effects including sleep walking, sleep driving and other bizarre behaviours. It must not be taken with alcohol and extreme caution is needed when combine with other drugs. It should not be used for more than four weeks.

#### Other Agents Sometimes Used for Sleep

**Melatonin** can be helpful for sleep, and many people use it for jet lag. **Sedative antipsychotics** such as quetiapine and olanzapine; they have potentially problematic side effects and are indicated under the PBS only for psychotic and bipolar disorders.

**Antihistamines** - not primarily hypnotics, but many have sedative side effects. **Barbiturates** - Very seldom used nowadays because of significant side effects.

# Daily Mood and Sleep Diary monitoring provides invaluable information in maintaining your wellness

#### **Daily Mood and Sleep Diary**

DAY	DATE	AM*	PM*	COMMENTS <sup>™</sup>	TIME TO BED	TIME OUT OF BED	SLEEP (HRS)
					11890	\	
			NT PEPP	DICEMILIA			
			10,				

\*Rate out of 10: 0 = "Awful" 5 = "Normal" 10 = "Wonderful" 4\* include significant life events, medication changes, etc.

Compiled by Prof. David Castle (22.10.2012)

#### LOOKING AFTER YOUR PHYSICAL HEALTH

People with a mental illness are at increased risk for a number of medical conditions that can have a negative impact on quality of life and longevity. Also, some psychiatric medications have side effects that can increase the risk of certain medical conditions, notably heart disease. It is very important for people with a mental illness to be aware of these issues and to ensure their physical health is properly monitored and any problems appropriately treated.

Discuss these issues with your doctor and make sure you keep a record of your weight, waist measurement, and blood pressure. We also suggest you have certain blood tests done on a regular basis to monitor your physical health.

'People with a mental illness are at increased risk for a number of medical conditions that can have a repative impact on quality of life and longevity.'

#### SUGGESTED METABOLIO MONITORING

Suggested monitoring (at least six monthly) will vary according to the individual, their particular risk factors, and their particular medications. An example of the 'St Vincent's Metabolic Monitoring Form' successfully in use at St Vincent's Mental Health, Melbourne is provided at the centre of this booklet: use it to monitor your own physical health and tell your doctor when your tests are due.

Monitoring should include:

- measurement of: weight, waist, blood pressure
- blood tests for:
  - liver function
  - kidney function
  - fasting blood sugar (for diabetes)
  - fasting blood fats ('lipid profile')
  - prolactin

Some antipsychotic medications (e.g. amisulpride, paliperidone, and risperidone) can cause hyperprolactinemia (increase in prolactin, a hormone secreted by the pituitary gland). If you are on one of these medications, you will need your prolactin level measured regularly (every 6-12 months).

Dry mouth caused by some medications use to treat psychosis and mood disorders can affect your dental hygiene. You should have regular check ups with your dentist.

#### **SUGGESTED METABOLIC MONITORING (Continued)**

**If you are on** <u>lithium</u> you will need your thyroid hormone and lithium level measured every six months.

**If you are on <u>sodium valproate</u> or <u>carbamazepine</u> you will need your blood count and blood levels done every six months.** 

**If you are on <u>clozapine</u>** you will need weekly blood tests for the 1st 18 weeks of treatment, and monthly thereafter; and tests of heart function (your doctor will arrange these for you).

Also, if you have any underlying heart problems or are on medication that might affect the heart (eg. ziprasidone, clozapine) you should have regular tests of your heart (an ECG).

#### SMOKING AND PSYCHIATRIC MEDICATIONS

Cigarette smoking is the primary cause of poor physical health for many people with mental illness. Quitting or cutting down can be very difficult since it can result in feelings of loss, sachess and anxiety. Weight gain is also a common concern for smokers and may lead to a reluctance to quit or relapse after successful cessation; hence, good preparation and ongoing support are very important to reduce the stress associated with quitting.

The tar in cigarette smoke causes the body to break down some medications, particularly clozapine, olanzapine or haloperidol more quickly than usual. So if you are prescribed clozapine, olanzapine or haloperidol and are a smoker, you will probably need a higher dose to achieve the same benefit. Ordinarily this doesn't matter at all, since the dose of clozapine, olanzapine or haloperidol you take has been tailored to suit you and takes account of your smoking (or non-smoking, as the case may be). But, if you smoke and you are considering stopping, or you have very recently stopped smoking, it is very important that you contact your doctor, mental health team or local pharmacist to discuss this, as your clozapine, olanzapine, or haloperidol dose may need to be adjusted.

If you have a mental illness, do not stop smoking or change your smoking habits, even if you plan to use Nicotine Replacement Therapy, without first getting advice from a member of the healthcare team. If you have any more questions discuss these with your doctor and pharmacist.

#### **Nicotine Replacement Therapy (NRT)**

Nicotine is the active addictive ingredient in tobacco and can be replaced via patches, lozenges, inhalers, gum or sprays to decrease the desire to continue smoking. Doses are tailored initially to the amount you usually smoke and then to a dose that stops you craving. Potential side effects include sleeplessness, headaches and nightmares. If you are ready to cease smoking, nicotine patches can be prescribed by your GP.

**Bupropion (Zyban®)** is an antidepressant drug which also helps reduce rates of smoking. It has all the side effects of common anti-depressants and should be used cautiously, if at all, in people with a history of seizures.

**Varenicline (Champix**) acts on the same receptors as nicotine to reduce cravings. It needs to be built up to the effective dose over two weeks to reduce the risk of nausea. It can also give people headaches, vivid dreams and may potentially cause or worsen depression and psychosis.

The uses of **Bupropion** and **Varenicline** are complicated in the case of people with mental illness. There are reasons to believe they could make psychosis worse, or cause agitation or even make people feel suicidal. So, they should **only** be used with care and caution in people with a mental illness and mental-state must be very carefully monitored.

**St.** Vincent's Mental Health Patient Resource - Smoking Cessation Card (may be reproduced without prior permission)





If you smoke and you are considering stopping, or you have very recently stopped smoking, it is *very important* that you contact your doctor, mental health team or local pharmacist to discuss this, as your medication can be significantly affected by smoking (and by smoking cessation).

Please do not stop smoking or change your smoking habits, even if you plan to use Nicotine Replacement Therapy, without first getting advice from a member of the healthcare team.



If you stop smoking, you may need lower doses of:

- Clozapine
- Olanzapine
- Haloperidol



#### **SUBSTANCE ABUSE AND DEPENDENCE**

Medications can play an important part of treatment for substance abuse and dependence. These medications, when used in conjunction with counselling and lifestyle changes, make the choice to not use drugs or alcohol, easier. Medications are often taken for a prolonged period of time until people have established a drug free lifestyle. Their use is well established for alcohol, nicotine and opioid dependence though medications can also be prescribed for amphetamines, cannabis and other drugs.

When people stop using drugs or alcohol they often go through a period of withdrawal which can be medically dangerous. People with chemical dependence, especially those with alcohol dependence, frequently require supplementation with vitamins including this mine to avoid long term brain damage.

#### **OPIATE DEPENDENCE**

Withdrawal symptoms from opioids when opioid use is discontinued or reduced can last as a few day up to a week. Symptoms include: sweating, runny nose, watery eyes, yawning, diarrhoea, vomiting, nausea, shivering and goose bumps, muscle aches and cramps, restlessness and insomnia, irritability and anxiety, loss of appetite and drug craving.

For severe opioid dependence, <u>Substitution Therapies</u> such as methadone and buprenorphine are available. <u>Methadone and buprenorphine</u> are liquid/tablet/film substitutes for injected opiates such as heroin or morphine. While the person taking these medications remains opiate dependent, they allow people to move themselves away from injecting drug use. They generally have the same side effects as other opiates including sedation, constipation, nauand dry mouth. They carry a risk of overdose. <u>Buprenorphine</u> is now available combined with naloxone (known as Suboxone<sup>®</sup>).

For people who wish to be abstinent from all opioids, <u>Abstinence Therapies</u> like <u>naltrexone</u> may assist them to remain abstinent. This drug acts to block the effect of opiates. It must be taken under close supervision, due to the risk of overdose on opiates once <u>naltrexone</u> is ceased. <u>Naltrexone</u> can be used as a tablet or implant.

#### **ALCOHOL DEPENDENCE**

Chronic alcohol intake causes a deficiency in thiamine (vitamin B1) in the body which can lead to serious brain disorders. The body itself can not produce thiamine so it must be obtained from eating food such as meat, whole grain cereals, nuts, dried beans, peas, and soybeans. Therefore, thiamine supplements are of-often prescribed in people who do not have enough intake from their diets.

Alcohol withdrawal symptoms can occur in alcohol dependent people if they reduce or stop drinking suddenly. Typical alcohol withdrawal features can last about 5 days and include: shaking (tremors, nausea & vomiting, sweating, headache, anxiety, depression and difficulty sleeping (may last several weeks). It is advisable to discuss a decision to stop drinking with your doctor as medication may be needed to prevent withdrawal complications.

Medications commonly use for stopping drinking and staying stopped include:

**Acamprosate (Campral®)** helps reduce cravings for alcohol. Its major side effect is diarrhoea and stomach upset which generally passes in the first week.

**Naltrexone (Revia**) helps block the rewarding effect of alcohol. It should not be used with strong analgesics such as morphine, codeine or oxycodone or on anyone using heroin. It can make these medications ineffective and cause withdrawal symptoms from these opioids. It is important to tell your doctor that you take naltrexone in the event you need strong pain relief. Naltrexone can also cause nausea, headache, vivid dreams and changes in liver function.

**Disulfiram (Antabuse**) blocks the breakdown of alcohol, resulting in an accumulation of toxic breakdown products should the person continue to drink. It acts as a deterrent to alcohol consumption by causing flushing, nausea, distress and sometimes chest pains after drinking. It is only suitable for highly motivated and medically fit people who maintain close medical supervision.

Other medications sometimes used for alcohol dependence include **baclofen** and **topiramate**.

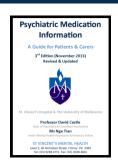
For more information please speak to your doctor or pharmacist or call:

Psychotropic Drug Advisory Service
Mental Health Research Institute (MHRI)
INFOLINE: (03) 9035 6789

Kenneth Myer Building, 30 Royal Parade Vic 3052

### **ORDER INFORMATION**

TRANSLATIONS AVAILABLE IN GREEK, VIETNAMESE, CHINESE, ITALIAN & ARABIC (1<sup>ST</sup> EDITION ONLY)



COSTS: \$2.50 + GST per booklet + P&H

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The original (VERSION 1: FEB 2008) version has been translated into: Chinese, Greek, Italian, Vietnamese and Arabic. Copies can be obtained from St. Vincent's Mental Health

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#### **DISCLAIMER**

The information contained in this leaflet is not intended to be a substitute for medical care. Decisions regarding treatment are complex medical decisions requiring the independent, informed decision of an appropriate health care professional. Reference to any drug or substance does not imply recommendation by the authors who accept no responsibility for any clinical untoward event that may arise from following the recommendations contained herein.

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