The Physical Health Mental Health Handbook was initially developed as part of the ‘Teams of Two’ initiative, a joint project of General Practice NSW (GP NSW) and the Mental Health and Drug and Alcohol Office (MHDAO), that was launched in 2003. ‘Teams of Two’ was essentially a learning initiative that combined learning with local practice for general practitioners and mental health professionals. While the ‘Teams of Two’ project has now been finalised, a user-friendly package containing the ‘Teams of Two’ joint learning modules were still available on CD-ROM from GP NSW when this resource went to print.

Due to its popularity, the Handbook has had a limited revision and re-print to support the release of the NSW Health Physical Health Care for Mental Health Consumers (PHCMHC) Guidelines. Area Mental Health Services in NSW have a responsibility to ensure the consumers who use their service receive appropriate physical health care, in collaboration with the consumer’s GP where possible. The PHCMHC Guidelines provide a framework and, where available, evidence based guidance to assist NSW Area Mental Health Services to meet their obligations in this area. Additionally, the Guidelines promote the essential link between physical and mental health care and highlight the importance of mental health services working in collaboration with GPs.

The Handbook complements the PHCMHC Guidelines by providing information about common mental illness presentations and conditions and approaches to management as well as suggestions about important issues to address in prevention and early-intervention.
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While it has long been recognised that mental and physical health states have complex interactions, there is a growing body of evidence that indicates the significant impact mental health can have on physical illness and disease.

For example, in 2001 The University of Western Australia released the results of a state-wide study into the physical health of consumers using mental health services. This study, called ‘Duty to Care’, established that people with mental health problems have considerably elevated mortality rates from all main causes of death compared to the general population (Lawrence, 2001). In Western Australia, users of mental health services have a mortality rate that is two and a half times higher than the rest of the population.

There is an increased risk of death from ischaemic heart disease (IHD) in people with mental health problems. Despite a downward trend in the general community, the IHD death rate in people with mental illness has increased in women and remained constant in men. Lower rates of revascularisation procedures have also been observed, particularly in people with psychoses.

Despite high smoking rates, research indicates that cancer incidence is no different in people with mental health problems than the general population. However, once a cancer is diagnosed, there is a 30% higher case fatality rate in users of mental health services. There are also strong associations between mental illness and hepatitis, HIV, deficiency anaemias, Parkinson’s disease, alcohol-related disorders, smoking-related respiratory disorders and all types of physical injury.

Two main themes have emerged. People suffering from mental health problems experience significantly higher rates of physical illness. They also have consistently higher mortality rates than incidence or hospitalisation rates, raising questions as to whether people with mental health problems receive an appropriate level of care for their physical health problems.

**The role of the General Practitioner**

These findings are a concern to all health professionals looking after consumers with a mental illness and there are many complex factors that contribute to this outcome. There is an emerging body of evidence suggesting that mental illness and psychotropic medications impact directly on physical health. Additionally, consumers with a mental illness or disorder can be reluctant to engage with health systems because of past experiences such as involuntary hospitalisation. Further, serious and enduring mental illnesses can impact on the individual’s educational level, assertiveness and capacity for self-care.
These factors suggest that mental health and primary care services need to operate at a higher level of responsibility in addressing the physical health care of consumers with a mental illness using their service. Most primary health care is provided in our community by general practitioners (GPs) and the majority of people with schizophrenia will visit their GP each year. GPs are therefore crucial to the coordination of physical health care in people with mental health problems.

Population health screening in people with mental health problems

Burns and Cohen (1998) looked at the quantity of health promotion data recorded in GP notes for people with a severe mental illness. The consultations per year for this group was significantly higher than normal – 13 consultations per year compared to the average consultation rate of 3. However the amount of data recorded for a variety of health promotion areas was significantly less than average, suggesting that consumers with mental illness do not receive the same standard of preventative health care.

Purpose of this handbook

Mental health services and GPs are uniquely placed to support an improvement in the physical health of those people with a mental illness or disorder who use their service. Accordingly, the aim of the Physical Health Mental Health Handbook is to assist clinicians and GPs to provide appropriate physical health care to this vulnerable group.

The Handbook supports the adoption of a holistic approach to the care and treatment of people with a mental illness or disorder and has been written as a practical tool.

However, the Handbook is not a comprehensive medical text or a substitute for sound clinical judgement or consultation with colleagues. While every care has been taken with accuracy, it should be noted that information can, and does, change rapidly.

“One very important issue is that a focus on physical illness is a “normalisation” approach to mental health care. Everyone expects to be examined fully and interviewed comprehensively by a doctor, and if this happens in the context of mental illness, it is appreciated by the person with mental illness, who thinks now, at least, they are being treated decently and carefully”.

Emeritus Professor
Ian Webster AO
Introduction

A broad range of evidence, such as the results of the Duty to Care (Lawrence, 2001) study confirm that people with mental health problems suffer from high rates of physical illnesses and that they may not receive an adequate level of care for their physical health problems.

Many factors predispose consumers with mental health problems to poor physical health and physical health outcomes. These include:

- Social factors, e.g. poverty, inadequate housing
- Lifestyle factors, e.g. smoking, drug and alcohol use, lack of exercise
- Difficulty accessing screening programs and health care
- An inability to effectively communicate physical symptoms
- The impact of factors related to mental illness, e.g. apathy, disorganisation, paranoia and delusions
- Missed or delayed diagnoses
- High mobility preventing continuity of care and failure to follow up
- Negative, stigmatising or paternalistic attitudes by the client, their carers, health professionals or the wider community.

Approaches to overcoming these barriers to care include:

- Actively discussing physical health issues alongside mental health
- Adopting a patient, flexible and creative approach to assessment
- Assessment of the physical health problem across a number of interviews, some spent just on the process of engagement
- Reinforcing and writing down details of tests or treatments
- Taking a more active role in ensuring follow-up
- Creating effective partnerships between the consumer, family, carers, PG and mental health clinicians
Preventative health care for people with a mental health problem

Population health studies have established the overall value of preventative health screening for the general community. Research in this area has improved our understanding of who to screen, what to screen for, how to screen and how often to screen. However, screening recommendations for adult populations are complicated and are constantly under revision.

This document does not aim to provide comprehensive information about screening but rather to indicate those areas that are a priority for particular illness groups based on the current available evidence base. GPs and mental health clinicians are encouraged to draw on specialised resources in this area, such as the Guidelines for Preventative Activities in General Practice, developed by The Royal Australian College of General Practitioners and published in the Australian Family Physician, May 2002. These guidelines provide comprehensive, evidence-based recommendations about screening across the life span.

The Sainsbury Centre for Mental Health in the United Kingdom has recommended that every person who has schizophrenia or bi-polar affective disorder should be offered at least:

- an annual check of blood pressure
- an annual urine analysis to exclude the presence of glucose
- protection against influenza by vaccination
- advice about reducing smoking

Outline of physical assessment in the consumer with known mental health problems

The difficulties in providing effective health care to consumers with mental health problems highlights the need for all medical services and service providers to have an organised approach to physical health assessment for this marginalised group. This approach can be structured around the anticipated health priorities for a particular psychiatric diagnosis.

This chapter proposes a framework for the assessment of physical health in consumers with established psychiatric disorders. The framework aims to guide the clinician to the major health priorities for each group based on current available evidence. The clinician will want to develop the framework in the context of their experience with their consumer population.
The physical health priorities to consider include:

**Screen for coronary artery disease and its risk factors**
- Check for personal/family history of IHD
- Take a smoking history
- Check blood pressure
- Check weight
- Check lipids
  
  IHD causes most of the excess mortality in this group

**Screen for diabetes**
- Do BSL
  
  Every 6-12 months if on atypical antipsychotics

**Screen for side effects of medication**
- Weight gain
- Metabolic effects - glucose and lipids
- Hyperprolactinemia
- Extrapyramidal side effects (EPSE)
- Tardive Dyskinesia (TD)
- Yearly ECG for consumers > 55 years on antipsychotics
- QTc prolongation with some antipsychotics

**Screen for substance use**
- Take an alcohol and drug history
- Advise/refer if patterns of use are unsafe

**Screen for substance use complications**
- Alcohol related disorders eg liver disease, peptic ulcer disease
- Hepatitis B/C, HIV/AIDS, infective endocarditis

**Screen for cancer**
- Women: mammogram, PAP smear
- Faecal occult blood - Rectal/colon cancer
- Skin cancer

**Screen for other smoking related illness**
- Chronic Obstructive Pulmonary Disease (COPD)
- Peripheral Vascular Disease (PVD)

**Reproductive health**
- Review for sexually transmitted diseases (STDs)
- Consider possibility of pregnancy
- Educate about safe sex practices
- Episodic high risk sexual behaviour

**Immunisation history**
- Influenza, Hepatitis B vaccinations

**Nutritional state**
- Anaemia, B12/folate deficiency, osteoporosis

**Dental**
- Caries, missing teeth, gingivitis

**Podiatry**
- Poor foot care - nails, tinea
- Ulcers - PVD, diabetic neuropathy

**Others**
- Polydipsia - water intoxication/hyponatremia
### The physical health priorities to consider include:

| Screen for coronary artery disease and its risk factors | Check for personal/family history of IHD  
Take a smoking history  
Check blood pressure  
Check weight  
Check lipids  
IHD causes most of the excess mortality in this group |
| Screen for diabetes | Do BSL  
Every 6-12 months if on atypical antipsychotics |
| Screen for side effects of medication | **Mood stabilisers** - monitor blood levels and:  
Lithium - weight, UEC, TFT, ECG (>65yr)  
Sodium valproate - weight, LFT, FBC  
Carbamazepine - bone marrow toxicity, FBC, LFT |
| **Antipsychotics** | Weight gain  
Metabolic effects - glucose and lipids  
Hyperprolactinemia  
Extrapyamidal side effects (EPSE)  
Tardive Dyskinesia (TD)  
Yearly ECG for consumers > 55 years on antipsychotics  
QTc prolongation with some antipsychotics |
| Screen for substance use | Take an alcohol and drug history  
Advise/refer if patterns of use are unsafe  
Unsafe episodic use common in this group |
| Screen for substance use complications | Alcohol related disorders eg liver disease, peptic ulcer disease  
Hepatitis B/C, HIV/AIDS, Infective endocarditis |
| Reproductive health | Review for Sexually Transmitted Diseases  
Consider possibility of pregnancy  
Educate about safe sex practices  
Episodic high risk sexual behaviour |
| Screen for cancer | Women: Mammogram, PAP smear  
Faecal occult blood - Rectal/colon cancer, Skin Cancer |
| Screen for other smoking related illness | Chronic Obstructive Pulmonary Disease (COPD)  
Peripheral Vascular Disease (PVD) |
| Immunisation history | Influenza, Hepatitis B vaccinations |
| Nutritional state | Anaemia, B12/folate deficiency, osteoporosis |
| Dental | Caries, missing teeth, gingivitis |
| Podiatry | Poor foot care - nails, tinea  
Ulcers - Peripheral/Vascular Disease |
| Others | Accidental injury |
The physical health priorities to consider include:

**Screen for coronary artery disease or its risk factors**
- Check for personal/family history of IHD
- Take a smoking history
- Check weight
- Check lipids
- Strong link between coronary artery disease and depression

**Screen blood pressure**
- Hypertension/stroke associated with depression
- Hypotension/hypertension - can be a side effect of antidepressants

**Screen for substance use**
- Take an alcohol and drug history
- Advise/refer if patterns of use are unsafe

**Screen for substance use complications**
- Alcohol related disorders - liver disease, peptic ulcer disease
- Hepatitis B/C, HIV/AIDS, Infective endocarditis

**Screen for side effects of medication**
- Weight gain
- Hypo/hypertension
- Cardiac arrhythmias - especially with tricyclics
- Sexual dysfunction
- Yearly ECG for consumers > 55 years on tricyclics

**Screen for cancer**
- Women: Mammogram, PAP smear
- Faecal occult blood - rectal/colon cancer, skin cancer

**Screen for diabetes**
- Do BSL

**Screen for other smoking related illness**
- Chronic Obstructive Pulmonary Disease (COPD)
- Peripheral Vascular Disease (PVD)
- Smoking more common in depressed consumers

Consider illnesses related to self-neglect:

**Nutritional state**
- Low body weight, anaemia, B12/folate deficiency, osteoporosis

**Dental**
- Caries, missing teeth, gingivitis

**Podiatry**
- Poor foot care - nails, tinea
- Ulcers, peripheral vascular disease, diabetic neuropathy

**Illnesses consequent to suicidality**
- Overtakes, self-mutilation, self-injury

**Illnesses with a causal link to depression**
- Thyroid disease, Pancreatic/cerebral tumours

**Reproductive health**
- Review for sexually transmitted diseases
- Consider possibility of pregnancy
- Educate about safe sex practices

**Immunisation history**
- Influenza, Hepatitis B vaccinations
The physical health priorities to consider include:

**Screen blood pressure**
Hypertension associated with anxiety

**Screen for substance use**
Take an alcohol and drug history
Advise/refer if patterns of use are unsafe
Alcohol/benzodiazepines commonly used or abused in this group

**Screen for substance use complications**
Benzodiazepine dependence
Alcohol related disorders - liver disease, peptic ulcer disease
Hepatitis B/C, HIV/AIDS, infective endocarditis

**Screen for side effects of medication**
Benzodiazepines - impaired psychomotor skills impacting on work, driving etc.
SSRIs - weight gain, sexual dysfunction

Health prevention screening - as per age - includes:

**Reproductive health**
Review for Sexually Transmitted Diseases
Always consider possibility of pregnancy
Educate about safe sex practices

**Screen for cancer**
Women - Mammogram, PAP smear
Faecal occult blood - Rectal/colon cancer
Skin Cancer

**Screen for coronary artery disease and its risk factors**
History of chest pain/family history of IHD
Smoking history
Check blood pressure
Check weight
Check lipids
Weak link between anxiety and CAD

**Screen for other smoking related illness**
Asthma, chronic Obstructive Pulmonary Disease (C O P D), Peripheral Vascular Disease

**Screen for diabetes**
Do BSL

**Nutritional state**
Anaemia, B12/folate deficiency, osteoporosis

**Immunisation history**
Influenza, Hepatitis B vaccinations

**Others**
Accidental injury
The physical health priorities to consider include:

**Screen for substance use**
Establish the alcohol and drug history - ask about all drugs
Advise/refer if patterns of use are unsafe

**Screen for illnesses due to the drug effects:**

**Alcohol**
Alcoholic hepatitis, cirrhosis, liver failure, peptic ulcer disease, pancreatitis
Wernicke's Encephalopathy with gaze palsies - medical emergency

**Benzodiazepines**
Dependence and withdrawal

**Cannabis**
Increased appetite/weight
Respiratory illnesses - asthma, chronic bronchitis, lung cancer
Paranoia, hallucinations, psychosis, anxiety/panic

**Amphetamines**
(including 'ecstasy')
Increased heart rate, blood pressure, overheating
Malnutrition and its effects, psychosis

**Opiates (includes heroin)**
Malnutrition, constipation, menstrual irregularity, infertility

**Cocaine**
Cardiac related events - ischaemic chest pain, cardiac arrest
Weight loss, agitation/anxiety, paranoia, hallucinations, psychosis

**Nutritional state**
Check and monitor weight
Anaemia, B12/folate deficiency, osteoporosis
Skin, lung and other infections, e.g. tuberculosis
Dental health - caries, missing teeth

**Screen for complications of the mode of drug use:**

**Injected**
Skin, heart and lung infections, hepatitis, HIV

**inhaled by smoking**
Breathing difficulties, cough, asthma, oral/ENT/lung cancers

**inhaled by 'freebasing'**
Breathing difficulties, chronic cough, asthma, lung damage

**Inhaled by nose**
Damage to nasal lining and septum, including perforation

**Screen for age and sex specific physical health prevention, e.g.:**

**Reproductive health**
Review for Sexually Transmitted Diseases
Consider possibility of pregnancy
Educate about safe sex practices

**Screen for illnesses associated with smoking**
Asthma, Coronary Artery Disease (CAD), Chronic Obstructive Pulmonary Disease (COPD), check blood pressure, check lipids
Cigarette smoking more common in substance users

**Screen for cancer**
Women - Mammogram, PAP smear
Faecal occult blood - rectal/colon cancer, skin cancer.
Lung cancer (increased risk), oesophageal cancer (with alcohol)

**Screen for diabetes**
Do BSL

**Immunisation history**
Influenza, Hepatitis B vaccinations
EATING DISORDERS
(Covers Anorexia Nervosa, Bulimia Nervosa, Binge Eating Disorder)

The physical health priorities to consider include:

Screen for life threatening complications of Eating Disorders:

- **Check weight/height**: Calculate and review BMI
- **Screen for serious cardiac conditions arrhythmias and congestive cardiac failure**
  - History of irregular heart beat/blackouts
  - Check for failure symptoms/signs
  - Check pulse, especially for bradycardia
  - Blood pressure - orthostatic hypotension common
  - Perform ECG - consider QT interval
  - Check lipids
- **Screen for serious biochemical abnormalities**
  - Check serum UEC, K, Mg - hypokalemia, hypomagnesemia
  - Predispose to arrhythmias
  - Check BSL

Screen for other health related complications of eating disorders:

- **Dental complications**: Caries, erosion of enamel (BN, BE), parotid swelling
- **Menstrual history**: Amenorrhea, irregular menses common
- **Osteoporosis**: Consider bone density studies
- **Medication use/abuse**: Particularly diuretics, laxatives, diet pills, benzodiazepines
- **Nutritional deficiencies**: Anaemia, B12/folate - check levels
- **Thyroid disease**: Check TFT’s

Screen for age and sex specific physical health prevention:

- **Screen for smoking**: Take a smoking history - advise re smoking
- **Screen for substance abuse**: Take a drug and alcohol use history
  - Advise about use patterns if problematic
  - Check appropriate indicators, e.g. LFT’s, HepB/C
- **Reproductive health**: Review for Sexually Transmitted Diseases
  - Consider possibility of pregnancy
  - Educate about safe sex practices
- **Screen for cancer**: Women - mammogram, PAP smear
  - Faecal occult blood - rectal/colon cancer
  - Skin cancer
- **Screen for diabetes**: Do BSL
- **Immunisation history**: Influenza, Hepatitis B vaccinations
The physical health priorities to consider include:

| Screen for complications of current or past deliberate self harm | Lacerations – check distal circulation, neurologic function, scar tissue |
| Tetanus status |
| Burning injuries |
| Blunt trauma – hitting self, others or objects |
| Prescribed or other drug overdoses |
| Always ask about paracetamol overdose |
| Late development of symptoms leads to delayed diagnosis |

| Screen for substance use | Take an alcohol and drug history |
| Advise/refer if pattern of use is unsafe |
| Comorbid substance abuse/dependence common |

| Screen for substance use complications | Alcohol related disorders – liver disease, peptic ulcer disease |
| Hepatitis B/C, HIV/AIDS, infective endocarditis |

| Screen for side effects of any prescribed medication | Benzodiazepines, Antidepressants common, Antipsychotics |

| Reproductive health | Review for Sexually Transmitted Diseases |
| Consider possibility of pregnancy |
| Educate about safe sex practices |
| High risk sexual behaviour common |

| Screen for cancer | Women - Mammogram, PAP smear |
| Faecal occult blood - Rectal/colon cancer, Skin Cancer |
| Lung cancer (increased risk), Oesophageal cancer (with alcohol) |

| Screen for ischaemic | Check for personal/family history of IHD |

| Heart disease or its risk factors | Take a smoking history |
| Check blood pressure |
| Check weight |
| Check lipids |

| Screen for other smoking related illness | Chronic Obstructive Pulmonary Disease (COPD) |
| Peripheral Vascular Disease |
| Screen for Diabetes |
| Do BSL |

| Immunisation history | Tetanus, Hepatitis B vaccinations |

| Nutritional state | Anaemia, B12/ Folate deficiency, osteoporosis |

| Dental | Caries, missing teeth, gingivitis |

| Podiatry | Poor foot care – nails, tinea, ulcers |

| Others | Accidental injury |
Somatisation Disorder

Consumers with Somatisation Disorder, or a tendency to somatise, still require preventative physical health care. It is challenge to provide this care without amplifying the Somatisation Disorder or somatising behaviour. At all times health providers should work towards the appropriate balance between these aspects of the care of this consumer group.

The physical health priorities to consider include:

- **Appropriate assessment investigation and management of somatic symptoms**: Somatisation disorder associated with pain, sexual, gastrointestinal and pseudoneurological symptoms.

- **Screen for side effects of medication**: Frequently also treated for depression and anxiety

- **Screen for substance use**: Take an alcohol and drug history. Need to consider benzodiazepines and analgesics in this group. Advise/refer if patterns of use are unsafe.

- **Screen for substance use complications**: Benzodiazepine/analgesic dependence. Alcohol related disorders - liver disease, peptic ulcer disease, Hepatitis B/C, HIV

Health prevention screening - as per age- includes:


- **Screen for cancer**: Women: Mammogram, PAP smear. Faecal occult blood - Rectal/colon cancer. Skin Cancer

- **Screen for hypertension**: Check blood pressure.

- **Screen for cardiovascular disease**: Check blood pressure. Check weight. Check lipids.

- **Screen for diabetes**: Do BSL.

- **Immunisation**: Influenza, Hepatitis B vaccinations.

- **Nutritional state**: Anaemia, B12/ Folate deficiency.
This list is not comprehensive and is intended to act as only as a guide. In all circumstances, investigations should be conducted as clinically indicated.

The following are investigations that can be helpful in routine health prevention screening:

<table>
<thead>
<tr>
<th>TEST</th>
<th>ASSIST WITH</th>
</tr>
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<tbody>
<tr>
<td>BSL</td>
<td>Diabetes</td>
</tr>
<tr>
<td>Lipids</td>
<td>Hypercholesterolemia, lipid disorders</td>
</tr>
<tr>
<td>FBC</td>
<td>Anaemia, abnormal white cells/platelets</td>
</tr>
<tr>
<td>ESR</td>
<td>Inflammatory/connective tissue disease</td>
</tr>
<tr>
<td>EUC</td>
<td>Renal impairment, hypokalemia</td>
</tr>
<tr>
<td>LFT</td>
<td>Abnormal liver function</td>
</tr>
<tr>
<td>TFT</td>
<td>Abnormal thyroid function</td>
</tr>
<tr>
<td>Serum Calcium</td>
<td>Hyper/hypocalcemia</td>
</tr>
</tbody>
</table>

Bone Density | Osteoporosis

PAP Smear | Cervical cancer
Mammogram/Breast Ultrasound | Breast cancer
Faecal occult blood test | Bowel cancer

<table>
<thead>
<tr>
<th>Other Tests that may be relevant and helpful:</th>
</tr>
</thead>
</table>

- Drug levels | Noncompliance, toxicity |
- HbA1c | Longer term diabetic control |
- HepA/B/C serology | Hepatitis |
- HIV serology | HIV |
- VDRL/TPHA | Screening for syphilis |
- Vitamin B12/Folate | B12 and folate deficiencies |
- Iron studies | Anaemia and its causes |
- Prolactin, Oestrogen, Testosterone | Medication effects, fertility |
- Progesterone, FSH/LH levels | |
- PSA (Prostate specific antigen) | Menopause, Prostate cancer |
- Urinalysis | Diabetes, renal disorders |
- ECG (Electrocardiogram) | Arrhythmias, Ischemic Heart Disease |
- Spirometry | Asthma, C0 PD (Chronic Obstructive Pulmonary Disease) |
- CXR (Chest x-ray) | C0 PD, lung cancer |
- Cerebral CT Scan | Confirm or exclude atrophy, focal lesions |
FURTHER RESOURCES


Medical Complications of Psychiatric Illness

Guidelines for Preventative Activities in General Practice

Internet Resources

Diabetes Australia
Website of the Diabetes Australia Organisation. Has a wide range of information about diabetes, including fact sheets and booklets about healthy eating with diabetes.
http://www.diabetesaustralia.org.au

Health Finder
United States Department of Health and Human Services website. Provides health information about a range of physical health disorders for consumers and carers. It also has a site that covers aspects of prevention and wellness.
http://www.healthfinder.gov

Heart Foundation
National Heart Foundation of Australia website. Contains a variety of information and resources about all aspects of cardiovascular health for both professionals and consumers.
http://www.heartfoundation.com.au

NSW Cancer Council
Cancer Council of NSW website. Provides reliable information about cancer, cancer-related services and lifestyle risk factors for cancer.
http://www.nswcc.org.au
Consumers with mental health problems experience an increased mortality from all main causes of death. This includes many medical illnesses or disorders that have a ‘lifestyle’ component such as smoking related disorders, ischaemic heart disease (IHD), drug use disorders, hepatitis and nutritional deficiencies.

Many factors may account for this trend. Educational programmes designed to impact on lifestyle change within the wider community may not have reached those with mental health problems to the same degree. Paternalistic views by clinicians and carers may also contribute, e.g. “Smoking is one of the few pleasures he/she has”. There has also been a perception that changing high risk health behaviours in this group is too hard or requires significantly more resources or highly specialised treatment programmes.

Although consumers with mental health problems can find it harder to act on recommendations for change because of limitations relating to their illness and circumstances, the evidence suggests that they are able to address high risk health behaviours with encouragement, education and support. The potential health benefits of managing high risk health behaviours in this group are obvious.

This chapter aims to provide the clinician with an outline for approaching common high risk health behaviours in consumers with mental health problems. Clearly this chapter cannot provide comprehensive treatment protocols for all these behaviours and further resources are therefore provided. Clinicians are also encouraged to seek the support of other professionals when needed.

The following high-risk health behaviour areas are covered in this chapter:

A  Smoking
B  Weight and nutrition
C  Alcohol and other drug use
D  Reproductive health
E  Lack of meaningful occupation
A. SMOKING

Background

- In Australia, tobacco smoking is the largest single preventable cause of death and disease. One in two lifetime smokers will die from diseases caused by tobacco, and half of these deaths will occur in middle age.
- The prevalence of smoking amongst people with schizophrenia may be as high as 90% (Glassman 1993) - the prevalence in the general population is now just over 20% (Consensus Statement 1999). People with schizophrenia are more heavily nicotine dependent and inhale more deeply (McNeill 2001).
- Despite the success of smoking cessation programs in the general population, until recently, smoking in consumers with mental health problems has been a neglected area.
- People with mental health problems such as schizophrenia are rarely encouraged to stop or given support in their efforts to quit (Addington 1998).
- Research has found that the majority of these people are interested in quitting (Addington 1997) and that stopping smoking is possible for people with mental health problems, especially if the treatment is specifically designed for them (Addington 1998).

Effects of smoking in people with mental health problems

Nicotine has a number of properties which may predispose consumers with mental health problems to its use:

- It enhances concentration, information processing and learning by stimulating the dopaminergic pathways in the prefrontal cortex.
- By similar mechanisms, it may decrease negative symptoms of schizophrenia.
- It has a possible antidepressant effect.
- It aids relaxation.

Smoking:

- Can relieve boredom and facilitate social interaction.
- Can impact significantly on the finances of people on limited incomes.
- Increases the metabolism of some antipsychotics, necessitating higher medication doses.
- May increase the risk of dyskinetic movements.
- Contributes to the higher mortality rates from cardiovascular and respiratory disease in people with schizophrenia.

Cigarette smoking is a serious physical health issue affecting consumers experiencing mental health problems. Despite the difficulties, it is clear that we should encourage and support all consumers to quit smoking.
1. Identify smokers
   - Congratulate if not a smoker!

2. Assess readiness to quit
   - Determine level of motivation to quit smoking.
   - If not ready, find a personalised reason to quit.
   - Determine the cost vs benefit for each person.
   - Take a smoking history.

3. Assess risks of smoking cessation
   - Psychotic relapse.
   - Know usual signs for this consumer.
   - Depression.
   - Screen for and treat prior to cessation.
   - Change in medication effects.
   - Know consumer’s current side effects, if any.

4. Write an individual plan
   - If psychiatrically stable, a written plan is important as cognitive deficits may be present.
   - Choose a day to stop.
   - Enlist support – family, friends.
   - Identify and reinforce helpful strategies.
   - Plan for high risk situations, e.g. alcohol use.

5. Use nicotine replacement therapy (NRT)
   - Significantly increases quit rates and minimises withdrawal symptoms

6. Recommend group support
   - Aids relapse prevention.

7. Monitor frequently
   - See 1-3 days after quitting: deal with any problems, provide support, adjust NRT.
   - See weekly for one month: assess for psychotic relapse and/or depression, adjust medication and NRT as indicated.
   - See monthly for six months: continue to monitor mental state and medication.

8. Congratulate on any progress
Notes regarding management of smoking cessation

Take a smoking history

- Establish current number of cigarettes smoked per day
- Any past attempts to quit?
- Problems with past attempts?
- Cause/s of relapse into smoking
- Previous treatments used to assist cessation

Assessing risks of smoking cessation

- Can precipitate a psychotic relapse - ensure current mental state stable and consumer is aware of their early warning signs.
- Can precipitate a depressive disorder - screen for and treat depression before smoking cessation attempted.
- Cessation of smoking can impact on the dose of antipsychotic needed. Document antipsychotic dose and side effects prior to cessation of smoking and then monitor.

Antipsychotic medications whose metabolism is increased by smoking include:

- Clozapine (Clozaril, Clopine)
- Fluphenazine (Modecate)
- Haloperidol (Serenace, Haldol)
- Olanzapine (Zyprexa)

Nicotine Replacement Therapy

Most established smokers will experience nicotine withdrawal. Withdrawal symptoms include: anxiety, depression, insomnia, irritability, restlessness, weight gain.

Nicotine replacement therapy (NRT) has been shown to:

- Substantially reduce withdrawal symptoms
- Increase quit rates

Nicotine patches are usually the NRT of choice.

Nicotine gum and inhaler permit more control over the dose and how quickly it is delivered.

Combinations of patches and inhaler/gum may be useful.

Needs to be individualised for maximum benefit.

Few contraindications to the use of NRT: little abuse potential and there is no evidence of increased cardiovascular risk.
**Non-nicotine pharmacotherapy** - Buproprion (Zyban)

- Contraindicated in Anorexia Nervosa and Bulimia
- Use with care in Schizophrenia
- Could precipitate/exacerbate psychosis
- Has many neuropsychiatric side-effects
- Interacts with antipsychotics and other medications with an increased risk of seizures

**Consider group support**

The effectiveness of all forms of NRT is enhanced when accompanied by problem solving/skills training.

Participation in a quit group is a useful way of people learning cognitive-behavioural techniques that will aid smoking cessation and maintenance.

People with mental health problems may benefit from a specially designed program that allows for their cognitive, affective and social impairments, e.g. SANE Smokefree Program.

**Further reading:**


Strasser KM. Smoking reduction and cessation guidelines for people with schizophrenia for general practitioners. SANE Australia and the University of Melbourne Department of Psychiatry, 2001.

**Further resources for clinicians**

- **Quitkits** - Can be ordered in bulk from the Better Health Centre
  Tel. (02) 9879 0443, Fax. (02) 9879 0994

- **Leaflet** - Products to help quit smoking - explains pharmacotherapy, withdrawal and behavioural strategies to assist cessation. Can be downloaded from http://www.mhcs.health.nsw.gov.au

- **SANE Australia** - SANE Smokefree Project Coordinator, (03) 9682 5933
  http://www.sane.org

- **The SANE SmokeFree Kit** - A manual for mental health workers.

**Further resources for consumers**

- **QUIT Line** - for Quitkits and counselling. 131 848

- **SANE Australia** - SAN E SmokeFree Zone
**Background**

Fifty five percent of Australian men and women are overweight or obese. Obesity has been linked to the development of non-insulin dependent diabetes (NIDDM), hypertension and increased blood lipid levels, all of which increase the risk for vascular disease and decrease life expectancy.

Obesity is more common in people with mental health problems. Weight gain during antipsychotic treatment has been reported in up to 60% of consumers (Fakhoury, 2001). The incidence of NIDDM is also higher for consumers with schizophrenia and bipolar disorder compared with the general population (Sussman, 2003).

The mechanisms underlying weight gain in consumers with mental health problems are complex and include interactions with neurotransmitters, sex hormone dysregulation, altered insulin sensitivity (Werneke, 2002), sedation, decreasing physical activity, a general lack of understanding of nutrition as well as lack of motivation and skills to shop for and prepare food.

A typical antipsychotics have been linked to the development of NIDDM (Sussman, 2003), although it is not clear whether this is due to the associated weight gain or direct effects on glucose metabolism. In decreasing order, obesity and NIDDM is most common in consumers being treated with clozapine, olanzapine and risperidone (Sussman, 2003). Current evidence suggests that quetiapine induces only small weight gain and does not increase the risk of developing NIDDM (Sussman, 2003).

Weight gain also impacts negatively on the self-esteem of consumers and may lead to social withdrawal and noncompliance.

Clinicians must therefore educate themselves about appropriate measures for preventing weight gain before or immediately after initiating antipsychotic therapy. Strategies for weight gain management that have proven effective in trials include regular check ups, lifestyle and medication counseling, medication assessments and behavioural control programs (Aquila, 2002).

**Determining who needs intervention**

The risk associated with obesity can be calculated by two methods.

\[ \text{BMI} = \frac{\text{weight (kg)}}{\text{height (m)}}^2 \]

BMI categories of overweight and obesity in kg/m² are as follows:

- **Underweight** <18.5
- **Normal** 18.5 – 24.9
- **Overweight** 25.0 – 29.9
- **Obese** 30.0 – 39.9
- **Extremely obese** > 40.0

**Waist circumference** is measured at the narrowest circumference between the lower border of the ribs and the upper boarder of the iliac crest. High waist circumference is associated with an increased risk of NIDDM, dyslipidemia, hypertension and cerebrovascular disease. The high risk waist circumferences are men >102cm; women >88cm.
These figures need to be lowered by approximately 10cm for Indians and Asians and may also vary for other ethnic groups, although this is currently unknown.

Unless the consumer specifically declines, all consumers must have their weight and/or waist-hip ratio (WHR) measured by the mental health service at least every 6 months. This will need to be more frequent if the consumer is identified as over-weight (BMI>25 or WHR >1).

It is preferable to measure the waist-hip ratio of consumers, however if this is not considered appropriate, weight and waist measurement may be used.

**The goals of weight loss management**

Studies suggest that sustained weight loss can be a difficult goal. Participants in weight loss programs can lose up to 10% of their weight but 1/3 to 2/3 of the weight is regained within one year, and almost all the weight is regained within 5 years (NIH Technology Assessment Panel, 1993).

The overall goal of weight loss management is to achieve and maintain a healthy body weight and improve quality of life. Consumers should be encouraged to aim for up to a 10% reduction in body weight over a 12 month period, which is sustainable over time. However, improving or preventing metabolic disease can be attainable with a weight loss as low as 5%.

**The principles of management**

- Focus on slow, steady and realistic weight loss and maintenance.
- Set achievable, sustainable behavioural goals.
- Changes to eating patterns should be only one part a wider program that addresses other lifestyle factors such as exercise and stress management.
- Tailor the weight loss treatment to the consumer's individual needs.
- Assess knowledge about nutrition and exercise - provide information where knowledge is lacking.
- Provide regular review, support and encouragement.
- If necessary, refer the consumers with more complex psychological issues associated with body weight and image to appropriate professionals.
- Consider the use of care sharing with established weight loss programs or professionals to provide greater support to the consumer.
- Plan for weight maintenance after weight loss has been achieved.
Guidelines for clinicians assisting a consumer to achieve a healthy weight

Monitoring weight

Across the course of treatment with psychiatric medication, check weight at regular intervals - to detect weight gain early.

Assisting consumers to lose weight

A food diary can be helpful to assist consumers accurately determine their eating habits. Start by reviewing the consumer’s existing diet and identify changes that they are willing to make and sustain. Encourage small but progressive changes. Acknowledge ethnic, cultural and financial issues.

Encourage the consumer to incorporate healthy eating strategies into everyday life, e.g. when shopping for, preparing and eating food.

- Be positive about food, rather than focusing on the negative aspects and restraint and restriction.
- Reinforce that starting a more active, healthy lifestyle is a journey and encourage consumers to be pleased with the small steps they take and to be consumer with themselves.
- Provide specific, appropriate advice about exercise, e.g. ‘start by walking for 10mins each day’ rather than ‘you need to walk more’.
- Advise gradual progression of activity. Some consumers will need to start with simple exercise that can be gradually increased. Walking five minutes three days a week can be built up to walking 30 mins five days per week.

Maintaining motivation

- Assess the consumers’ understanding of health risks associated with overweight and obesity and enhance this knowledge where possible.
- Encourage the consumer to set realistic dietary and weight loss goals – unrealistic goals are unlikely to succeed or be sustained.
- Plan for frequent consultations in the early phases of treatment.
- Don’t encourage a focus only around weight lost – encourage goals around health, fitness and self-esteem.
- Use physical measures to support motivation - improved fit of clothes, ability for more activity, a healthier BMI or waist measurement.
- Give positive reinforcement and encourage the consumer to also acknowledge each goal that is reached.

Dealing with lapses

- Use relapses as an opportunity for further learning, education and reinforcement of healthy eating practices.
Encourage the view that one variation from the healthy eating plan is not failure - it is what is done 95% of the time that counts.

Support

- Some consumers will prefer the support of friends, a support network or a weight loss group, e.g. Weight Watchers, Gut Busters.
- Make use of the available resources, e.g. nutritionists or exercise consultants.

Guidelines for people wanting to achieve a healthier weight

- Set realistic goals - you are more likely to stay with your plan and to achieve your aims.
- Set goals of improved health and fitness, rather than just focus on weight loss.
- Successful change will require small, steady change in several areas - food, exercise and managing life stress.

Practical advice about food

- Eat mostly fruits, vegetables, grains, breads and cereals; eat meat, fish, eggs and diary products in moderation; consume least of fats, sugar and alcohol.
- Plan eating – eat at regular times and eat only what you need to eat. If you leave decisions about your food until the last minute, there’s more risk you will eat ‘fast’ food that is often high in fat and sugar.
- Look at how much you put on your plate – making small decreases in the size of each portion of your meal will help you maintain a healthy weight.
- Eat slowly and enjoy your food. This makes food much more satisfying, so you will tend to eat less.
- Cooking – bake, grill, steam, lightly stir fry and microwave; use herbs and spices to flavour.
- Shop sensibly – follow a list to avoid browsing; shop when you are not hungry; read food labels to select low calorie, low fat foods.
- Fine tune the fat content of your diet. Use low-fat dairy products and lean cuts of meat; reduce margarine on bread and limit take-aways.
- Eat out wisely – order small portions and skip or share dessert.
- Drink healthy – try to drink 1.5-2 litres of water daily. Sip on thirst quenching water, plain mineral or soda water rather than soft drinks, cordial or fruit juice.
- Monitor your alcohol intake. Alcohol contains calories. Have a non-alcoholic drink between alcoholic ones, try light beers or diet soft-drink mixers, and avoid becoming involved in ‘shouts’.
- Review your labels for food - when people eat food they think of as ‘bad’ or ‘junk’, they can feel bad about themselves and guilty about what they have eaten. Think of food more in terms of ‘everyday’ or ‘sometimes’ food.
Exercise

- Exercise is an important part of a healthy, happy life. Regular exercise will have significant benefits for your health and fitness but it will also help you feel better about yourself and improve your mood. Exercise is NOT a ‘quick fix’ for weight problems.
- Look for extra ways to move your body. Every bit counts so don’t be afraid to do things the long way, e.g. walk up the stairs rather than take the lift, walk instead of catching a bus.
- Plan some physical activity for most days of the week. Aim to slowly build up to 30-40 minutes each day. This will also help your heart, sleeping and stress.
- Think laterally and try to find exercise that is fun - walking the dog, ballroom dancing, swimming, bushwalking, gardening.
- Drink plenty of water when exercising, especially in summer. Dehydration can be an unpleasant feeling and that can discourage you from continuing to exercise.
- Find an exercise partner - it makes exercising more fun. You are less likely to avoid exercise if you have made a commitment to someone else. Ask your family, friends or neighbours to join you.
- When people first start to exercise they can be very self-conscious. Try to find places or times to exercise in which you will feel comfortable, so you will keep going.

Dealing with eating that’s not about being hungry

- Pause and check with your body - do you really feel hungry or are you about to eat for another reason?
- Identify what triggers eating apart from hunger - boredom, tiredness, stress or other feelings. Acknowledge your emotional state or the real issue and try other approaches to deal with the situation.
- Seek help and support to solve problems or learn new strategies.

Dealing with feeling hungry

- Plan for healthy snacks between meals. This helps prevent less healthy choices when feeling hungry. Snack on fruit and vegetables - they are filling and low calorie.
- Have a glass of water or low calorie soft drink.
- Keep busy - try doing something active or interesting instead.

Dealing with lapses

- Remember that a ‘slip up’ doesn’t mean failure! Learn what you can from the experience and keep trying.
- Keep a helpful perspective on lapses, e.g. instead of “I’ve eaten a piece of cake today, I’ve failed” think “I’ve eaten a piece of cake, I will need to increase my activity.”
Further resources for clinicians

**ABC of healthy living**

An education manual developed by the New England Area Health Service for use by clinicians working with people with mental illness. It aims to assist consumers to develop their knowledge, skills and motivation in the areas of healthy eating and physical activity.

The package contains background information, activity ideas and handouts for providing group or one-to-one education. Distributed to all area health services with funding provided by MHDAO.

**A model approach to obesity.**


**Tips for long term weight management.**


Further resources for consumers

**The Australian guide to healthy eating**

Department of Health and Ageing website that contains the Australian Guide to Healthy Eating resources including a consumer booklet and background information for nutrition educators.

http://www.healthyeatingclub.org/info/articles/food-guides/aust-guide-he.htm

**The SANE guide to healthy living**

Handbook written for people experiencing mental illness who want to live a healthier lifestyle. It covers the benefits of being physically healthy, staying healthy and how to find help. SANE, Australia, Melbourne, 2002.

http://www.sane.org

**Working together for a healthy active australia**

The Australian Government website provides access to practical information and up-dates, news for families, parents, teenagers, children and their carers and older Australians on healthy eating, regular physical activity, overweight and obesity, particularly for children and adolescents and active living.


**Dieticians Association of Australia**

Website of the Dieticians Association of Australia - provides a guide to assist in finding a dietician, smart eating tips and recipes and nutritional information.

http://www.daa.asn.au

**“Shape Up America”** is a non-profit organisation dedicated to achieving healthy weight for life. The website has a variety of information and resources for both consumers and professionals.

http://www.shapeup.org
Comorbid substance use and mental disorder (often called Dual Diagnosis) is common and the prevalence may be increasing. Depending on the population sample, 30-80% of people with mental disorders have a co-existing substance use disorder (Mental Health and Substance Use Disorder Discussion Paper, 2002). In Australia, the most frequently used substances are alcohol, cannabis and amphetamines, and less commonly opioids, hallucinogens, inhalants (e.g. petrol, glue, paint) and anticholinergics (Lubman and Sundram, 2003).

A number of reasons for the increased prevalence of substance use disorders in people with psychotic illness have been advanced by Smith and Hucker (1994) and include:

- Attempts to deal with adverse states arising from the psychiatric illness and side effects of prescribed medication;
- Social drift into environments where substance use is common;
- Attempts to facilitate social interaction;
- Attempts to develop an identity more acceptable than that of a consumer with mental illness;
- Attempts to cope with the disabilities of mental illness (isolation, poverty);
- An increase in the social acceptability and prevalence of substance use;
- The possibility that substance abuse may precipitate, perpetuate or cause such psychiatric illness.

The high rates of comorbidity may also reflect the possibility of a common underlying neurobiological vulnerability to both disorders, or to traits, such as antisocial personality, that increase the likelihood of comorbid disorders (Lubman and Sundram, 2003).

The need for treatment

The misuse of substances by consumers with mental health problems can impact negatively on their mental health and its management. Substance use is associated with higher risks of relapse, re-admission to hospital and suicide (Dual Diagnosis Good Practice Guide, 2001). Increased psychiatric symptoms, non-compliance, increased rates of tardive dyskinesia and HIV infection, and early mortality (Dixon, 1999) are other potential poor medical outcomes.

Compounding these outcomes are the related social and occupational costs. People with comorbid disorders have an increased risk of legal, family and financial difficulties, with increased rates of incarceration, homelessness and housing instability (Mental Health and Substance Use Discussion Paper, 2002).

Difficulties in management

The management of a consumer with both mental health and substance abuse problems can pose a significant clinical challenge. Diagnosis and treatment of each disorder can be more complicated because of the presence of the other. Health care providers can experience these consumers as demanding, frustrating and overwhelming and can find it hard to maintain a sense of hope about treatment. However, there is evidence that suggests even brief interventions may improve outcomes (Drake and Mueser, 2000).
Consumers with dual disorders are a diverse group with various complex needs, requiring a range of treatments and services. They are at risk of being identified as ‘difficult’ and may not receive the care they require, falling between programs and services (Burdekin Report, 1993).

An approach to the management of consumers with mental health problems and comorbid substance abuse/dependence

Successful treatment of comorbid substance abuse or dependence requires a comprehensive approach to management. This includes:

- Screening
- Assessment of the substance abuse/dependence
- Engagement motivation education
- Medical treatment
- Relapse prevention
- Monitoring and follow-up

Screening

- The role of substance misuse should be considered in the assessment of all individuals with mental health problems.
- Self-report measures are the most common way to screen.
- Denial of substance use is common and other measures such as collateral history and laboratory tests may be helpful.

Assessment of the substance abuse/dependence

- Establish the current and lifetime use of substances. Ask specifically about each drug including alcohol, cannabis, amphetamines, ecstasy, cocaine, opioids, hallucinogens and inhalants.
- It is important to ask about abuse/dependence of prescribed medications such as benzodiazepines and anticholinergics.
- Establish the severity of use and associated risk-taking behaviours (e.g. injecting practices, unsafe sex).
- Screen for medical complications of the substance or mode of use, e.g. abscess formation, hepatitis B/C or HIV with intravenous opioid use.
- Enquire about any negative psychosocial consequences of use, e.g. alcohol-related driving charges, contact with the criminal justice system.
- Consider if there are issues requiring acute management, e.g. intoxication, overdose, withdrawal, suicidal ideation or aggression.
Engagement

Engagement is the first step in developing a trusting alliance between the consumer and health care provider. Successful engagement is critical to effective interventions or treatment. Rapport building and the development of a strong therapeutic relationship is paramount and the following strategies can enhance this process:

- Empathic, non-judgemental and compassionate attitudes.
- Individualised care that includes strengths as well as problems.
- Matching interventions to a person’s readiness to change.
- Promotion of self-efficacy.
- Due respect to issues of confidentiality and privacy.
- Consumers with mental health problems can experience problems in interpersonal skills and this can prolong the engagement phase.

Motivation

It is important to examine the consumer’s motivation to change and to set realistic goals for the stage of change. The following techniques may assist strengthen commitment to change:

- Education about substances and the problems that can be associated with use, e.g. worsening of mental health, Hepatitis B/C, HIV.
- Present and discuss any test results, e.g. liver function tests, urine drug screen.
- Draw links between the substance use and that consumer’s problems, e.g. substance use and increased paranoia.
- Help the consumer to explore the pros and cons of continued use or abstinence.
- Explore the barriers to change, including attitudes about past attempts that were unsuccessful.

The health care provider should try to remain non-confrontational and empathic – the aim is to help the consumer reflect on their behaviour, not to frighten or coerce the consumer into change.

Specific psychosocial interventions for consumers with mental illness such as schizophrenia

Lubman and Sundram (2003) outlined the following selected psychosocial interventions for the treatment of addiction, specially modified for consumers with schizophrenia:

- Explore reasons for substance misuse, including relationship to psychiatric symptoms, antipsychotic treatment and feelings of social isolation;
- Address the consumer’s motives and degree of commitment towards treatment of both their psychotic illness and their substance misuse;
- Adopt concrete problem-solving approach with consumer, where appropriate;
- Set tasks that are simple and readily achievable (e.g. keeping a diary of substance use or psychotic symptoms; regularly taking medication; keeping appointments);
Focus on specific skills to deal with high-risk situations, and consider use of role play (e.g. learning how to say "no" to a dealer or drug-using friends);

Suggest alternatives to substance use for coping with stressful situations (e.g. exercise, contacting a support person);

Treat comorbid anxiety with behavioural techniques (e.g. breathing exercises, progressive muscular relaxation);

Remain supportive and emphasise any gains made;

Recommend group support (if mental health specific group available);

Encourage participation in alternative activities and contact with non-substance-using peer group (discuss available resources with local community health centre or mental health service);

Adopt a long-term perspective, with ongoing intervention.

**Treatment**

It may take many months for a consumer to indicate their willingness to engage in active treatment interventions for their substance abuse/dependence. It is important to set realistic goals in appropriate time frames, e.g. harm minimisation by reduction in use as a short-term goal; abstinence as a long-term goal.

**Education**

- Discuss with the consumer safe and responsible levels of substance use, such as the National Health and Medical Research Council Guidelines for safe alcohol use.
- Ensure the consumer has an understanding of safe practices relating to drug use, e.g. using clean needles, never injecting alone, using injecting centres.
- Discuss associated issues such as safe sex practices.

**Medical treatment**

- Review, and monitor, the effectiveness of the pharmacological treatment of the mental health problem, including side effects.
- It is preferable to stabilise the mental state prior to detoxification from substances.
- Consumers with mental health problems may require a slower detoxification regimen, with close monitoring of mental state.
- Referral to mental health services or drug and alcohol units for detoxification in more complicated cases.
- Medications that may be misused such as benzodiazepines and anticholinergics, should be prescribed only when there is a clear therapeutic indication and for brief periods of time.
- If the consumer is dependent, medication may delay relapse, e.g. acamprosate and naltrexone for alcohol; methadone and buprenorphine for opiates.
Relapse prevention

Substance abuse/dependence can have a chronic relapsing course. It is important therefore, once a consumer has reduced their use or become abstinent, to provide them with interventions aimed at the prevention and management of future relapses of their substance use and mental health problems. These include:

- Assist the consumer to identify their triggers for relapse of substance use, e.g. meeting other substance users, being paid, family conflict.
- Assist the consumer to identify the triggers for relapse of their mental health problems, e.g. noncompliance, stress, substance use.
- Help the consumer to identify and develop relapse prevention strategies for both the substance misuse and mental health problems.
- Involve family and other supports in the development, use and monitoring of relapse strategies.
- When relapse occurs, remain supportive. Encourage the consumer to see the relapse as a learning opportunity and emphasise the gains made.

Monitoring and follow-up

Comprehensive care of the consumer with comorbid substance use and mental health problems requires:

- Attention to social, financial, relationship and cultural factors.
- Regular monitoring of mental state, substance use and medication.
- Assertive follow-up and ongoing case management.
- Access to acute services and reassessment as required.
- Integrated care through collaborative partnerships between general practice, mental health and drug and alcohol services.

Family, carers and other supports

- At all stages encourage the involvement of families or close supports.
- Provide supports with support, e.g. Al-Anon, SANE.

Further resources for consumers

The SANE Guide to Drugs.
http://www.sane.org
Further resources for families, carers and friends

When someone you love is addicted to alcohol or drugs

Addict In the Family

Further resources for clinicians

Substance misuse in consumers with Schizophrenia: a primary care guide.

Alcohol misuse and dependence. Assessment and management.

New South Wales Detoxification Clinical Practice Guidelines.

Overcoming Addictions - Skills Training for People with Schizophrenia.

Psychostimulant Users - Clinical Guidelines for Assessment and Management
NSW Health Department, 2006

Internet resources

Australian Alcohol Guidelines
Department of Health and Aging website containing the Australian Alcohol Guidelines, resources and contacts which may help in the management of problematic alcohol use. Includes brochures and booklets for consumers that can downloaded.
http://www.alcoholguidelines.gov.au

Australian Drug Information Network (ADIN)
Provides a central point of access to internet-based alcohol and drug information provided by prominent organisations in Australia and internationally. http://www.adin.com.au

Australia Drug Foundation Site
The website of the Australian Drug Foundation, an independent non-profit organisation working to prevent and reduce alcohol and drug problems in the Australian community. It provides a wide range of information on alcohol and other substances, including free resources to use in education programs. http://www.adf.org.au
Resource organisations

**Alcohol and Drug Information Service**
- 24 hour helpline: 02 9361 8000
- Outside Sydney Metropolitan Area: 1800 422 599

**Alcoholics Anonymous**
- 24 hour helpline: 02 9799 1199
- [http://www.aa.org.au](http://www.aa.org.au)

**Al-Anon Family Groups**
- Support group for relatives and friends of people with alcohol dependence: 02 9279 3600

**Narcotics Anonymous**
- 24 hour helpline: 02 9212 3444
- 02 9519 6200

**Nar-Anon Family Groups**
- Support group for relatives and friends of substance abusers: 02 9418 8728

**NSW Drug and Alcohol Specialist Advisory Service (DASAS)**
- 24 hour telephone service to assist health professionals throughout NSW in the diagnosis, management and treatment of drug and alcohol related problems: 02 9361 8006
Background

Reproductive health is an area overlooked in the care of people with mental health problems. This can be because of a reluctance of health care providers to explore this area or a perception that people with mental health problems are asexual. However these consumers are sexually active and are at increased risk of a range of poor reproductive health outcomes.

They are more likely to experience sexually transmitted diseases (STD’s). A third or more of consumers with major psychoses report a history of treatment of STD’s other than HIV (Kelly et al., 1995). HIV/AIDS, hepatitis B, syphilis, Chlamydia infections and genital herpes are the major STD’s that occur in this consumer population (Rosenberg et al., 2001).

Consumers with mental illness are also at increased risk of coercive or abusive sexual relationships, sexual assault, unplanned pregnancy, induced abortions and pregnancy complications (Miller and Finnerty, 1996). Female consumers that complete a pregnancy are more likely to give up the child (Miller and Finnerty, 1996). Male consumers are less likely than other men to use contraception and they are often not involved in raising the children that they father (Coverdale et al., 1994).

Many factors contribute to this increased rise of poor reproductive health outcomes. Some psychiatric disorders are directly associated with high-risk sexual behaviour, e.g. hypersexuality with mania and organic brain syndromes. Poor impulse control, multiple sexual partners, comorbid substance abuse and homelessness also contribute to the risk.

There are many factors that can impede access to good reproductive health care for people with mental health problems. For example, consumers may be unable to access medical care because of the nature of their psychiatric illness or a lack of funds or medical insurance. For consumers with severe mental illness, examination and diagnostic testing of sexual health problems may be avoided because of concern that it may adversely affect the psychiatric condition.

Consumers with mental health problems may also experience problems with sexual functioning. This may relate directly or indirectly to the effects of psychotropic medications. For example, antipsychotic medications can be associated with erectile, ejaculatory and orgasmic dysfunction (Smith et al., 2002). In women, antipsychotic use can also be associated with a failure of ovulation (Currier and Simpson, 1998). Side effects of medication such as weight gain and sedation may impact on self-esteem and confidence, and therefore sexual function.

Clinicians can optimise the reproductive health of consumers with mental health problems by coordinating care with other providers to ensure that consumers receive these services. Education programs should include topics that are specific to consumers with mental health problems, e.g. psychotropic medications. The programs also need to provide information in a manner that is appropriate to the client group.
Summary of the reproductive health needs of consumers with mental health problems

Hepatitis B vaccine to all consumers at high risk on screening

Women
- Cervical cytological screening (Pap smear) every 2-3 years
- Mammogram every 2 years for women aged 50-70 years
  (Note recommendations are different for high-risk groups)
- Consideration of hormone replacement therapy (HRT) in post menopausal women.

Men
- Currently no recommended screening for men.

Education/preventative services - need to cover issues of:
- Intimacy, sexual orientation, "saying no"
- Basic reproductive physiology
- Menstrual hygiene/menopause for women
- Reproductive health screening
- Risks of unprotected sex - sexually transmitted diseases, including HIV; pregnancy
- Safe sex practices and sexually transmitted disease risk reduction
- Contraception and pregnancy

Family planning/obstetrics
- Family planning/contraceptive services
- Management of unwanted pregnancy (abortion, adoption, support services)

Genetic counseling
- Risks of mental health problems in offspring
- Potential risks of psychotropic medication in pregnancy

Obstetric care
- Prenatal care and delivery
- Psychotropic drug management in pregnancy/delivery/breast feeding
- Assessment of parenting skills
- Support with parenting issues/parenting classes

Disease management
- HIV/AIDS - prevention, diagnosis, management
- Other sexually transmitted diseases - prevention, diagnosis, treatment
- Rape - prevention, counseling, treatment
Notes regarding management of reproductive health in consumers with mental health problems

Contraception

Although condoms protect against STD’s and unwanted pregnancy, people with mental health problems may experience difficulty negotiating their use with partners. Consumers with schizophrenia may experience altered pain thresholds, obscuring the early signs of pelvic inflammatory disease (PID) which can be a complication of interuterine devices (IUD’s).

Consumers need to be given adequate counseling about the advantages and disadvantages of each contraceptive option including condoms, oral contraceptive pill, diaphragm, interuterine device, depot provera and tubal ligation. Consumers with severe mental illness may be overweight and smoke heavily - this is a particular issue with respect to the use of the oral contraceptive pill.

Reproductive functioning

Psychotropic medications can interfere with normal reproductive functioning - hyperprolactinemia, amenorrhea and infertility have been reported (Currier and Simpson, 1998). Women need to be counseled about these risks.

Obstetric care

There is a correlation between the severity of mental health problems and obstetric complications. Failure to receive good obstetric care may be due to many factors including denial, poor social functioning, lack of education regarding the need for prenatal care and a lack of access to health care.

Psychotropic drugs in pregnancy

At this point in time, there are no psychiatric medications that have been declared absolutely safe for use in pregnancy.

The decision to use a psychotropic drug should be reached by carefully weighing the risks of prenatal exposure to the fetus against the risks to the fetus and mother posed by a relapse of the mother’s mental health problems if drugs are withheld (Miller, 1991).

Clinicians should use all available resources to provide consumers with the most accurate information about the risks of medication in pregnancy and breast-feeding. This includes Therapeutic Guidelines – Psychotropic (Version 5, 2003), the broader medical literature and specialist advice from psychiatrists and obstetricians.

Parenting skills

 Mothers with mental health problems are particularly vulnerable to parenting dysfunction and loss of custody of their children (Miller and Finnerty, 1996). For those that retain custody, stresses may exceed their coping skills and their children are at high risk of poor social outcomes. Parents suffering from mental health problems require significant support and education and this is often best performed in programs tailored to their specific needs.
Autonomy and Consent

With respect to all these areas, issues of autonomy and consent are important. Whenever possible, consumer autonomy must be respected. However, it is important to remember that in some circumstances that consumer’s mental health problems will impair their decision-making capacity and this impairment may vary over time. If the consumer’s decision making is so impaired that it is felt that he/she cannot participate in making informed decisions in any of these areas, the treating professionals need to consult the Guardianship Tribunal or the Mental Health Review Tribunal.

Further resources for clinicians

Taking a sexual history.

Psychotropic medications in pregnant women: treatment dilemmas.


The Use of Psychotropic Medications During Breast-Feeding.

Therapeutic Guidelines: Psychotropic.

Resource organisations

FPA Health 1300 658 886
Family Planning Association helpline for reproductive and sexual health questions.

Sydney Sexual Health Centre 02 9382 7440
1800 451 624
**Background**

One of the key tasks of adulthood is to find a sense of meaning and purpose in our individual lives. Our various roles in life - the work that we do, the contributions we make to our communities and our relationships with families and friends - are some of the ways we achieve this sense of meaning. These roles can also be important to our happiness and self-esteem. Serious mental health problems can greatly impact on the tasks and roles of adult life, significantly affecting the sense of self for people who experience mental health problems. The comprehensive treatment of consumers with mental health problems requires us to be sensitive to these issues and to be aware of strategies that will assist consumers to overcome these difficulties.

**Promoting realistic goals**

Consumers with serious mental health problems experience a range of symptoms that can impact on their ability to function in adult life. Paranoid thoughts and delusions may make consumers too fearful to tolerate contact with others. Auditory hallucinations may be so distracting that they impair ability to have conversations and relationships. Negative symptoms, e.g. poor motivation and volition, can impact on the desire to be involved in activity. Some degree of cognitive impairment may accompany chronic mental health problems, especially illness complicated by serious substance use. Chronic mental health problems also impact on the consumer’s confidence and self-esteem.

When encouraging consumers with mental health problems to find meaningful occupational, social and leisure activities, it important to help consumers determine and work towards realistic goals. It is preferable to make smaller, but more achievable steps, than to undermine confidence with the failure to achieve an inappropriate goal. Consumers may need to be gently dissuaded from some goals that are clearly unrealistic. Help can be sought from professionals such as occupational therapists about the capabilities of individual consumers.

**Strategies to assist consumers develop meaningful occupation**

The following ideas may assist clinicians to help consumers re-establish meaningful occupation:

- Activity planning
- Activity on a budget
- Study and courses
- Local area mental health services
- The role of non-government organisations
- Voluntary work
- Consumer advocacy
- Commonwealth rehabilitation service

**Activity planning**

Consumers with chronic mental health problems often experience difficulties with maintaining structure and activity in their lives. These things are important however to maintain motivation, overcome boredom and have a sense of purpose. Clinicians can assist consumers by showing them how to plan activities and consider the value of the activity, in terms of the pleasure or sense of achievement gained.
Assisting a consumer with activity planning

- Encourage the consumer to use a diary, or even a piece of paper, to write down a plan of activity for the coming day or week.
- Suggest that they plan specific times for each activity - this helps to prevent avoiding or delaying an activity, or planning too many things for the time available.
- Encourage them to set realistic times for each activity - remember that some consumers may need more time because of problems with planning and organisation.
- Some consumers will require some activities or tasks to be broken into smaller, more manageable steps.
- Encourage consumers to include activities that are for fun or pleasure as well as those that are necessary, e.g. the shopping, the washing, cleaning.
- Encourage consumers to organise to do some activities with others - this helps to break down feelings of social isolation and helps to maintain social skills.
- Encourage them to reflect on the degree of pleasure or achievement they got from activities - this helps to reinforce the positive aspects of activity.
- Initially, review their planning with them on a regular basis. Give positive feedback about achievements and review difficulties.
- When consumers have developed skills at activity planning, they can use the same principles to assist with larger, longer-term life goals.

Activity on a budget

Consumers with serious mental health problems often have limited financial resources. Provided below are some ideas for activities that are relatively inexpensive. Community notice boards, the local library or newspaper and the local council may also be good sources for information about free local events.

**Social activities:** visit someone, write a letter, telephone a friend, invite a friend around, have a coffee out, take your usual lunch and have a picnic, play cards, visit your church.

**Creative activities:** cooking, sewing, singing, drawing, painting, make a model, write a story or a poem, play an instrument, pottery, rearrange a room, restore a piece of furniture.

**Recreational activities:** go for a walk, laze in the sun, sit on the beach, take a dog for a walk, meditation, yoga, tai-chi, listen to music, read a magazine, book or newspaper, go to hear a band, see a movie, watch a sporting event, garden, jog, play cards, chess or dominoes, have a game of golf, play tennis or lawn bowls, go ten pin bowling, swim, bushwalk.

**Educational activities:** go to the library, read a book, do a course, learn a language, go to the museum, go to the zoo, do a cross word or puzzle.

**Nurturing activities:** wear something that feels good, buy something for yourself, relax in a warm bath, treat yourself to a haircut, walk barefoot on the beach.
Local mental health service activities

Some mental health services will have activity programmes that are part of their rehabilitation services for consumers with mental health problems. These include day centres with established recreational programmes as well as outings and some courses. Although access to these programmes may be limited, details of these programmes can be sought through your local mental health service.

The role of Non-Government Organisations (NGO’s)

There are many non-government organisations that are involved in providing support, recreational activity and suitable employment to consumers with mental health problems. These services usually focus on working with consumers with more severe, disabling illness. Examples of these organisations include the psychiatric rehabilitation association (pra), new horizons and the clubhouse program (schizophrenia fellowship of nsw). Centrelink or the departments of health or disability and aging may be able to provide advice on the services that operate in your local area.

Study and courses

Some consumers may wish to participate in study or courses for pleasure or interest. Local community colleges run a variety of courses for interest, as do some tafe colleges. Some consumers will want educational institutions have a disability support officer who can provide assistance in planning a course of study and support during the course. Consumers on benefits may be eligible for financial assistance to study and centrelink can advise consumers about their entitlements.

Voluntary work

Some consumers will not be ready for or able to return to employment but may benefit from participation in voluntary work. This often promotes a sense of purpose and contribution. It also provides opportunities for social contact and the development of social skills and friendships. When people with mental health problems volunteer, it is important to encourage them to disclose their mental health problems to the organisation. This allows the organisation to be sensitive to their needs, plan appropriate voluntary activity for them and be understanding if problems arise.

There are many ways people can participate in voluntary activity. Many charitable organisations require volunteers on a regular basis. Large-scale cultural or sporting events require many volunteers but for shorter periods of time. It is advisable to make use of services designed to assess volunteers and link them to appropriate interests and organisations.

Consumer advocacy

Many area health services now have strong consumer programmes. These include programmes of consumer advocacy, consumer support and consumer networks. Involvement in these programmes can provide opportunities for consumers to derive a sense of contribution and to develop social skills and networks. These programmes also provide an opportunity for consumers to develop skills of value when seeking employment. Your local or area mental health service can advise you of the programmes in your area.
Commonwealth Rehabilitation Service (CRS)

The Commonwealth Rehabilitation Service has an established role in helping people with mental health problems return to paid employment. This is usually done through a process of assessment of needs and cooperation with empathic, understanding employers. They are able to negotiate and structure employment situations to the needs of the individual, e.g. part-time employment or flexible starting hours. There are several non-government organisations also approved to provide this type of assistance and some consumers with mental health problems will prefer to work with NGO’s.

Further resources for clinicians

Commonwealth Rehabilitation Service 1800 624 824
- see phone book for local offices

Volunteering NSW 02 9261 3600
An organisation that tries to match an individual’s interests to volunteer needs.

The blueprint guide to recreation and psychiatric disability

The blueprint guide to psychosocial rehabilitation.

Further resources for consumers

The sane guide to healthy living

Internet resources

Working together for a healthy active Australia
The Australian Government website provides access to practical information and up-dates, news for families, parents, teenagers, children and their carers and older Australians on healthy eating, regular physical activity, overweight and obesity, particularly for children and adolescents and active living. http://www.healthyactive.gov.au/

Disability Online

GROW NSW
Community Mental Health Movement. http://www.grow.net.au
Psychotropic medications have a valuable role in the treatment of acute and chronic disorders of mental health. As their principal site of action is the central nervous system, these medications have the potential to impact significantly on our capacity to function and the clinician using them therefore needs to have an appreciation of their side effects, risks and interactions.

This chapter aims to give the reader a brief overview of some of the most important points relating to the clinical use of the major groups of psychotropic medications, particularly in the areas of side effects, monitoring and drug interactions. However, the information contained in this chapter is not comprehensive and is not intended to determine for prescribers what to do or not to do. **As prescribing information about medications is constantly being revised, the reader is encouraged to review more detailed sources prior to prescribing.**

Acceptance of and adherence to medication is a common and significant problem in the treatment of consumers with mental health problems. Some consumers with poor insight may view medications as unnecessary. It is important to gain an understanding of the significance and meaning of medication for each consumer. Wherever possible, consumers should be encouraged to participate in decisions about their treatment. Successful treatment with psychotropic medication involves a balance between improving symptoms and minimising side effects as well as an awareness of how the treatment impacts on the individual.

The following medication groups are covered in this chapter:

- Antipsychotics – atypical and traditional
- Antiparkinsonian agents
- Mood stabilisers
- Antidepressants benzodiazepines
Each group or drug is covered under the following headings:

- Common side effects
- Significant side effects
- What to monitor
- Why monitor
- Significant drug interactions
- Discontinuation
- Special notes

All prescribers should familiarise themselves with the relevant prescribing information, including side effects, drug interactions and monitoring, before using any medication. Dosage recommendations can be obtained from the official prescribing information and from publications such as Psychotropic Drug Guidelines. Further, in complicated situations the practitioner should always seek additional advice from an informed source. We have included several such sources in our Further Resources section at the end of this chapter.
# Antipsychotics

## Common side effects
- Sedation
- Postural hypotension
- Anticholinergic effects: blurred vision, dry mouth, constipation
- Rarely precipitate narrow angle glaucoma, urinary retention

## Significant side effects
- Weight gain
- Metabolic side effects - glucose and lipids
- Raised prolactin and its effects
- Arrhythmias due to prolonged QTc
- Extrapyramidal side effects (EPSE)
- Tardive Dyskinesia (TD)
- Neuroleptic Malignant Syndrome (NMS)

## What to monitor and why

### Weight
- Weight gain can be clinically significant.
- Poses serious long-term health risks.
- Weight gain can precipitate noncompliance.
- Needs early detection/treatment with diet/lifestyle changes.

### BSL
- Association between antipsychotics and insulin resistance/diabetes.
- Stronger for atypicals than traditional antipsychotics.
- Strongest association with clozapine, olanzapine, quetiapine.

### Lipid profile
- Should be monitored as part of weight monitoring.
- Some research suggests an independent association.

### ECG
- Must be done prior to commencement of clozapine.
- Do as baseline prior to:
  - antipsychotics associated with QT prolongation
  - in any consumer with a cardiac history
  - in any consumer over 45 years.
- Repeat at 12 month intervals whilst on the antipsychotic.

### FBC and LFT’s
- Clozapine requires regular FBC monitoring.
- Some antipsychotics are associated with leucopenia, agranulocytopenia, thrombocytopenia, raised LFT’s.
- Review if clinical symptoms arise.

### Significant drug interactions
- Consider the additive effect of multiple CNS or respiratory depressant drugs.
- Avoid combinations where each drug is known to have a risk of agranulocytosis, eg clozapine and carbamazepine.
- Avoid using antipsychotics that may prolong the QTc interval with other drugs that are proarrhythmic, eg tricyclic antidepressants, beta-blockers, some antihistamines.

### Discontinuation
- Abrupt discontinuation can increase the risk of relapse.
- Discontinuation can lead to non-specific withdrawal symptoms eg nausea, restlessness and mild flu-like symptoms.
Special notes on the use of antipsychotics

Maintaining consumer adherence to treatment

Is a significant problem in the use of antipsychotic medication

Adherence to treatment can be improved by:

- Starting at low doses and increasing slowly
- Use the minimum effective dose
- Note administration for once daily preparations.

Consider depot preparations when adherence to therapy is an issue of significant clinical risk.

Cardiac side effects - the potential for QT prolongation and sudden death

- Some antipsychotics, especially thioridazine, pimozide, ziprasidone, droperidol and haloperidol, may prolong the qtc interval which could lead to life-threatening torsade de pointe (therapeutic guidelines, psychotropic, 2003), (glassman and bigger, 2001).
- Some conditions are associated with a greater risk of qtc prolongation e.g. Hypokalemia, heart failure or congenital predisposition.
- If the consumer’s own history or family history suggest this susceptibility, an electrocardiogram (ecg) should be done prior to starting treatment. If the qtc interval is above that considered normal, the decision to use a qtc prolonging antipsychotic must be given thoughtful consideration.

Metabolic effects - glucose and lipids

- Some of the newer antipsychotic drugs can be associated with abnormal glucose tolerance and increased serum lipids, particularly clozapine and olanzapine. Quetiapine also appears to have similar effects but the evidence is less clear for this drug.
- These effects may occur in the absence of weight gain and place consumers at increased risk of diabetes and cardiovascular disease. Obesity, smoking and lack of exercise may intensify these risks.
- Therapeutic Guidelines - Psychotropic (2003) recommends a fasting blood glucose and lipids around the onset of treatment and thereafter annually for all consumers, and every six months in consumers on clozapine or olanzapine.
- If abnormalities are detected, investigation and treatment should be conducted as appropriate, and consideration given to changing the medication.
- Attention to risk factors including diet, and smoking are important.
Weight gain

- Almost all antipsychotic medications can cause weight gain - amisulpride, aripiprazole and pimozide may be exceptions. Clozapine and olanzapine are especially prone to increase in weight.
- It is important to measure and then monitor weight and body mass index (BMI) across the course of treatment.
- Consumers who show a significant increase in weight need to be provided with dietary and lifestyle advice or treatment. A change to another antipsychotic may need to be considered.

Prolactin

- Raised prolactin may lead to number of changes including gynaecomastia, galactorrhoea, amenorrhoea, anovulation (Meaney and O’Keane, 2002), impaired spermatogenesis, decreased libido, impaired sexual arousal, impotence and anorgasmia.
- Therapeutic Guidelines - Psychotropic (2003) reports these effects are dose dependent and associated to varying degrees with all antipsychotic drugs, with the possible exceptions of clozapine, quetiapine and aripiprazole.
- Hyperprolactinemia is more likely to occur with drugs of high D2 receptor affinity.
- Reduced bone mineral density or osteoporosis may be associated with raised prolactin (Meaney AM, 2003).

Extrapyramidal Side Effects (EPSE)

- Are a group of movement disorders mediated by the extrapyramidal system.
- They have both objective signs and subjective symptoms.
- They can be associated with failure to adhere to medication.
- Occur more commonly with depot and older classes of antipsychotic medications.

Includes:

Acute Dystonias

- Consumers experience restlessness, agitation, awareness of discomfort.
- Involves a sudden onset of postural distortion.
- Often affects the muscles of the head and neck, e.g. oculogyric crisis or the “look ups”.
- Laryngeal spasm can be fatal - requires immediate parenteral benztropine.
- Symptoms usually improve with anticholinergics.

Parkinsonism

- Core triad of symptoms - bradykinesia, rigidity, tremor.
- Consumers may experience muscle weakness, apathy, social withdrawal.
- Variable improvement with anticholinergics.

Akathisia

- Consumers experience an unpleasant inner restlessness and an urge to move to relieve this subjective distress.
- Consumers may move part or all of the body, e.g. pacing, jiggling legs.
Consumers may move part or all of the body, e.g. pacing, jiggling legs.
Responds poorly to antiparkinsonian agents.
Successful treatment may require consideration of a reduction in medication.

**Tardive Dyskinesia (TD)**

- Consumers experience an unpleasant inner restlessness and an urge to move to relieve this subjective distress.
- Consumers may move part or all of the body, e.g. pacing, jiggling legs.
- Responds poorly to antiparkinsonian agents.
- Successful treatment may require consideration of a reduction in medication.
- A syndrome of involuntary movements usually developing during long-term exposure to antipsychotic drugs.
- 80% of cases involve the muscles of the lower 1/3 of the face, e.g. involuntary movements of the tongue, puckering movements of the lips, grinding or chewing jaw movements.
- Risk of development is higher in women, the elderly and consumers with underlying brain abnormality.
- Occurs more commonly with depots and older classes of antipsychotic medications.

**Neuroleptic Malignant Syndrome (NMS)**

- Syndrome characterised by confusion, high temperature, muscle rigidity, altered consciousness, autonomic instability CK (creatinine kinase), neutrophilia.
- Occurs rarely but is potentially fatal.
- Needs prompt recognition, cessation of antipsychotic agent and urgent referral to specialist psychiatric services.

**Selected atypical antipsychotics**

- **Aripiprazole (Abilify)**
  In recommended dose range, unlikely to cause EPSE, hyperprolactinemia, hyperglycemia, weight gain or to increase the QTc interval. Metabolised by CYP3A4 and CYP2D6.

- **Amisulpride (Solian)**
  Adverse effects dose dependent. Include: prolongation of QTc interval, reduced seizure threshold and possible increase in prolactin. Use lower doses for treatment of negative symptoms.

- **Clozapine (Clozapine, Clozaril, Clopine)**
  Sedation, postural hypotension and hypersalivation are common.
  Excessive weight gain and glucose intolerance can occur.
  Neutropenia, agranulocytopenia, myocarditis and seizures are serious but less frequent side effects.
  Requires strict monitoring of FBC and cardiac parameters according to company guidelines.
### Selected atypical antipsychotics

<table>
<thead>
<tr>
<th>Drug</th>
<th>Side Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olanzapine</td>
<td>Weight gain and glucose intolerance can occur.</td>
</tr>
<tr>
<td>(Zyprexa)</td>
<td>Transient increase in LFT's - does not appear to be of clinical significance.</td>
</tr>
<tr>
<td></td>
<td>IMI preparation now available.</td>
</tr>
<tr>
<td>Quetiapine</td>
<td>Possibly lower propensity to cause extrapyramidal side effects.</td>
</tr>
<tr>
<td>(Seroquel)</td>
<td>Twice daily dosing recommended.</td>
</tr>
<tr>
<td></td>
<td>Side effects include dry mouth, hypotension and somnolence.</td>
</tr>
<tr>
<td>Risperidone</td>
<td>Postural hypotension common early in treatment.</td>
</tr>
<tr>
<td>(Risperdal)</td>
<td>Weight gain less common in adults.</td>
</tr>
<tr>
<td></td>
<td>Some reports of increased incidence of cerebrovascular adverse events in consumers with dementia related psychosis (Therapeutic Guidelines, 2003).</td>
</tr>
</tbody>
</table>

### Traditional antipsychotics

<table>
<thead>
<tr>
<th>Drug</th>
<th>Side Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorpromazine</td>
<td>Marked sedation and hypotension.</td>
</tr>
<tr>
<td>(Largactil)</td>
<td>Photosensitivity - can cause severe sunburn.</td>
</tr>
<tr>
<td></td>
<td>Hepatotoxicity may also occur.</td>
</tr>
<tr>
<td>Fluphenazine</td>
<td>High incidence of EPSE's</td>
</tr>
<tr>
<td>(Anatensol)</td>
<td>Hepatic damage can occur early in treatment</td>
</tr>
<tr>
<td>Haloperidol</td>
<td>High incidence of EPSEs</td>
</tr>
<tr>
<td>(Serenace)</td>
<td>Less hypotension.</td>
</tr>
<tr>
<td></td>
<td>Reports of prolonging the QTc interval.</td>
</tr>
<tr>
<td>(Neulactil)</td>
<td>Arrhythmias have been reported.</td>
</tr>
<tr>
<td>Pimozide</td>
<td>Risk of arrhythmia due to QTc prolongation.</td>
</tr>
<tr>
<td>(Orap)</td>
<td>ECG prior to treatment and every 12 months on treatment.</td>
</tr>
<tr>
<td>Thioridazine</td>
<td>Risk of arrhythmia due to QTc prolongation.</td>
</tr>
<tr>
<td>(Aldazine, Melleril)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ECG prior starting treatment and every 12 months on treatment.</td>
</tr>
<tr>
<td></td>
<td>Now only available for treatment refractory schizophrenia.</td>
</tr>
<tr>
<td></td>
<td>Retinal pigmentation with changes to vision.</td>
</tr>
<tr>
<td>Trifluoperazine</td>
<td>High incidence of EPSE's</td>
</tr>
<tr>
<td>(Stelazine)</td>
<td>Blood dyscrasias can occur</td>
</tr>
</tbody>
</table>
Atypical depot antipsychotics

Includes  
Risperidone (Risperdal Consta)

Special notes  
Significantly less EPSE than other depot preparations
Can use oral risperidone to establish tolerability prior to initiating treatment with Risperdal Consta
Restricted dosages available
Reconstituted just prior to delivery therefore more difficult to use in less reliable consumers
Not yet available on the PBS

Other depot antipsychotics

Includes  
Zuclopenthixol decanoate (Clopixol)
Flupenthixol decanoate (Fluanxol)
Fluphenazine decanoate (Fluphenazine, Modecate)
Haloperidol decanoate (Haldol)

Special notes  
Higher incidence of EPSEs than oral preparations.
Rotation of injection sites helps to avoid nodule formation.
Plasma-drug concentration slow to change with dose adjustments.
Zuclopenthixol may have some advantage in agitated, aggressive consumers whereas flupenthixol may cause over-excitement in such consumers.
Zuclopenthixol also available as an oral preparation.
ANTI PARKINSON AGENTS

Includes

Benztropine (Cogentin, Benztrop)
Benzhexol (Artane)
Biperiden (Akineton)

Common side effects

Dose related and due to anticholinergic actions:
Tachycardia
Constipation, dry mouth
Blurred vision
Hyperthermia, anhidrosis

Significant side effects

Urinary obstruction
Glaucoma
Confusion, hallucinations, psychotic symptoms

Special notes

Effective for drug-induced dystonias, parkinsonism.

Not very effective for akathisia or tremor.
Tardive dyskinesia may be made worse by these agents.
Significant caution and lower doses required in older people due to sensitivity to side effects, particularly confusion and urinary obstruction

Routine administration not recommended because:
• Not all consumers develop EPSE's
• Have own side effect profile
• Abuse of anticholinergic agents is frequent.
• Benztropine available as IMI preparation for severe, acute dystonic reactions, e.g. laryngeal spasm.
• Benzhexol more likely to be abused because of its stimulating properties.
Mood Stabilisers

Lithium carbonate

Includes
- Lithicarb
- Quilonum SR

Common side effects
- Nausea, diarrhea
- Fine tremor
- Thirst, polyuria, polydipsia, oedema
- Weight gain

Significant side effects
- Toxicity - see below
- Renal impairment or failure
- Hypothyroidism and/or goitre
- Cardiac arrhythmias
- Exacerbation of acne or psoriasis
- Long-term use - Nephrogenic diabetes insipidus, mild cognitive impairment

What to monitor

Baseline tests:
- EUC
- TFT

ECG for > 65 y.o. and for < 16 y.o.

Ongoing monitoring:
- Lithium level - collect
  - as trough level 12 hours after dose
  - if mental state deteriorates, physically ill or signs of toxicity
  - whenever dose is adjusted
  - every three months if stable
- EUC and TFT every 6-12 months

Why monitor
- Narrow therapeutic/toxic window - toxicity develops easily and can occur at ‘therapeutic levels’ in some older people
- Signs of toxicity: vomiting, diarrhea, muscle weakness, polyuria, coarse tremor, ataxia, twitching, hyperreflexia, disorientation, seizures, coma, death.
- Signs of normal side effects and toxicity overlap
- Lithium toxicity is a medical emergency.

Optimum levels
- Acute treatment: 0.8 – 1.2 mmol/L
- Maintenance treatment: 0.4 – 1.0 mmol/L
  (Level in maintenance is determined by individual clinical response)

Significant drug interactions
- Diuretics (increase lithium)
- NSAIDs (increase lithium)
- ACE inhibitors (increase lithium)
- SSRI’s – risk of serotonin syndrome
- Discontinuation
  - Abrupt discontinuation increases the risk of relapse.

Special notes
- Encourage consumer to maintain an adequate fluid intake.
- Not appropriate for use when significant cardiovascular or renal disease, hypothyroidism or hyponatremia is present.
**Sodium Valporate**

**Includes**  
Epilim  
Valpro

**Common side effects**  
Nausea, vomiting, diarrhea - usually transient  
Weight gain  
Sedation  
Tremor  
Thrombocytopenia

**Significant side effects**  
Hepatotoxicity  
Hair thinning, alopecia  
Pancreatitis (rare)

**What to monitor**

**Baseline tests:**
- LFT
- FBC
- Coagulation studies

**Ongoing monitoring:**
- Sodium valproate level - collect  
  - As trough level 12 hours after dose  
  - If mental state deteriorates, physically ill or signs of toxicity  
  - Whenever dose is adjusted  
  - Every three months if stable
- Monthly LFT's for first six months then as clinically indicated.
- Platelet count and coagulation studies at periodic intervals.

**Why monitor**

Liver dysfunction, including fatal hepatic failure, has occurred, usually in the first six months of treatment.

Thrombocytopenia and reversible prolongation of bleeding time have been reported.

**Optimum levels**

In acute mania, levels of at least 300 micromol/L are necessary.

Toxicity is likely at levels of 850 micromol/L or higher.

No therapeutic range for prophylactic treatment has been recommended.

Plasma concentrations for its use as an antiepileptic are used as a guideline - 350-700 micromol/L or 50-100mg/L.

**Significant drug interactions**

- Chlorpromazine (decreases valproate)
- Diazepam (increases diazepam)
- Clozapine (increases valproate or clozapine)
- Aspirin (increases valproate)

**Discontinuation**

Abrupt discontinuation increases the risk of relapse.

**Special notes**

Not appropriate for use when hepatic disease or urea cycle disorders are present.
Carbamazepine

Includes Carbamazepine – BC/Sandoz
Tegretol
Teril

Common side effects
Nausea, vomiting, dizziness, ataxia, drowsiness
Headaches, blurred or double vision
Weight gain
Elevation of GGT (hepatic enzyme induction)
Leucopenia, thrombocytopenia, hyponatremia

Significant side effects
Agranulocytosis, aplastic anemia
Severe skin reactions, eg Stevens-Johnson syndrome
Abnormal involuntary movements, N MS

What to monitor

Baseline tests:
FBC/LFT

Ongoing monitoring:
Carbamazepine level - collect:
- as trough level 12 hours after dose
- if mental state deteriorates, physically ill or signs of toxicity
- whenever dose is adjusted
- every three months if stable

FBC/LFT monthly for first 2 months then every 3-6 mths:

Why monitor
Fatal bone marrow suppression and hepatotoxicity have occurred, usually in the first six months of treatment.

Optimum levels
For mania, carbamazepine levels are not a useful index of efficacy. Titrate dose to clinical response and side effects. Risk of toxicity increases at levels above 10 mg/L.

Significant drug interactions
Valproate (decreases carbamazepine)
Macrolide Antibiotics (increases carbamazepine)
Some SSRIs (increases carbamazepine)
Ca channel blockers (increases carbamazepine, decreases Ca channel blocker)
Risperidone (decreases risperidone)
Methadone (decreases methadone)
Warfarin (decreases warfarin)
O ral contraceptives (decreases OCP)

Discontinuation
Abrupt discontinuation increases the risk of relapse.

Special notes
Multiple drug interactions - check before prescribing
Not appropriate for use when liver disease, bone marrow disorders, A-V block or SLE are present
Contraindicated with MAO I’s
Induces its own metabolism - plasma levels may fall after 2-4 weeks, requiring dose review and increase
ANTIDEPRESSANTS

Selective Serotonin Reuptake Inhibitors (SSRI’S)

Includes
- Citalopram (Celapram, Cipramil, Talam, Talohexal)
- Escitalopram (Lexapro)
- Fluoxetine (Auscap, Fluohexal, Lovan, Prozac, Zactin)
- Fluvoxamine (Faverin, Luvox, Movox)
- Paroxetine (Aropax, Ooxetine, Paxtine)
- Sertraline (Zoloft)

Common side effects
- Diarrhea, nausea, anorexia, weight loss, anxiety, insomnia, dizziness, tremor
- Yawning, rash

Significant side effects
- Decreased libido and sexual dysfunction
- Marked stimulation with restlessness and agitation
- Hyponatremia (increased incidence in older people), Manic reaction or switch to mania. Bradycardia

Serotonin Syndrome (SS)
Characterised by agitation, diarrhea, tachycardia, sweating, tremor, myoclonus, confusion, hypo/hypertension, hyperpyrexia, coma.

May result from:
- An overdose with an SSRI
- Combination of an SSRI and a MAOI/moclobemide
- Combination of an SSRI and a TCA
- Combination of an SSRI and illicit drugs e.g. ecstasy
- Inadequate drug-free interval when changing antidepressants.

Monitoring
- Na, LFT, bleeding profile - as clinically indicated

Significant drug interactions
- SSRI’s inhibit the liver cytochrome enzymes responsible for the metabolism of many drugs with a large potential for significant drug interactions.
- Contraindicated with all MAOI’s - high risk of serotonin syndrome.
- Combination with other serotonergic drugs (other SSRI’s, TCA’s, venlafaxine and tramadol) requires careful consideration and should be avoided.

Discontinuation
- Sudden cessation can lead to an acute withdrawal syndrome of anxiety, insomnia, nausea, dizziness and headache.
- Discontinue slowly.
- Discontinuation syndrome responds rapidly to reinstatement of SSRI’s.

Special notes
- Always warn consumers of delay in onset of action.
- Low lethality in overdose. Relatively free of cardiovascular side effects.

Comparison of clinical presentations with ssri use
Sometimes the distinction between ssri side effects, toxicity and a discontinuation syndrome may be difficult.

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Agitation</th>
<th>Diarrhea</th>
<th>Tremor, myoclonus</th>
<th>Tachycardia</th>
<th>Profuse sweating</th>
<th>Hypo/hypertension</th>
<th>Confusion</th>
<th>Coma</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Nervousness</td>
<td>Hyperpyrexia</td>
<td>Dry mouth</td>
<td>Nausea, diarrhea</td>
<td>Dizziness</td>
<td>Headache</td>
<td>Insomnia</td>
<td>Insomnia</td>
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**Tricyclic and related antidepressants (TCA’s)**

**Includes**
- **Amitriptyline** (Endep, Tryptanol)
- **Clomipramine** (Anafranil, Placil)
- **Dothiepin** (Dothep, Prothiaden)
- **Doxepin** (Deptran, Sinequan)
- **Imipramine** (Melipramine, Tofranil)
- **Nortriptyline** (Allegron)
- **Trimipramine** (Surmontil)
- **Mianserin - tetracyclic** (Lumin, Tolvon)

**Common side effects**
- Anticholinergic effects - dry mouth, blurred vision, constipation, urinary retention, postural hypotension.
- Sedation - amitriptyline, dothiepin, doxepin, trimipramine.
- Less sedating - imipramine, nortriptyline.
- Weight gain.

**Significant side effects**
- Cardiac arrhythmias and heart block.
- Hyponatremia.
- Lower seizure threshold.
- Mianserin associated with neutropenia.

**What to monitor**
- **ECG** - Perform prior to treatment, every twelve months or if cardiac symptoms develop.
- **FBC** prior to commencement of mianserin, at 4-6 weeks and if any clinical features of neutropenia develop.

**Why monitor**
- Fatal bone marrow suppression and hepatotoxicity have occurred, usually in the first six months of treatment.

**Significant drug interactions**
- Other antidepressants, especially MAOI’s, SSRI’S and venlafaxine.
- Any medications with a propensity to cardiac arrhythmias.
- Hypoglycaemics - may increase hypoglycaemic effect.

**Discontinuation**
- Sudden cessation can be associated with nausea, vomiting, headache, giddiness, anxiety, extreme motor restlessness.
- Gradual reduction over four or more weeks preferred.

**Special notes**
- Always warn consumers of delay in onset of action.
- Cardiac toxicity makes TCA’s lethal in overdose.
- Special precautions required in consumers with significant suicide risk.
- Special caution should be used in older people; if indicated consider using less anticholinergic TCAs, eg Nortriptyline.
Reversible Monoamine-oxidase Inhibitors (RIMA’s)

Includes Moclobemide (Arima, Aurorix, Clobemix, Maosig, Mohexal)

Common side effects Nausea, dizziness, headache, insomnia, agitation, dry mouth, visual disturbance

Significant side effects Food and drug interactions can occur but frequency and severity greatly reduced – consumers should avoid consuming large amounts of tyramine rich foods (e.g. mature cheese, yeast extracts).

What to monitor Blood pressure - to detect significant hypertensive responses

Significant drug interactions Serotonin syndrome can occur if used in combination with the following:
- pethidine dextromethorphan, tramadol, pentazocine
- antidepressants - SSRI’s, venlafaxine, MAOI’s, clomipramine
- selegline, tryptophan

Risk of Hypertensive Crisis or reaction with sympathomimetic amines (pseudoephedrine, ephedrine) and psychostimulants (dexamphetamine, methylphenidate)

Discontinuation Abrupt discontinuation of long-term therapy can lead to symptoms. Observe appropriate drug free intervals between antidepressants.

Special notes Tyramine-free diet generally not required. Risk of interaction with food further reduced by ingesting moclobemide after meals.

Monoamine-oxidase Inhibitors (MAOI’s)

Includes Phenelzine (Nardil) and Tranylcypromine (Parnate)

Common side effects Postural hypotension.
Dry mouth, blurred vision, constipation.
Insomnia and agitation.
Sexual dysfunction.

Significant side effects Hypertensive crises can be precipitated by the use of MAOI’s with food stuffs and alcohol containing tyramine or other amines.

What to monitor Blood pressure - risk of postural hypotensive and hypertensive responses.

Significant drug interactions Sympathomimetic amines (e.g. cough and cold remedies, amphetamines, ephedrine, pseudoephedrine) and levodopa can lead to severe, life-threatening hypertensive reaction.
Serotonin syndrome possible with serotonergic agonists, eg SSRI’s, TCA’s, venlafaxine and tryptophan. Also avoid combination with mianserin, mirtazapine, moclobemide.
Narcotic analgesics eg pethidine tramadol, can cause excitation, sweating, rigidity and hypertension; hypotension or coma.

Discontinuation Withdrawal may be associated with nausea, vomiting and malaise. Uncommonly severe withdrawal reaction can include agitation, psychosis and convulsions.

Special notes Tranylcypromine is the most hazardous because of its stimulant action.
**VENLAFAXINE (EFEXOR, EFEXOR-XR)**

**Common side effects**
- Nausea, vomiting, anorexia. Headache, agitation, insomnia, sedation
- Increased sweating, rashes

**Significant side effects**
- Both hypotension and hypertension can occur. Increased blood pressure in 3% of consumers at daily doses > 225mg. Elevated cholesterol, hyponatremia, sexual dysfunction

**What to monitor**
- Blood pressure, especially when dose > 200mg daily, cholesterol levels

**Significant drug interactions**
- Serotonin syndrome possible with SSRIs, MAOIs, moclobemide
- Increased risk of hyponatremia if used with diuretics

**Special notes**
- Use with caution in consumers with history of hypertension or cardiac disease
- Twice-daily dosing necessary if using the immediate-release formulation
- Can have a significant discontinuation syndrome

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**MIRTAZAPINE (AVANZA, AXIT 30, MIRTazon, REMeron)**

**Common side effects**
- Dry mouth, sedation, increased appetite

**Significant side effects**
- Weight gain. Postural hypotension, occasionally hypertension. Elevated lipid levels
- Reversible agranulocytosis (rare)

**What to monitor**
- Check fasting lipid levels before and during treatment
- Full blood count if clinical features suggest neutropenia, e.g. infection, sore throat

**Significant drug interactions**
- Avoid use with mianserin - also associated with agranulocytosis. Contraindicated with MAOIs. Fluvoxamine reported to increase mirtazapine levels
- Use with caution with drugs that are strong CYP3A4 inhibitors

**Special notes**
- Appears to have few sexual side effects

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**REBOXETINE (EDRONAX)**

**Common side effects**
- Dry mouth, constipation, sweating, insomnia

**Significant side effects**
- Hypotension, tachycardia. Reduced plasma potassium in older consumers.
- Hyponatremia. Decreased libido. Urinary hesitancy or retention, particularly older males

**What to monitor**
- Potassium in prolonged use in the elderly

**Significant drug interactions**
- Potassium depleting diuretics
- Ketoconazole - increases reboxetine levels
- Contraindicated with MAOIs

**Special notes**
- Short half-life - requires twice daily dosing
- Metabolised by CYP3A4 - potential for interactions and altered reboxetine levels
- No interaction with alcohol
# Benzodiazepines

<table>
<thead>
<tr>
<th>Includes</th>
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<tbody>
<tr>
<td><strong>Alprazolam</strong></td>
<td>(Alprax, Kalma, Xanax)</td>
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<tr>
<td><strong>Bromazepam</strong></td>
<td>(Lexotan)</td>
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<tr>
<td><strong>Clobazam</strong></td>
<td>(Frisium)</td>
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<tr>
<td><strong>Clonazepam</strong></td>
<td>(Paxam, Rivotril)</td>
</tr>
<tr>
<td><strong>Diazepam</strong></td>
<td>(Antenex, Ducene, Valium, Valpam)</td>
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<tr>
<td><strong>Flunitrazepam</strong></td>
<td>(Hypnodorm)</td>
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<tr>
<td><strong>Lorazepam</strong></td>
<td>(Ativan)</td>
</tr>
<tr>
<td><strong>Nitrazepam</strong></td>
<td>(Alodorm, Mogadon)</td>
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<tr>
<td><strong>Oxazepam</strong></td>
<td>(Alepam, Murelax, Serepax)</td>
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<tr>
<td><strong>Temazepam</strong></td>
<td>(Euhypnos, Normison, Temaze, Temtabs)</td>
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<tr>
<td><strong>Triazolam</strong></td>
<td>(Halcion)</td>
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</tbody>
</table>

**Common side effects**: Drowsiness and lightheadedness - common initially

**Significant side effects**: Abuse, Tolerance, Dependence

- Impairment of psychomotor performance
- Impairment of memory
- Confusion, memory loss, cognitive impairment & ataxia in the elderly, with the potential for falls and injury
- Rare paradoxical effects have been reported with benzodiazepines - including acute hyperexcitation, stimulation, insomnia, rage & muscle spasticity.

**Monitoring**: Tolerance and dependence - can develop quickly in some individuals

**Significant drug interactions**: Additive effects for sedation and respiratory depression with alcohol and other CNS depressants (e.g. some antidepressants, opioids)

**Discontinuation**: The benzodiazepine withdrawal syndrome is highly variable.

- Common symptoms - anxiety, irritability, insomnia, nausea, aching limbs, palpitations and sensory disturbances.
- Abrupt discontinuation in consumers taking high doses (e.g. > 50 mg diazepam or equivalent daily) can be associated with seizures.
- In long-term use withdraw slowly, e.g. 2-2.5mg diazepam equivalents per week or as symptoms permit.

**Special notes**: Overdose of benzodiazepines can be treated with the antagonist flumazenil.

- Use with caution in consumers with respiratory disorders.
- Adjust doses in consumers with severe renal impairment.
- Consumers prescribed benzodiazepines should be warned against driving.
FURTHER RESOURCES FOR CLINICIANS

Therapeutic Guidelines - Psychotropic
http://www.tg.com.au
Independently derived guidelines for therapy based on the latest world literature, interpreted and derived by Australian experts.

MIMS (Australia) Online
http://www.mims.com.au
Independent medication product information.

Australian Prescriber
http://www.australianprescriber.com
An independent publication providing readily accessible information about drugs and therapeutics.

Independent Drug Information and Therapeutic Advice Service
1300 138 677
Across the course of a significant physical illness people will experience a range of emotional reactions. These reactions include shock, anger, fear, anxiety, denial, sadness and grief. The diagnosis of a life threatening or terminal illness is especially associated with psychological reactions.

Most people will make an appropriate, healthy adjustment to physical illness by the successful use of their own resources and supports. However some people will benefit from professional assistance for the psychological impact or consequences of their illness.

Despite the wide variety of psychological reactions to physical illness, there are common principles that underlie assessment and treatment in each situation. This chapter aims to provide the clinician with a suggested approach according to these principles.
A. COMMON PSYCHOLOGICAL REACTIONS TO PHYSICAL ILLNESS

Although a whole range of emotional reactions can occur with the physical and psychological stress of illness, the common responses are anxiety and depression.

- Anxiety and depression are responses to illness that lie along a spectrum.
- They can be normal, transient emotional states that are part of the healthy adjustment to an illness.
- They can develop into significant clinical disorders that require specific treatment.
- There is a considerable overlap between anxiety and depression - they commonly coexist, both as symptoms and as illnesses.

The development of anxiety and depression in relation to illness is influenced by many factors.

- Personality style, coping skills and past experiences may predispose an individual to anxiety and/or depression.
- The personal and social meaning of a diagnosis can influence the reactions experienced to it, e.g. cancer, HIV.
- Anxiety and depression can be attenuated by the context in which an illness occurs and the supports available to the individual affected

B. ANXIETY

Anxiety can significantly impact on the treatment of physical illness.

- It can: impair the ability of an individual to accept and understand an illness and its treatment, lead to the avoidance of medical care.

Anxiety disorders that can be associated with physical illness include Adjustment Disorder with Anxiety, Generalised Anxiety Disorder and Panic Attacks or Panic Disorder. Panic Attacks are characterized by:

- A discrete period of intense fear or discomfort, developing abruptly and reaching a peak within 10 mins
- Associated with physical symptoms such as palpitations or pounding heart, sweating,
- Trembling, sensation of shortness of breath, chest discomfort, dizziness
- Fear of losing control, going crazy or dying

Anxiety can also occur as the direct physical effect of some disease processes e.g. hyperthyroidism or hypoxia due to respiratory disease.

Anxiety can occur as a consequence of some treatments e.g. bronchodilators.
The diagnosis of a mood disorder in the context of medical problems is complicated. There can be a considerable overlap in symptoms between the two conditions. Depression is commonly characterised by:

- Depressed mood
- Loss of interest and energy
- Disturbed appetite, usually associated with weight loss
- Disturbed sleep
- Feelings of worthlessness or excessive guilt
- Decreased libido
- Suicidal ideation

Many of these symptoms may also occur in the course of a physical illness, making the diagnosis of a mood disorder difficult.

In the context of a physical illness, the following factors should alert the clinician to the possibility of a depressive illness:

- Fearful or depressed appearance
- Loss of reactivity of mood and affect
- Diurnal mood variation
- Psychomotor retardation
- The presence of hopelessness, guilt or self-reproach
- Social withdrawal
- Symptoms such as weight loss, sleep disturbance and pain that are more intense or pervasive than is consistent with the degree of physical illness

Depression can also be the direct result of the effects of an illness. Examples include glandular fever, HIV, pancreatic cancer and cerebrovascular disease.

Some medications are known to have an association with depressed mood, e.g. steroids and beta blockers.

**C. DEPRESSION**

**D. ASSESSMENT OF ANXIETY AND DEPRESSION IN THE PHYSICALLY ILL**

**Determine the relationship between the physical illness and the psychological symptoms.**

The clinician needs to:

- gain an understanding of the history of the physical illness including the response to treatments and any treatment complications
- Review the consumer's past medical and psychological history
- Make an assessment of the consumer's current psychological symptoms and mental state.

**Determine the consumer's perspective and understanding**

It is most important to gain a sense of the consumer's perspective and understanding – to what do they attribute their symptoms; what do they think is likely to change their symptoms or situation; what do they believe, or fear, lies ahead of them.
Exclude physical causes

- Reasonable investigations might include:
  - a physical examination
  - FBC
  - EUC, LFT’s, BSL
  - TFT’s CXR.

- Other investigations should be conducted as clinically indicated.

- Investigation should be conducted thoughtfully - multiple inappropriate investigations will increase consumer anxiety and distract the focus away from the psychological.

Screening tools

Several scales are available to assist the clinician in the assessment of anxiety and depression, e.g. a mood chart or the DASS scale.

Scales may help in making the diagnosis in cases with co-morbid medical illness or atypical depressive symptoms.

Scales can also helpful in following the response to treatment and can provide valuable feedback to the consumer about their improvement.

Age specific screening tools are available, e.g. The Geriatric Depression Scale.

E. MANAGEMENT OF ANXIETY AND DEPRESSION IN THE PHYSICALLY ILL

Important General Issues

- When anxiety and depression develops in any consumer with a physical illness, it is important to review their medical management and physical symptom control. Uncontrolled pain and other physical symptoms such as breathlessness can precipitate or exacerbate anxiety and depression.

- In treating consumers with anxiety and depression always attempt to engage the family and significant others in the assessment and management. They can provide history as well as support and assistance with management and follow-up.

- Some consumers may develop suicidal ideation, e.g. the depressed or terminally ill. It is important to consider the risk factors for suicide and to enquire about suicidal thoughts as appropriate.

- Carers and family of consumers with chronic illness are themselves at risk of psychological or physical health problems and need to be provided with appropriate information and supports.
Non-pharmacological management

**General supportive interventions**

- Provide consumers with an empathic environment in which they can safely express their fears and concerns for their health.
- Acknowledge these concerns, providing reassurance and normalizing the experience as appropriate.
- Provide clear information about the physical illness, its management, its course and prognosis.
- Provide education to the consumer about the psychological reactions to illness and how to manage them.

**Behaviour Therapy**

The aim of behaviour therapy is to encourage the consumer to establish patterns of behaving which maintain function, assist mood control or improve their coping capacity.

- Consumers with depressed mood should particularly be provided with appropriate information on how to maintain physical activity, social connections and pleasant activities.
- Relaxation techniques such as slow breathing and progressive muscle relaxation assist in the acute situation but also increase the consumer’s repertoire of long-term coping skills.

**Cognitive Therapy**

The technique of challenging and redirecting unhelpful thinking patterns is relevant to both anxious and depressed consumers. The focus is on questioning the rational basis for the person’s anxious or depressed beliefs. Particularly during depression these unhelpful cognitions are illogical, persistent and generalised to everything in the person’s life.

The questioning may follow the lines of:

- Why do you believe...?
- What evidence do you have...?
- What are the other possible explanations/solutions...?

Behavioural and cognitive therapies are often combined.

**Attention to social factors**

Financial stressors, accommodation problems, family and relationship difficulties can all impact on the experience of anxiety and depression and may need specific intervention.

- Some consumers may be assisted to approach these practical issues through techniques such as Structured Problem Solving.
- Government bodies such as Centrelink or the Department of Housing may be able to provide practical assistance.
- Relationship counseling may be important to consider where the illness has impacted on the relationship or magnified existing problems within the relationship.
- Support/self-help groups may assist some consumers.

Consideration should always be given to the importance of cultural and religious beliefs and supports, e.g. the role of a religious leader in the management of consumers with terminal illness.
Efficacy of antidepressants

For depressive symptoms, there are no major differences in the effectiveness of antidepressants of different classes.

Medication is likely to be needed where there is any sustained depressive disorder and when non-pharmacological strategies are not achieving their goals.

In the consumer with physical illness, useful signs to indicate commencing medication include:

- Presence of biological signs such as disturbed sleep, appetite and energy changes, diurnal variation in mood (usually worse in the morning)
- Agitation or retardation
- Depression with any psychotic features
- Severe hopelessness

Antidepressants (particularly SSRI’s and some tricyclic antidepressants) are useful in mixed anxiety-depressive states and ‘pure’ anxiety disorders.

Special considerations for the use of antidepressants in consumers with medical illness

Consumers with suicidal ideation or with significant risk factors for suicide should not be given antidepressants which have a high potential for lethality such as tricyclic antidepressants.

Special care must be taken in the choice of antidepressant, or the doses used, for those consumers with comorbid medical illnesses (e.g. renal or hepatic impairment, diabetes) and in the aged.

Antidepressants of different classes differ in their propensity to sedate or enervate.

- SSRIs and venlafaxine have a more pronounced energizing effect earlier in their use and they may be indicated for those consumers who have more slowing and withdrawal.
- TCA’s and mirtazapine are more sedating early in treatment. They may be a good choice of antidepressant for consumers with prominent anxiety or agitation.

Other antidepressant effects or side effects may be helpful in determining treatment choice e.g.

- Mirtazapine has a strong effect on appetite and is useful in consumers with prominent appetite disturbance and weight loss.

All antidepressants have the potential for side effects and interactions with other medications. When prescribing antidepressants for consumers with medical illness always check the literature for interactions. The following are worth particular note however.

- Venlafaxine can increase blood pressure to clinically significant levels.
- SSRIs impact to a variable level on the cytochrome P450 system, with potential for drug interactions.
- TCA’s commonly cause hypotension early in treatment and have been associated with cardiac arrhythmias by prolongation of the QTc interval.

All prescribers should acquaint themselves with the relevant drug prescribing information, including drug interactions, before using any medication.

Dosage recommendations can be obtained from the official prescribing information and from publications such as Therapeutic Guidelines – Psychotropic (Version 5, 2003).
Comprehensive management of anxiety and depression includes follow-up at appropriate intervals, especially if there has been a treatment intervention. Depression and anxiety can impact on the consumer’s ability to comply with follow-up. Depressive and anxious symptoms, problems with motivation and hopelessness can all impede the consumer’s ability to attend the surgery or center. Failure to keep an appointment may actually indicate a deteriorating mental state and the clinician should respond by assertive follow-up.

Referral for specialist psychiatric review and/or treatment should be considered in the following situations.

- Severe depressive illnesses, especially those with melancholic or psychotic features, should be referred early.
- Although not all consumers with suicidal ideation will need specialist care, the clinician should consult and refer such consumers if they do not feel they are able to assess or support that risk appropriately.
- Any consumer that fails to respond to a reasonable trial of appropriate therapy should be considered for referral.
- Referral may also be indicated for those consumers with a past history of depression or anxiety that has not responded to treatment or who suffer from significant personality disturbance.

Consider referral for further medical assessment and review of the physical illness if symptom control is poor or the illness unresponsive. It is important to note that some services, e.g. oncology units, can provide specialist psychological supports and services.

The principles of management of psychological reactions in medical conditions include:

- Exclude physical illness or treatments as the cause of the psychological symptoms.
- Review medical management and physical symptom control.
- Provide explanation and information about the psychological response.
- Consider more specific techniques such as CBT if the psychological symptoms are more significant.
- Antidepressants are indicated for consumers with major depressive or anxiety disorders.
- Effective management of anxiety and depression require attention to social factors and the involvement of the consumer’s supports.
- Organise referral early if the illness is severe or complicated by factors such as suicidal ideation.

For those consumers suffering from chronic and complex medical conditions consider referral to specialist medical clinics for consultation and advice on management.
Cancer and stroke, or cerebrovascular disease (CVA), are two conditions that can be associated with significant psychological consequences. As they are common medical conditions, their psychological impact will be discussed in more detail here.

CANCER

The psychological responses to cancer can change over time and according to the stage of illness. Three significant phases associated with the diagnosis of cancer include:

- Initial response to the diagnosis of cancer
- Adjustment to living with cancer
- Adjustment to terminal illness

Initial response to the diagnosis of cancer

Cancer has a particular social connotation of pain, suffering and death. The diagnosis of cancer is therefore often more stressful than the diagnosis of other conditions.

Individuals newly diagnosed with cancer will experience a range of emotional responses including a sense of shock, anger, fear and helplessness. Grief and loss are key issues. There are usually very powerful feelings of distress and fear that the cancer could be fatal.

Following diagnosis, treatment decisions may need to be made rapidly. Careful evaluation of the consumer’s level of arousal is important at this time – some consumers experience an overwhelming emotional or cognitive state that can impact on their decision-making abilities. It is important to ensure that other family members are available to receive information, as well as the consumer.

Consumers will be helped to manage their anxiety at this time if they are given clear, straightforward information about treatment options and prognosis. Further, a balance should be sought between the need to start treatment and the consumer’s need for time to make their decision.

Adjustment to living with cancer

The diagnosis and treatment of cancer is for most people a stressful life event. It is also important to remember that the experience of cancer is not a single, differentiated event. Consumers with cancer experience a series of stressful events and challenges over time, which pose different demands and difficulties. Cancer is increasingly a chronic condition that requires adjustment to maintain a productive lifestyle. Treatment can be demanding and complicated.

The extent to which a person with cancer has support and feels supported has been identified as an important factor in adjustment to the disease. Individuals who perceive they have poor support are more likely to experience greater psychological distress.
Anxiety and depression

Most people will experience minor or transient symptoms of anxiety and depression as part of their emotional adjustment to living with cancer. Some people will develop more severe disorders of anxiety and depression, requiring specialised treatment. The level of psychological distress is likely to be higher when the disease burden or complications are more severe.

Anxiety

It is common for consumers with cancer to experience anxiety. The anxiety can be related to concerns about survival or recurrence. Anxiety can have a major impact on the individual's functioning, and that of their family. It may even lead to the avoidance of medical care. Alternatively, some consumers may focus on multiple minor symptoms and give them inappropriate negative attributions. Evidence suggests that 12-30% of people with cancer will experience clinically significant problems (Bodurka-Bevers et al., 2000).

Depression

Depression is very common in the adjustment to cancer. It is associated with increased severity of medical symptoms and may compromise the physical care of the person with cancer – depressed consumers are three times more likely to be non-compliant with treatment recommendations. It is more common in cancers with a poor prognosis and high disease burden.

Depression can also be caused by the treatment itself. Some chemotherapeutic agents, particularly vincristine and cisplatinum, but also steroids, can cause direct depressant effects on the central nervous system (CNS). The nausea, vomiting and lack of energy that accompanies chemotherapy and radiotherapy can indirectly precipitate depression. The surgical treatment of cancer can effect body image, producing depression.

Depression can also be precipitated by the completion of treatment. The initial intensive phase of treatment is highly supported, with frequent contact with nursing and medical staff. When treatment is completed, depression may develop as the individual is faced with the uncertainty of his or her future, in the absence of support.

Suicide

Accurate suicide figures in cancer are hard to obtain. Studies do suggest the incidence of suicide is higher in individuals with cancer than the general population and that it is more likely in the first year after diagnosis (Allebeck et al., 1989). The lack of hope for the future, particularly in those with advanced cancer, is a strong predictor (Chochinov et al., 1998). It is important therefore to assess for suicidal ideation in consumers with cancer.

Other psychological effects of living with cancer

Body image

The diagnosis of cancer and its treatment can impact on an individual’s sense of body image and self-image and their self-concept of masculinity and femininity. The issue is complex and doesn’t just relate to the extent of surgical intervention. These concerns arise in people with many different sorts of cancers and less radical surgery does not necessarily give better outcomes.
Sexuality

Concerns about current or potential sexuality problems are a major cause of anxiety for cancer consumers. Estimates of the proportion of consumers experiencing sexual problems following the diagnosis and treatment of cancer vary from 10-88%, depending on the cancer site and the type of problem (Gamba et al., 1992, Schain et al., 1994, Cull et al., 1993, Arai et al., 1997, Lilleby et al., 1999, Spranger et al., 1993). Factors which impact on sexual adjustment include:

- Treatment that directly effects sexual organs, e.g. Radiotherapy to the pelvis
- Sex hormone alterations relating to chemotherapy and surgery
- Treatment side effects such as hair loss
- Pre-existing problems with relationships or sexuality
- Pre-treatment menopausal status for women and age.

Interpersonal problems

The diagnosis of cancer places considerable strain on relationships, especially if there are any pre-existing difficulties. Conversely, problems within the relationship place the person with cancer at increased risk of psychological problems and can impact on their adjustment.

Adjustment to Terminal Illness

The first relapse or recurrence is a time of maximum distress in the course of living with cancer – depression is common at this time. The terminal phase of illness is accompanied by physical and emotional changes that further complicate the assessment and treatment of depression.

- Physical symptoms – pain, anorexia, weight loss and anergia – are a challenge to the clinician attempting to detect symptoms of depression.
- Medication, particularly opiate analgesia, has marked effects on a consumer’s mental state causing drowsiness, loss of energy and restriction of interests.
- Grief and a sense of loss are a common feature of the psychological response at this time. Similar guidelines as outlined above are helpful in diagnosing depression in this context.

Family responses to cancer

Partners and children of individuals with cancer are also more vulnerable to psychological distress and in need of support.

Recent studies suggest that partners experience significantly more distress than consumers (Kornblith et al., 1994) and receive less support (Northouse et al., 2000). Women experience more stress in adjustment to cancer, regardless of whether they are consumer or partner (Northouse et al., 2000) but evidence suggest that they are better in understanding their partners experience with cancer than men (Carlson et al., 2001).

Children of parents with cancer are susceptible to stress and also need support. Parents coping with cancer may fail to recognise emotional distress in their children. Children’s adjustment is poorer when there is an inability to discuss the illness with their parents and their usual supports and activities are interrupted.
Barriers to communication in cancer treatment

An important aspect of the support of individuals with cancer is creating an atmosphere in which they feel comfortable to talk about cancer.

Individuals with cancer may avoid communicating about their illness because:

- They don’t have the words to describe how they feel
- They don’t want to be a burden
- They fear ‘breaking down’
- They feel ashamed of admitting problems coping
- They perceive that the doctor or health professional is too busy or not interested.

Discussion of cancer related issues is particularly difficult for men and may be a negative factor in men’s adjustment.

Health professionals may avoid discussion of the diagnosis because of:

- A fear of causing distress, harm or worry for consumers
- Feeling out of their depth
- They believe that discussion of existential issues is not part of medicine.

Cerebrovascular disease or stroke

Cerebrovascular disease has long been recognised as having an association with depression. A depressive illness may occur in the context of the individual’s attempts to come to terms with the disability caused by the stroke and its impact on their self-image, level of function and lifestyle.

However it has also become clear in the last decade that cerebrovascular disease itself is an important contributor to the development of depression.

- Research has demonstrated the high incidence of depression in the 12 months following stroke.
- Anatomical determinants on brain MRI or CT scan (laterality and location of lesions) are important factors in the development of depression post-stroke (eg left sided and frontal lesions are associated more strongly with depression)

Following a stroke, depression can be difficult to diagnose, particularly if verbal communication has been affected or the ability to regulate affect has been impaired.

Stroke recovery can be limited by depression as rehabilitation requires active participation in treatment.

- Depression leads to diminished motivation and energy levels, both of which are necessary for early recovery from disability
- Poor progression with rehabilitation should always alert the clinician to the possibility of depression

Clinical research has validated the role of antidepressants in treating post-stroke depression.

- Tricyclics need to be used with caution because of the propensity to cardiovascular and anticholinergic side effects.
- In general the selective serotonin reuptake inhibitors (SSRI’s) are effective in the treatment of post stroke depression.
**For Clinicians**

*Dealing with anxiety and hyperventilation symptoms.*

*Dealing with psychological aspects of physical disease.*
Streimer J. Medicine Today, 2001; April: p 74.

*Treatment of depression in comorbid medical illness.*

*Consensus Guidelines for Assessment and Management of Depression in the Elderly - NSW Health Department, 2001.*

*Clinical practice guidelines for the psychosocial care of adults with cancer*  

*Major depression and demoralisation in cancer consumers: diagnostic and treatment considerations.*
Angelino AF and Treisman GJ. Supportive Care in Cancer, 2001; 9 (5): 344-349.

Therapeutic Guidelines Ltd, North Melbourne, Vic.  

**Further Resources for Consumers**

*The SANE Guide to Depression*  
A guide providing information on depression, its treatment and other practical advice  
Video also available. SANE Australia.  
[http://www.sane.org](http://www.sane.org)

*Beating the Blues.*  
A Self-help Approach to Overcoming Depression.  
Tanner S and Ball J. 1991

*Health Finder*  
United States Department of Health and Human Services website which provides health information about a range of physical health disorders for consumers and carers. It also has a site that covers aspects of prevention and wellness  
[http://www.healthfinder.gov](http://www.healthfinder.gov)

*NSW Cancer Council*  
The Cancer Council of NSW website which provides reliable information about cancer, cancer-related services and lifestyle risk factor for cancer.  

*Palliative Care Association of New South Wales*  
Somatisation is defined as ‘an idiom of distress in which individuals with psychosocial and emotional problems articulate their distress primarily through physical symptoms’ (Katon et al, 1984). It is a common presentation to primary care providers. Somatisation is a term that can be used to describe the way in which an individual relates and manages their distress. Somatisation Disorder is the presentation of specific physical complaints, over many years, inadequately explained by physical findings. It is a psychiatric disorder, defined by specific criteria, and it is one of the Somatoform Disorders. This is a group of disorders that also includes Conversion disorder, Hypochondriasis and Chronic Pain Syndrome. They all have in common with somatisation that psychosocial factors are related to the development or continuation of the physical symptoms or illness.

The prevalence of somatisation disorder in primary care settings is about 3% (Gureje et al, 1997). The prevalence among the top 10% of health care utilisers rises to about 20% (Katon et al, 1990). Somatic symptoms however are estimated to account for 15-30% of the common symptoms presenting to GPs that are not explained by a physical disease or a psychiatric disorder (Kroenke et al., 1994). Of all mental health problems encountered by GPs, over half will present with somatic symptoms alone (Streimer, 2001).

As a group these individuals are distressed, high utilisers of medical services and at risk of iatrogenic complications. They also engender frustration in health staff. These consumers often experience their interactions with doctors and health care professionals as unhelpful and frustrating. It is important for health care providers to remember that even if the symptoms are unexplained by physical disease, for the consumer they are a real experience and the focus of genuine concern.
B. AETIOLOGY

The aetiology of somatisation is unclear. It is best considered a dynamic process rather than a disorder or disease. It involves the perception of physical symptoms, possibly through the misinterpretation of bodily sensations. Once perceived, the symptom/s are given an explanation or attribution. This attribution can be influenced by factors such as mood and context. On top of this comes a level of concern, anxiety or worry about illness. This can then lead to exaggerated or excessive illness behaviour.

There is a strong relationship between somatisation and anxiety and depression. When the incidence of depression and anxiety is correlated with the presence of somatoform (unexplained) symptoms, the likelihood of depression and anxiety being present increases in proportion to the number of unexplained symptoms present.

The occurrence of depression and anxiety with somatoform symptoms (Kroenke et al, 1994):

<table>
<thead>
<tr>
<th>Number of unexplained physical symptoms</th>
<th>Depression</th>
<th>Anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>2-3</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>4-5</td>
<td>23%</td>
<td>13%</td>
</tr>
<tr>
<td>6-8</td>
<td>44%</td>
<td>30%</td>
</tr>
<tr>
<td>&gt;9</td>
<td>60%</td>
<td>48%</td>
</tr>
</tbody>
</table>

C. IDENTIFYING A SOMATIC PRESENTATION

Practitioners will increase the detection of consumers with somatic complaints by (Streimer 2001):

- Open attitudes - believing psychological issues plays an important part in physical and mental illness increases detection
- Attend to verbal and nonverbal cues, especially in at-risk groups such as isolated older females and young males
- Asking open, clarifying questions - seeming less rushed and more empathic and enquiring about the consumer's personal life will yield results.

Common somatic symptoms include:

- Tiredness, fatigue, lethargy
- Vague chest or abdominal aches and pains
- Headaches
- Dizziness
- Odd neurological symptoms
- Palpitations
- ‘Tension’.
Presentations that may suggest underlying somatisation:

- Vague presentations – the account of symptoms may be atypical or hard to pin down
- Very few complaints, or many and varied complaints
- Preoccupation with the physical symptoms
- Urgent visits, or presents with a sense of urgency
- Increasingly frequent or seemingly inappropriate visits
- Consumers concern is out of proportion to the symptoms
- Excessive emotionality and worry about own or other family members’ illness
- Deteriorating social or interpersonal circumstance

D. ASSESSMENT OF THE SOMATIC PRESENTATION

There are several important aims of the assessment process. These include:

- To ensure that there is no underlying physical disorder
- To convey to the consumer they have been heard, taken seriously and understood
- To ascertain what they believe is going on - their attributions and concerns
- To have an interaction with the consumer that is perceived as helpful by the Consumer

Assessment of the somatic presentation includes:

- Detail the history of the physical symptoms
- Take a complete medical history, looking for associated medical disorders
- Take a psychosocial history – current life stressors or loss?
- Is there a childhood or family history of unexplained illness?
- Childhood and family history of physical illness
- Establish the consumer's and/or family's belief system about illness
- Screen for depression, anxiety, psychosis
- Current medications – overuse of analgesics/benzodiazepines common
- Alcohol and drug history – may coexist with somatisation
- Comprehensive examination of the relevant physical system
- Review any investigations and specialist consultations
- Further investigations only as appropriate to exclude/include important physical health diagnoses
E. MANAGEMENT OF THE SOMATIC PRESENTATION

1. Exclude physical illness and provide reassurance
   - Once somatic concerns have been examined and physical causes excluded, reassure the consumer that no life-threatening illness is present.
   - Provide consistent reassurance regarding the absence of serious physical disease.
   - If the consumer resists such reassurance, be prepared to refer to a physician for a second opinion.
   - If the consumer is to accept reassurance and alternative explanations, they must believe that they are being taken seriously. Avoid saying that ‘there is nothing wrong’.

2. Shifting the consumer’s focus from the physical to the emotional/social
   - Summarise what you have found on history and physical examination,
   - Acknowledge the reality of the symptoms and identify and reflect back to consumers what you have understood about their mood and life circumstance.
   - Try tentatively to bring these together - reframing - by suggesting something like “I wonder if these things are linked in some way?”
   - Explain the interaction of physical and psychological factors to avoid fostering the mind-body split.
   - Some consumers will be more open to the psychological possibilities than others. A symptom diary, noting when symptoms appear and what is happening at the time, may help some consumers.
   - Re-attribution is a dynamic process requiring reassurance, persuasion, patience and persistence.

3. Increase the consumer’s coping repertoire
   - Teach relaxation techniques such as controlled breathing and progressive muscle relaxation
   - Teach cognitive behavioural therapy, especially challenging depressive, anxious or somatising cognitions
   - If indicated, teach problem solving and interpersonal skills

4. Treat common comorbidities
   - Screen for and treat clinically significant anxiety and depression
   - If treating with antidepressants or other psychotropics, anticipate somatic side effects. Counsel about common side effects prior to prescribing
   - Screen for alcohol and other drug use/abuse and supervise withdrawal
F. MANAGEMENT OF CHRONIC SOMATISATION

- See the consumer regularly - this shows you are concerned and prevents reinforcement of the somatising behaviour because the consumer does not need to manifest symptoms to be seen.
- Listen carefully as the consumer describes their experience - this will help them to feel acknowledged and will provide a broader psychosocial framework in which to plan treatment.
- Conduct a brief examination relevant to any presenting complaint. Use signs of disease, rather than symptoms, to guide further investigation.
- Encourage the individual to focus on things other than symptoms.
- Find common ground and agree on realistic goals - usually in the area of functioning.
- Monitor for depression and anxiety disorders.
- Instill hope, give care and reassurance, but do not promise cure.
- Define someone as the principal clinician - usually the GP.
- Maintain good communication between the involved health professionals - this helps avoid splitting. It also provides the opportunity for the professionals to reassure and support each other in looking after these challenging consumers.

G. REFERRAL

- On occasions there will be a role for referring somatising consumers to a physician for a second opinion. It is good to identify a physician who does comprehensive evaluations and is able to take a moderate though compassionate view.
- Identify and refer for psychiatric opinion consumers with severe, persistent or bizarre somatic concerns.
- Refer consumers who have or develop significant co-morbid depression or anxiety.
- Referral is also indicated for consumers with any suicidal ideation that the primary clinician feels unable to adequately assess or manage.

FURTHER RESOURCES

Dealing with somatic presentations of mental health problems.
Streimer J. Medicine Today, 2001; September, p105.

Somatisation. What is it?

Management of somatoform disorders.

Dealing with anxiety and hyperventilation symptoms.
CHAPTER SEVEN
SERVICES AND CONTACTS LIST

ABORIGINAL SERVICES

Aboriginal Children’s Services 02 9698 2222
24 hour

Aboriginal Homeless Persons Service 02 9799 8446
24 hour

Aboriginal Medical Service 02 9319 5823

ABORTION SUPPORT SERVICES

Abortion Grief Counselling 1300 363 550
Provides abortion grief counselling

Pregnancy Counselling Australia 1300 737 732
Pregnancy termination alternatives and post termination counselling

ACCOMMODATION SERVICES

Aboriginal Homeless People 02 9799 8446
24 hour service

Homeless Persons Information Centre 1800 234 566

Youth Accommodation Association 02 9318 1531 1800 424 830

AGED CARE SERVICES AND ORGANISATIONS

Commonwealth Carelink Centres - Aged Care Assessment Teams (ACAT) 1800 052 222
Professionals in aged care who assess older people for care needs and support at home or for residential care in nursing homes and hostels

Alzheimer’s Australia Dementia Helpline 1800 639 331

Carers NSW 02 9280 4744 1800 242 636

Centrelink Retirement’s Line 13 23 00

Contact telephone numbers may change and readers are advised to regularly update their own record.

1800 numbers are free.

1300 numbers are usually the cost of a local call from your service.
### Commonwealth Carelink Centres - Community Aged Care Packages

- **1800 052 222**
- Packages of aged care services to help older people stay at home instead of entering low level residential care

### Department of Health and Ageing

- **1800 048 998**
- Provides general information about residential and community aged care services and consumer rights

### Department of Veterans’ Affairs

- **13 32 54** Country callers only
- **1800 555 254**

### National Dementia Behaviour Advisory Service

- **1300 366 448**

### National Dementia Helpline

- **1800 100 500**

### Seniors Information Service

- **8232 1441**

### Seniors Card Information Service

- **13 12 44** Country callers only
- **1800 636 368**

### Commonwealth Carelink Centres - Transport Services

- **1800 052 222**
- Provides transport for people who cannot use existing forms of transport because of their age

### AIDS/HIV SERVICES

- **NSW HIV/AIDS Information Line** 02 9332 9700
- **Hearing Impaired (TTY)** 02 9332 4268

### ALCOHOL AND OTHER DRUG SERVICES

- **Alcohol and Drug Information Service** 02 9361 8000
  - 24 hour
  - Outside Sydney Metropolitan Area 1800 422 599
- **Alcoholics Anonymous** 02 97991199
  - 24 hour helpline
- **Al-Anon Family Groups** 02 9279 3600
  - Support group for relatives and friends of people with alcohol dependence
- **Narcotics Anonymous** 02 9212 3444
  - Meeting times & locations - recorded message 1300 652 820
  - 24 hour service (Sydney) 02 9519 6200
- **Nar-Anon Family Groups** 02 9418 8728
  - Support group for relatives and friends of people with dependence on substances
NSW Drug and Alcohol Specialist Advisory Service (DASAS) 02 9361 8006
24 hour telephone service to assist health professionals throughout NSW in the diagnosis, management and treatment of drug and alcohol related problems.

NSW Quitline 13 18 48
Smoking cessation service - free quit kit and counselling

CANCER SERVICES

Cancer Helpline 13 11 20
Cancer Council of NSW

Palliative Care Association of NSW 02 9334 1891

CARER SUPPORT SERVICES AND ORGANISATIONS

Centrelink Carer’s Line 13 27 17

Carers NSW 02 9280 4744
1800 242 636

Carer Respite Centre 1800 059 059

CENTRELINK

Commonwealth Carelink Centre 1800 052 222

Disability, Sickness and Carers Line 13 27 17

Family Assistance Line 13 61 50

Retirement’s Line 13 23 00

CHILD ABUSE

Department of Community Services Helpline (24 hour service)
For health services staff 13 36 27
For consumers and the general public 13 21 11

Child Protection and Family Crisis Services 1800 066 777
For notification of child abuse and advice regarding child protection issues

PANOC (Physical abuse and neglect of children)
Each Area Health Service has a PANOC team

Child Abuse Teleconferencing Consultancy Service 02 9845 2434
Child Protection Unit, New Children’s Hospital, Westmead, NSW
CHILDREN AND ADOLESCENT SUPPORT SERVICES

**Kids Help Line**
24 hour service
1800 551 800

**COUNSELLING SERVICES**

**Abortion Grief Counselling**
Pregnancy Assistance Service
1300 363 550

**Anxiety Disorders Support Groups**
(Anxiety Disorders Alliance)
02 9570 4519
1800 626 055

**Dymphna House**
Hearing Impaired (TTY)
02 9797 6733
1800 654 119
02 9716 5100
Child sexual assault counselling and resource centre, incorporating support for adult survivors of CSA

**Eating Disorders Support and Information**
02 9412 4499

**FPA Health**
Family Planning Association helpline for reproductive and sexual health questions
1300 658 886

**Grief Support**
02 9489 6644

**Hepatitis C Helpline**
02 9332 1599

**Legacy Widow Support Services**
02 9248 9000
1800 444 041

**Lifeline**
13 11 14

**Missing Person's Support Line**
1800 227 772

**Mothersafe**
Statewide Medications in Pregnancy and Lactation at The Royal Hospital for Women, NSW
02 9382 6539

**Obsessive Compulsive Disorder Support Groups**
02 9570 4519
1800 626 055

**Salvation Army 24 hour Line**
02 9331 2000

**SIDS and KIDS NSW**
24 hour telephone support for families who have experienced the sudden death of a child during pregnancy, birth or infancy
1800 651 186

**Solace Association Inc Grief Support**
Service for those affected by loss of a partner through death
02 9909 2660

**Telefriend Counselling**
02 9419 8622

**Triumph over OCD and Phobias (TOP)**
02 9570 4126
1800 626 077
1800 043 503

**Vietnam Veterans Counselling Service**
DENTAL

Public Oral Health Clinics are available in each Area Health Service. Each clinic can also advise of a list of private dentists who have agreed to treat eligible consumers under the New South Wales Oral Health Fee for Service Scheme.

DOCTORS MENTAL HEALTH

Doctors’ Health Advisory Service
For support/counselling or if concerned about a colleague

Medical Benevolent Association of NSW
For counseling and financial assistance

DOMESTIC VIOLENCE

Department of Community Services Domestic Violence Line
24hr telephone support and referral
1800 656 463
Hearing Impaired (TTY) 1800 671 442

Domestic Violence Advocacy Service
02 9637 5020 or
02 9637 3741
Hearing Impaired (TTY)
1800 626 267
Country 1800 810 784

Immigrant Women’s Speakout
For migrant and refugee women who are victims of violence

DRUG AND ALCOHOL SERVICES

See Alcohol and Other Drug Services

DRUG INFORMATION

Independent Drug Information and Therapeutic Advice Service 1300 138 677
FAMILY SUPPORTS AND SERVICES

Child Care Access Hotline 1800 670 305
Family Crisis Service 02 9622 0522
Family Crisis Service 02 9622 0313
Relationships Australia (RAPS) 1800 654 648
Adolescent family therapy and mediation service

FINANCIAL CRISIS

Credit Helpline 1800 808 488
Moneycare Financial Counselling Service 02 9633 5011
(Salvation Army)

GAMBLING

Gamblers Anonymous 02 9564 1574
G-Line 1800 633 635
Hearing Impaired (TTY) 1800 633 649
Telephone counselling crisis intervention and referral for problem gambling

GAY AND LESBIAN SERVICES

Gay and Lesbian Counselling Services 02 8594 9596
1800 184 527
20/10 Gay and Lesbian Youth Support 02 9552 6130
Outside Sydney 1800 652 010
PFLAG 02 9294 1002
Parents & Friends of Lesbians and Gays - support for gay youth and their families

HIV/AIDS SERVICES

NSW HIV/AIDS Information Line 02 9332 9700
Hearing Impaired (TTY) 02 9332 4268
HOUSING

Department of Housing - Regional Offices
Central Sydney 02 9268 3444
South Western Sydney 02 9821 6111
Western Sydney 02 9891 8111

For local offices see phone book under Housing
Tenant’s Information Service 02 9229 0011

INDIGENOUS SERVICES

See under Aboriginal Services

INTERPRETING AND TRANSCULTURAL SERVICES

Health Care Interpreter Service
Working Hours 02 9515 3222
Emergency 02 9515 3218
Telephone Interpreter for Emergencies 13 14 50
24-hour 1300 655 030

LEGAL SERVICES

Aboriginal Legal Service 02 9318 2122
Law Access 1300 888 529
Legal Aid Hotline for Under 18’s 1800 101 810
Women’s Legal Services NSW Advice Line 02 9749 5533
Rural 1800 801 501
Aboriginal 1800 639 784

MEN’S SERVICES

Men’s Line Australia 1300 789 978
For men with family and relationship concerns

MENTAL HEALTH ACT AND GUARDIANSHIP

Guardianship Tribunal 02 9555 8500
Outside Sydney 1800 463 928
Determines orders of guardianship
Public Guardian
Administers orders of guardianship
02 9265 3184
1800 451 510

Mental Health Review Tribunal
Determines orders under the Mental Health Act, including Community Treatment Orders
02 9816 5955

Office of Protective Commissioner
Outside Sydney
02 9265 3131
1300 360 466
Hearing Impaired (TTY)
1800 882 889
Administers financial management orders

MENTAL HEALTH SPECIFIC ORGANISATIONS

Association of Relatives and Friends of the Mentally Ill (ARAFMI)
An association of family and friends of the mentally ill, promoting mental health and well being
02 9887 5897
1800 655 198

Grow NSW
Support Groups
Community Mental Health Movement
1800 032 120
02 9569 5566

Mental Health Co-ordinating Council (MHCC)
02 9555 8388

Mental Health Information Service
Outside Sydney
Provides advice about mental health and NGO’s (non-government organisations)
02 9816 5688
1800 674 200

NSW Consumer Advisory Group
02 9556 9219

SANE Helpline
Mental illness information and referral
1800 688 382

Schizophrenia Fellowship of NSW
02 9879 2600

PARENT SUPPORT SERVICES

Lone Parent Family Support Service
02 9251 5622

Parent Line
13 20 55

PFLAG
Parents & Friends of Lesbians and Gays - support for gay youth and their families
02 9294 1002

Karitane Care Line
02 9794 1852
Parent-Infant Counselling

Tresillian Parent’s Help Line
02 9787 0855
POISONS INFORMATION SERVICE 13 11 26

PREGNANCY RELATED SERVICES

Breast feeding helpline
Australian Breastfeeding Association - free counselling, information and support
02 9639 8686

Mothersafe
Advice about medications in pregnancy and lactation from The Royal Hospital for Women, NSW
02 9382 6539

Pregnancy Help Line
24 hour counselling and information for pregnant women and their families
1300 139 313

RELATIONSHIP SERVICES

Relationships Australia
02 9418 8724

SEXUAL ASSAULT SERVICES

RAPE CRISIS CENTRE
24 hours
02 9819 6565 or 1800 424 017
Hearing Impaired (TTY)
02 9181 4349

Sexual Assault Centre
For referral to the nearest sexual assault service
02 9926 7580

SEXUAL HEALTH AND SEXUALITY

FPA Health
Family Planning Association helpline for reproductive and sexual health questions
1300 658 886

Sydney Sexual Health Centre
02 9382 7440
1800 451 624

The Gender Centre
02 9569 2366

Wayside Safe Sex Advice Hotline
24 hours
02 9358 1010
TRANSCULTURAL SERVICES

Aboriginal Mental Health Partnership Clinic 02 9391 5823
- Statewide Review Service

Service for the Treatment and Rehabilitation of Torture and Trauma Survivors (STARTTS) 02 9646 6666 or 02 9794 1900

Transcultural Mental Health Centre 02 9840 3800

VOLUNTEERING SERVICES

Volunteering NSW 02 9261 3600

WOMEN’S SERVICES

Women’s and Girls Emergency Centre 02 9360 5388
Women’s Information & Referral Service 1800 817 227
Hearing Impaired (TTY) 1800 673 304
24 hour contacts

**Northern Sydney/Central Coast**
Northern Sydney area 1300 302 980  
Central Coast area 02 4320 3500

**South Eastern Sydney/Illawarra**
South Eastern Sydney area 1300 300 180  
Illawarra area 1300 552 289

**Sydney South West**
Central Sydney area 1800 636 825  
South Western Sydney area 1300 787 799

**Sydney/West**
Western Sydney area 02 9840 3047  
Wentworth area 1800 650 749

**Greater Southern**
Western (former Greater Murray) 1800 800 944  
Eastern (former Southern) 1800 677 114

**Greater Western**
Central West area 1800 011 511  
Far West area 1800 66 5066

**Hunter/New England**
Hunter area 1800 655 085  
New England area 1300 669 757

**North Coast** 1300 369 968
ACTIVITY RELATED WEBSITES

Working together for a Healthy Active Australia
The Australian Government website provides access to practical information and updates, news for families, parents, teenagers, children and their carers and older Australians on healthy eating, regular physical activity, overweight and obesity, particularly for children and adolescents and active living. http://www.healthyactive.gov.au/

ALCOHOL AND DRUG WEBSITES

Alcoholics Anonymous
http://www.aa.org.au

Australian Drug Foundation Site
The website of the Australian Drug Foundation, an independent, non-profit organisation working to prevent and reduce alcohol and drug problems in the Australian community. It provides a wide range of information on alcohol and other substances, including free resources to use in education programs.
http://www.adf.org.au

Australian Alcohol Guidelines
Department of Health and Ageing website containing the Australian Alcohol Guidelines and resources and contacts which may help in the management of problematic alcohol use. Includes brochures and booklets for consumers that can be downloaded.
http://www.alcoholguidelines.gov.au

Australian Drug Information Network (ADiN)
Provides a central point of access to internet-based alcohol and drug information provided by prominent organisations in Australia and internationally.
http://www.adin.com.au

ANXIETY DISORDERS WEBSITES

Clinical Research Unit for Anxiety Disorders (CRUFAD)
http://www.crufad.com
CANCER RELATED WEBSITES

NSW Cancer Council
The Cancer Council of NSW website which provides reliable information about cancer, cancer-related services and lifestyle risk factors for cancer. http://www.nswcc.org.au

Palliative Care Association of New South Wales
http://www.palliativecaresw.org.au

CHILD AND FAMILY RELATED WEBSITES

Open Doors (Counselling and Education Services Inc.)
This website contains a variety of information and resources about topics relating to adolescent and their families. The publications are not provided free. http://www.opendoors.com.au

Gay and Lesbian 20/10 Youth Support Service & Family Service

DISABILITY RELATED WEBSITES

Disability Online

GAY AND LESBIAN RELATED WEBSITES

Gay and Lesbian 20/10 Youth Support Service & Family Service

GOVERNMENT RELATED WEBSITES

NSW Government
http://www.nsw.gov.au

NSW Health Department

NSW Health Department documents

Department of Health and Ageing
MEDICATION RELATED WEBSITES

**Cardiac Safety in Schizophrenia**

**CIAP (Clinical Information Access Project)**
This website is available to health professionals of the NSW public health system. To access the databases, a user ID and password are required from your Health Service Librarian. http://www.clininfo.health.nsw.gov.au/

**Therapeutic Guidelines - Psychotropic, 2003**

MENTAL HEALTH RELATED WEBSITE

**Mental Health and Psychiatry Internet Resources**
A compilation of highly useful mental health information and links development by the Research librarian for mental health at the University of Adelaide. http://library.adelaide.edu.au/

MENTAL HEALTH RELATED ORGANISATIONS

**GROW NSW - Community Mental Health Movement**
http://www.grow.net.au/

**Guardianship Tribunal**

**Mental Health Coordinating Council (MHCC)**
The Mental Health Coordinating Council (MHCC) is the peak body for non-government organisations (NGOs) working for mental health throughout New South Wales (NSW). MHCC’s membership includes NGOs, both specialist and mainstream, and other bodies interested in mental health. http://www.mhcc.org.au

**Mental Health Council of Australia (MHCA)**
MHCA is an independent, national representative network of organizations and individuals committed to achieving a better mental health for Australians. http://www.mhca.com.au

**Mental Health Information Service**
http://www.mentalhealth.asn.au
Office of the Public Guardian

SANE Australia
Website of the SANE Australia organisation providing a wide range of resources relating to mental illness, including fact sheets, booklets, links to useful organisations and access to helplines. http://www.sane.org

Schizophrenia Fellowship of NSW
A non profit, community based organisation committed to improving the circumstances and welfare of people living with schizophrenia, their relatives and carers, and professionals working in the area. They provide programs, support groups and resources, details of which are available on the website. http://www.sfnsw.org.au

PHYSICAL HEALTH WEBSITES

Diabetes Australia

Health Finder
United States Department of Health and Human Services website provides health information about a range of health disorders for consumers and carers. It also has a site that covers aspects of prevention and wellness. http://www.healthfinder.gov

Heart Foundation
National Heart Foundation of Australia website contains a range of information and resources about all aspects of cardiovascular health for both professionals and consumers. http://www.heartfoundation.com.au

NSW Cancer Council

SANE Australia
The SANE Australia website provides a wide range of resources relating to mental illness, including fact sheets, booklets, links to useful organizations and access to Help online. http://www.sane.org
PSYCHIATRIC EMERGENCIES WEBSITE

Emedicine Online
A useful and up-to-date compilation dealing with medical emergencies - has a section on psychiatric emergencies. http://www.emedicine.com/emerg/index.shtml

WEIGHT AND NUTRITION

ASSO – Australian Society for the study of Obesity site.
Contains the most up-to-date Australian information about obesity.
http://www.asso.org.au

Dieticians Association of Australia
Website of the Dieticians Association – provides a guide to assist in finding a dietician, smart eating tips and recipes and nutritional information. http://www.daa.asn.au

The Australian Guide to Healthy Eating

The Australian Nutrition Foundation
This website provides scientifically based nutrition information and a wide range of publications designed to help individuals, families and communities to enjoy optimal health through food variety and physical activity. Publications are not provided free. http://www.nutritionaustralia.org

Shape up America
Is a non-profit organisation dedicated to achieving healthy weight for life. The website has a range of information and resources for both consumers and professionals.
http://www.shapeup.org
1 INTRODUCTION


Lawrence D, Holman C DJ, Jablensky AV. Duty to Care - Preventable Physical Illness in People with Mental Illness. Perth: The University of Western Australia, 2001.

2 THE PHYSICAL HEALTH ASSESSMENT OF CONSUMERS WITH MENTAL HEALTH PROBLEMS


NSW Health, Centre for Mental Health: Mental Health for Emergency Departments – A Reference Guide (Amended May 2002).


3 APPROACHES TO MANAGEMENT OF HIGH RISK HEALTH BEHAVIOURS

Smoking


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