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***Comorbidity of mental disorders
and substance use:
A brief guide for the primary care
clinician***

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Primary Mental Health Care Australian
Resource Centre 2002



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Australian Resource Centre

*Comorbidity of mental disorders and substance use: A brief guide
for the primary care clinician*

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Introduction

Comorbidity or the co-occurrence of mental disorders and substance use disorders is common. The prevalence of comorbidity in the community and the complex interactions that occur between the two sets of disorders, should raise doubts about the manner in which we continue to deal with each entity separately. As clinicians we need to consider these problems as part of a whole complex of phenomena that are closely linked to one another.

However there are significant problems with the management of people with comorbidity. There is a dearth of evidence about best practice. Specialist mental health or alcohol and other drugs services where they are available, are usually separated physically administratively and philosophically. Until recently training for general practitioners has been inadequate for the problems that we face on a day to day basis either in the mental health field or the alcohol and other drugs field.

This resource has been developed as a result of work that PARC undertook in 2001 with the development of a set of principles for the management of people with comorbidity. These principles are outline at the start of this resource.

More detailed information about specific aspects of management of the different types of co-existing mental disorders and substance use problems then follows.

Of course things are never that simple. The information available is patchy and much of it is not based on high levels of evidence. In addition many people with comorbidity have more than one mental disorder and may have problematic use of several drugs. This resource is a simple guide for clinicians to start to work from.

Chris Holmwood

Primary Mental Health Care

Australian Resource Centre

June 2002

Abridged principles of management of people with dual diagnosis or comorbidity of mental health problems and substance use

Mental disorders and substance use occur together very frequently and interact negatively on one another. Their management requires a long-term perspective. Actual GP interventions may be brief or extended over a period of time. A doctor-patient relationship based on honesty, trust and respect will form the basis for effective therapy. Active listening skills and a patient centered clinical method should be used to establish rapport, to develop a common understanding of the problems and an agreed management plan.

Detection

GPs should routinely enquire about substance use.

When a patient presents with either a substance use related problem or a mental disorder then the GP should enquire about the other.

Comorbidity should be suspected when progress or response to therapy is not straightforward.

Assessment

A full assessment often takes several consultations.

This assessment should include determination of:

- The patterns of drug use
- the day to day problems associated with the substance use,
- the reasons for the use and
- the effect that it might be having on the mental health problem
- the nature of the mental disorder itself, diagnosis, previous treatments and responses.

General Management

Management should be based on the patient's readiness for change. This readiness for change might be different for the management of the substance use than it is for the mental disorder.

Management should aim to increase the patient's awareness of the negative effect that the substance use and the mental disorder are having on each other.

Management should involve family or carers where appropriate.

Specific management

Detoxification should be offered as a first step to enable engagement in long-term approaches and decision making.

Specific management steps should include where appropriate:

- Information provision
- Structured problem solving
- Motivational interviewing
- Brief behavioural or cognitive approaches.

Pharmacological approaches

Clinicians should avoid using drugs of dependence unless as part of a harm reduction plan (eg methadone or buprenorphine)

Benzodiazepines should not be used for more than a few days. Generally longer acting benzodiazepines are preferable.

Clinicians should consider whether the current medication for the mental disorder is adequate or causing side-effects as the patient may be self medicating with non prescribed drugs to relieve symptoms or side effects.

The clinician should consider potential interactions between all substances used.

If there is drug-seeking behaviour then engagement of the patient in a planned and limited prescribing program is required. (eg HIC consent for all prescribing information to go to the one prescriber)

Referral

Consider referral when:

- Self harm risk or risk to others is present
- Acute exacerbation of mental disorder occurs
- Drug dependence with major associated problems (legal, health, social) is present.
- Complicated detox is anticipated.

It is important for GPs to develop links with local specialist mental health or drug and alcohol services (where they exist)

The Common Drug Groups

Cannabis/Hallucinogens

Cannabis (marijuana, hash, grass, dope), LSD (acid), Psilocybin (Magic Mushrooms)
 Datura (Angel's trumpet), Anticholinergic drugs, e.g. benztropine, benzhexol, orphenadrine.

In small quantities, users find cannabis both relaxing and stimulating. The senses are enhanced and it improves the appetite. The drug is often used in a group as it enhances sociability and at low doses it causes a high that includes feelings of relaxation and happiness. In larger quantities (or with stronger strains), cannabis may produce effects similar to LSD. LSD (Lysergic Acid Diethylamide or acid) is a hallucinogenic or psychedelic drug. LSD and large amounts of cannabis can trigger underlying mental problems and produce delusions, paranoia and schizophrenia-like states. They can also produce extreme anxiety states or panic attacks, not only while the person is under the influence of the drug, but for some time after. In this way these drugs may produce long standing changes in the personality of the user. Anticholinergic drugs, e.g. benztropine, benzhexol, orphenadrine may be prescribed to alleviate extrapyramidal symptoms in patients with psychosis. However these drugs may themselves lead to hallucinations, and are therefore sometimes sold for recreational use. Several psychotropic drugs have less marked anticholinergic effects, e.g. tricyclic antidepressants, thioridazine and may interact with prescribed or unsanctioned drugs to produce an anticholinergic psychosis.

Positive effects (cannabis): Relaxation, increased appetite, feelings of happiness, sleepiness

Problematic effects (cannabis): Nausea, hallucinations, anxiety, panic attacks, paranoia, psychological dependency, impaired judgement, reduced motivation, acute and chronic lung problems. Long term effects include reduced motivation and persistent cognitive impairment.

Overdose risk: Small

Withdrawal: Unlikely, although symptoms may include anorexia, disturbed sleep, irritability and moodiness.

Alcohol

Alcohol (ethanol) is one of the most commonly used and abused drugs. It is a depressant drug that slows down body reactions and general brain function. In Australia the 12 month prevalence of harmful use of alcohol is 3.0% while the prevalence of dependence is 3.5%. Men are twice as likely to suffer dependence compared with women. It is the secondary effects of alcohol that make it dangerous with motor vehicle accidents, alcohol-related violence (including domestic violence) and liver disease all major causes of morbidity and mortality. Alcohol is readily available and its consumption, even in excess, has become part of our culture. The depressive effects of alcohol makes it a significant risk factor in the development of mental health problems, particularly depression.

Short term effects: Relaxation, reduced social inhibition, slurring of speech, reduced motor-coordination, reduced vision, reduced consciousness

Long term effects: Liver disease, gastrointestinal disease, anemia, malnutrition (thiamine deficiency), central nervous system disturbances, depression

Overdose risk: Moderate, becomes particularly dangerous when used in conjunction with other substances (prescription benzodiazepines for example).

Withdrawal: If dependence is established then withdrawal effects include nausea and vomiting, agitation, tremour, sweating, hallucinations, and seizures. It is potentially life threatening.

Opioids

Heroin, codeine, morphine, pethedine, diconal, palfium, methadone.

Opioids are analgesic drugs derived from the opium poppy that have a wide range of effects on the mind and body. Opioids are generally taken to produce a sense of well-being and to reduce effects of stress and pain. Opioids are highly addictive and habit forming. Regular use quickly creates tolerance leading the user seeking increasingly larger doses of the drug to achieve the same effect. Accompanying tolerance is a powerful psychological craving for the drug and physical addiction that may produce strong withdrawal effects. It is these effects of opioids that create significant physical and mental health problems for the individual as they engage in behaviour that becomes increasingly focussed on obtaining and consuming the drug. Chemical contaminants may include talc, glucose, quinine and strychnine with associated harmful consequences.

Short term negative effects: Depressed respiration, clouded mental functioning, nausea, vomiting, sweating, itchy skin and constipation. There is also a high risk of overdose that may lead to fatal respiratory depression.

Long term effects: Poor health, lung complications, scarred or collapsed veins, abscesses, bacterial infections, blood borne viruses (eg. hepatitis, HIV).

Associated problems: Generally problems are associated with overdose and with injecting use. Hepatitis B and C, HIV, severe thrombophlebitis and intravascular sepsis, endocarditis, accidental arterial injection and peripheral ischaemia occur regularly in the injecting drug using community.

Overdose risk: Opioids may be lethal in overdose. Overdose results in respiratory and cardiovascular depression, loss of consciousness and death. Tolerance develops rapidly to opioids. Illicit drug availability varies considerably and hence purity of street available drugs vary, increasing the risk of accidental overdose.

Withdrawal: In the dependent person withdrawal is uncomfortable. Features include sleeplessness, restlessness and agitation, abdominal and general muscular pains, diarrhoea and nausea, shivers and pilo-erection.

Stimulants

Cocaine, amphetamine, methamphetamine, ecstasy (MDMA), methylphenidate, ephedrine, pseudoephedrine (Sudafed).

Stimulants are recreational drugs that are purported to enhance sociability, confidence and alertness while reducing inhibition. The sensation of euphoria and well being that is associated with the use of stimulants becomes highly sought after but is usually only short lasting. The physiological effects of stimulants are well documented and include increased heart rate and energy level while reducing the influence of tiredness. The psychological effects of stimulants, particularly prolonged use, are not so well documented. There is some evidence that stimulants may have significantly negative effects on consciousness and mental state. Indeed it has been suggested that it may be difficult to distinguish primary psychotic and primary mood disorders from chronic stimulant use induced symptoms.

Short term effects: Periods of euphoria, increased sexual activity, paranoia, empathy, enhanced sociability, fear dissolution, hallucinations, appetite suppression, increased energy level, stamina and racing thoughts followed by periods of depression and low energy.

Associated problems: Anxiety, depression, paranoia, tremor, mydriasis, tachycardia, diaphoresis, hypertension, hypothermia, risk of suicide, dehydration, acute renal failure, seizures, arrhythmias, hyponatremia, nausea, muscle cramping, jaw clenching, jitteriness. Injecting drug use associated with risks as stated above for opioids.

Overdose risk: Low to medium for oral use, however there is a high risk of overdose associated with injecting use.

Withdrawal: symptoms include depression, dysphoria, fatigue, exhaustion and somnolence, and loss of appetite lasting up to two weeks. Following prolonged use insomnia, intense dreaming and irritability may ensue and last several weeks to months.

Benzodiazepines

Flunitrazepam (rohypnol), lorazepam, diazepam, temazepam, clonazepam, oxazepam.

Benzodiazepines are sedative drugs that may be prescribed to reduce anxiety, to encourage sleep or to act as a muscle relaxant. The non-prescribed use of these psychotherapeutic medications is frequent. The most likely to be abused are those that are short acting or rapidly absorbed, producing a more rapid feeling of intoxication. These prescribed medications have become the target of doctor shoppers and they are sold or exchanged on the street. Benzodiazepines are often used in combination either with other benzodiazepines or with other illicit drugs eg. Flunitrazepam may be taken by heroin users to prolong the effect of a heroin injection and to reduce the effects of withdrawal. In non-poly drug users psychological addiction may occur when benzodiazepines are taken in an attempt to medicate (self-medicate) symptoms that are associated with an undiagnosed mental health problem.

Short term effects: Euphoria, hallucinations, disinhibition, skeletal muscle relaxation, sedation, light and sound sensitivity, memory impairment.

Associated problems: Drowsiness, forgetfulness, confusion, depression, digestive problems, tachycardia, apnea, ataxia, hypotension, seizures, nausea. When injected intravenously vein damage is common. When injected arterially accidentally they can result in peripheral ischaemia and gangrene.

Risk of overdose: Variable depending upon the strength of particular tablets. However, taken in large amounts and/or in-conjunction with other substances (usually alcohol) benzodiazepines there is a high risk of overdose, particularly in people with a high suicide risk.

Withdrawal: There is an established withdrawal effect associated with use of benzodiazepines. Likelihood of withdrawal is higher for stronger, shorter acting types that are used for a long period of time. Withdrawal effects include anxiety, depression, problems sleeping, irritability, palpitations and sensory disturbances. Seizures can occur with sudden withdrawal from more than 50mg/day of diazepam.

Tobacco

While tobacco use is fairly common in the general adult population, it is particularly widespread in patients with psychosis (87% in one study) and probably accounts for a significant component of the increased morbidity and premature death seen in patients with chronic psychosis.

The use of Bupropion (Zyban) is relatively contraindicated in bipolar disorder as its antidepressant effects may lead to hypomania.

Tobacco may induce the metabolism of some of the anti-psychotics and hence lessen their side-effects. Nicotine may lessen some side-effects of neuroleptic directly.

Depression and Substance Use

Depression is a debilitating disorder that disrupts relationships and daily lives. It is common, affecting approximately 10 percent of the general population. It is twice as common in women as in men, although both sexes suffer its effects.

Depression may be characterised by the presence of a majority of the following symptoms:

- Depressed mood most of the day, nearly every day, as indicated by either subjective report (e.g. the person feels sad or empty or appears tearful). In children and adolescents, this may be characterised as an irritable mood.
- Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day.
- Significant weight loss when not dieting or weight gain (a change of more than 5% of body weight in a month), or decrease or increase in appetite nearly every day.
- Insomnia or hypersomnia nearly every day.
- Psychomotor agitation or retardation nearly every day.
- Fatigue or loss of energy nearly every day.
- Feelings of worthlessness or excessive or inappropriate guilt nearly every day.
- Diminished ability to think or concentrate, or indecisiveness, nearly every day.
- Recurrent thoughts of death (not just fear of dying), recurrent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide

To be described as suffering a major depressive episode a person must either have a depressed mood or a loss of interest or pleasure in daily activities consistently for at least a 2 week period. This mood must represent a change from the person's normal mood. Social, occupational, educational or other important functioning must also be negatively impaired by the change in mood.

Comorbidity

People develop co-existing depression and substance use problems for a variety of reasons. The question about which came first is vexed but should not delay treatment of either disorder. Preferably the substance use should be ceased but this is not always possible. People self medicate with a variety of drugs to alleviate the symptoms of the depression. The effect that the drugs have depends on the drug itself, the particular individual's response to the drug, the duration of the drug use and the particulars of the mental disorder, in this case depression. Long-term use of stimulants, such as amphetamines and MDMA have been identified as producing depletion of neurotransmitters, thus causing or aggravating depression. Alcohol dependence frequently causes depressive symptoms. However psychosocial effects such as stigma, poverty and isolation associated with drug use may also be highly relevant.

Major clinical issues with cannabis, hallucinogens and depression

Effect of substance on mental disorder.

- Some people may use cannabis to self manage their depressive symptoms.
- However the sedative effect of cannabis may exacerbate depression.
- Amotivational syndrome (associated with long term heavy usage) may simulate the cognitive and psychomotor features of depression.
- Long-term heavy use also thought to cause a depression like syndrome.
- Cannabis may mask appetite loss, thus concealing the extent of vegetative changes in more severe depression.

Drug interaction with therapeutic agents.

- Cannabis will augment the sedative effect of benzodiazepines and tricyclic antidepressants.
- Cannabis has been reported to cause mania with fluoxetine. Confusion, depersonalisation, psychosis and hypomania have also been reported with concurrent use of cannabis and SSRIs.
- LSD may induce a serotonin syndrome with SSRIs.

Management approaches

- Because of the sedative effect of cannabis patients should be advised to reduce or stop their use so that depressive symptoms can be better evaluated.
- While adverse effects have been reported as above with concurrent use of SSRIs and cannabis, the risk is probably small. Patients should be counselled accordingly.
- Patients should be counselled re the signs of serotonin syndrome if SSRIs are to be used while the patient is using cannabis.

Major Clinical issues with alcohol and depression

Effect of substance on mental disorder.

- Depression is a common feature of alcohol dependence. In many instances the depression will resolve if the alcohol is ceased.
- In addition the depressant effect of alcohol will exacerbate a clinical depressive disorder. In fact chronic heavy use has been shown to induce a depression-like condition that is difficult to distinguish from major depressive disorder itself.
- Similarly a depression like set of symptoms may emerge during or after alcohol withdrawal.

Drug interactions

- Alcohol induced sedation will exacerbate the effects of benzodiazepines, tricyclic antidepressants, nefazodone and mirtazepine. Chronic alcohol use has a variable effect on the metabolism of some antidepressants.
- There is limited experience with drug interactions with acamprosate. Does not interact with imipramine, diazepam or disulfiram.
- Naltrexone will have a blocking effect on opiates used as analgesics.

Management approaches

- If a patient is clinically depressed and drinks harmful quantities of alcohol then they should be advised to stop drinking so that the symptoms can be evaluated in a drug-free setting.
- In men this commonly results in a resolution of the depressive symptoms.
- Women more commonly drink in response to a primary depression. Management therefore may involve the use of an anti-depressant as well as cessation of the alcohol.
- If this is not possible then use of antidepressants is indicated (SSRIs are safer than tricyclics in overdose with/without combination with alcohol). Response to antidepressants is less satisfactory in a heavy drinking situation.
- Cognitive therapy may not be possible or beneficial with persons drinking heavily.
- Acamprosate or naltrexone may be used to assist with abstinence supported by structured counselling.

Major clinical issues with depression and opiate use

Effect of opioids on mental disorder

- Opioids' depressive effects will exacerbate depressive disorders. Again the euphoric effects may assist with some of the more negative cognitive symptoms of depression.
- Some depression resolves once patients are stabilised on methadone.

Drug interactions

- Opioids will exacerbate the effects of the sedative antidepressants, especially the tricyclics.
- Fluoxetine, fluvoxamine, paroxetine and nefazodone potently inhibit some of the cytochrome systems in the liver; these enzyme systems metabolise several opioids including methadone. Fluvoxamine has been associated with methadone toxicity, and then when ceased, opioid withdrawal has developed.
- Citalopram and sertraline are less likely to have this effect.

- Carbamazepine (used as a mood stabiliser) will induce the metabolism of methadone and reduce levels. Sodium valproate does not have this effect.

Management approaches

- Evaluation of depression difficult while the patient is using opioids heavily. Therefore initial cessation recommended.
- Non sedating antidepressants (SSRIs, venlafaxine) preferable. Watch for interactions if using methadone or buprenorphine.
- Overdose risk is greater with combined tricyclic and opiate use.
- CBT difficult while using opioids but it provides additional benefit in combination with a methadone program.

Major clinical issues with depression and stimulant use

Effect of substance on mental disorder.

- Depression is a common feature of the cycle of dependence in stimulant users.
- People with depression sometimes use stimulants to self-treat the lack of energy associated with the depression. However tolerance to this effect develops quite quickly. There is a risk that stimulants might provide the severely psycho-motor retarded depressed person with the ability to self harm.
- Depression is exacerbated when stimulant effect wears off.
- Stimulant effect on sleep may worsen sleep wake cycle disturbances associated with depression.
- Depression is common in the months following cessation of stimulants.

Interactions between stimulants and antidepressants

- Irreversible monoamine oxidase inhibitors (tranylcypromine or phenelzine) should not be prescribed if stimulants are used.
- Some stimulants inhibit the metabolism of tri- and tetra-cyclic antidepressants. If the clinician is aware of stimulant use then other anti-depressants are probable better choices.
- Most anti-depressants, as well as cocaine both lower seizure thresholds. Increased seizures have been reported.
- Serotonin syndrome may occur with cocaine or MDMA/ecstasy and SSRIs and patients should be warned about this.
- MDMA metabolised through CYP 2D6. This is inhibited by fluoxetine, paroxetine and norfluoxetine.
- Patients should be told about the signs of serotonin syndrome (see appendix 1).

Management approaches

- The predictable depressive symptoms that occur when drug levels drop just exacerbate the depression. The person using stimulants and who is depressed should be encouraged to reduce and stop the stimulant use.
- If the person is dependent then formal drug detoxification should be considered. There is little consistent evidence that antidepressants are beneficial in management of stimulant withdrawal per se but if there is established coexisting major depression and stimulant use then antidepressants should be used. Benzodiazepines or pericyazine can also be helpful in the short-term management of withdrawal.
- Citalopram and sertraline have least cytochrome mediated drug interactions but all SSRIs are potential precipitators of serotonin syndrome in people using cocaine and MDMA.
- If use is only occasional and dependence is not present is not present then treatment as for depression can be commenced.
- If the depression persists despite adequate withdrawal from the stimulants then treat as for primary depression.
- CBT is best used when the patient is not intoxicated and stimulant use is minimal.

Major clinical issues in depression and benzodiazepine use

Effect of substance on mental disorder

- Benzodiazepines can relieve some of the symptoms of depression such as insomnia and agitation. However their sedative and depressive actions exacerbate the more negative symptoms of depression such as lack of energy, negative cognitions and anhedonia.
- Sleep quality is impaired by benzodiazepines with suppression of REM sleep.
- Adverse reactions to the benzodiazepine. For example paradoxical reactions such as aggression.

Drug interactions

- Benzodiazepines will exacerbate the sedative effect of the tricyclic and other antidepressants
- Disulfiram will increase the plasma concentrations of diazepam.
- The addition of nefazodone, fluoxetine and fluvoxamine will increase the levels of alprazolam, midazolam and triazolam potentially to toxic levels.

Management approaches

- Benzodiazepines can be useful for short term management of acute agitation, anxiety, panic and insomnia associated with depression but tolerance develops within a few weeks. Therefore this use should be restricted to a few days.

- Their long term use exacerbates depressive symptoms so that cessation should be a long term goal.
- In general short acting benzodiazepines should be replaced with long half-life benzodiazepines and dosages reduced steadily over w few weeks or months.
- Anti-depressant medication (SSRIs or other non-sedating antidepressants) can be commenced with the patient still taking benzodiazepines.
- Citalopram and sertraline are the least likely SSRIs to have cytochrome mediated drug interactions.
- CBT will be more effective if there is minimal sedation and anxiolysis due to the benzodiazepine use.

Anxiety Disorders and Substance Use

In contrast to fear, which is a response to a realistic immediate danger, anxiety is a fearful response occurring in the absence of a specific danger. According to the National Survey of Mental Health and Wellbeing anxiety disorders are the most common form of mental disorder in the population with a one-year prevalence of 9.7%. Patients experiencing anxiety may present with complaints of excessive fear or worry, or repetitive, intrusive thoughts or actions including worry about the future, health or relationships. These people may find it hard to relax, concentrate and sleep with physical symptoms such as heart palpitations, tension and muscle pain, sweating, hyperventilation, dizziness, faintness, headaches, nausea, indigestion, bowel disturbance and loss of sexual pleasure. In anxiety disorders the symptoms associated with anxiety are accompanied by changes in thoughts, emotions and behaviour that substantially interfere with the person's ability to love and work.

In general anxiety disorder the person experiences constant worry about harm befalling themselves or loved ones, about financial disaster, their health, work or personal relationships. Diagnostic indicators include:

- Excessive anxiety and worry more days than not for at least 6 months, about a number of events or activities.
- Difficulty controlling this worry.
- Restlessness or feeling keyed up or on edge
- Being easily fatigued
- Difficulty concentrating or mind going blank
- Irritability
- Muscle tension
- Sleep disturbance (difficulty falling or staying asleep, or restless unsatisfying sleep)
- Clinically significant distress or impairment in social, occupational, or other important areas of functioning but not due to the physiological effects of a substance, a general medical condition, or another mental disorder.

Anxiety Subtypes

There are also a number of anxiety subtypes including:

- Panic disorder, where a person suffers recurrent panic attacks that cause significant distress or disability. Panic attacks involve an abrupt onset of intense fear.
- Obsessive-Compulsive disorder, where a person experiences constant unwanted thoughts and conducts elaborate rituals in an attempt to control or banish these.
- Social Phobia, where a person experiences fear that others will judge everything they do in a negative way, particularly when in the presence of unfamiliar people or under specific scrutiny.

- Posttraumatic Stress Disorder, where a person experiences flashbacks, intrusive thoughts or nightmares for years following major traumas like assault, war, torture, rape, vehicle accidents, and fires.

Anxiety usually begins in early adulthood and is often, but not always, triggered by a series of significant life events. It frequently occurs in-conjunction with other mental disorders, for example between 30 and 40 percent of people with panic disorder and obsessive-compulsive disorder also suffer depression. Anxiety disorders may be also often complicated by self-medication with alcohol and other substances. Similarly substance use may be complicated by the development of anxiety symptoms. At times, it can be hard to distinguish primary symptoms of anxiety from withdrawal symptoms in a person with dependence on alcohol or benzodiazepines.

Comorbidity

Anxiety is commonly seen in association with substance use, however the relationship between the two is complex. Anxiety is common in withdrawal from alcohol, benzodiazepines, and opioids and is also common during intoxication with stimulants, marijuana and hallucinogens. The failure to recognise and treat anxiety can lead to worsening of substance use and associated problems vice versa.

Major clinical issues with anxiety disorders and cannabis/hallucinogens

Effect of substance on mental disorder.

- Cannabis and the other hallucinogens can induce anxiety in susceptible people. This occurs during intoxication and when high doses have been used, for some time afterwards when drug levels have dropped.
- Some people use cannabis to help them cope with the symptoms of an anxiety disorder that is not being properly managed.

Drug interaction with therapeutic agents.

- Cannabis will augment the sedative effect of benzodiazepines and tricyclic antidepressants.
- Cannabis has been reported to cause mania with fluoxetine. Confusion, depersonalisation, psychosis and hypomania have also been reported with concurrent use of cannabis and SSRIs.
- LSD may induce a serotonin syndrome with SSRIs.

Management approaches

- Because of the anxiety provoking effect of cannabis in some patients, they should be advised to reduce or stop their use so that their anxiety symptoms can be better evaluated. In many cases this will result in an overall reduction in anxiety symptoms.
- If the anxiety symptoms started after commencement of the cannabis or other hallucinogen then the anxiety is probably a secondary phenomenon and cessation is indicated.

- If the patient has been using cannabis or other hallucinogens to self medicate, then appropriate anxiety specific CBT or drug based treatment is obviously indicated.
- While adverse effects have been reported as above with concurrent use of SSRIs and cannabis, the risk is probably small. Patients should be counselled accordingly.
- Patients should be counselled re the signs of serotonin syndrome if SSRIs are to be used while the patient is using cannabis.

Major clinical issues with alcohol and anxiety disorders

Effect of substance on mental disorder

Alcohol has long been used to self medicate for symptoms of anxiety disorders. The effect is sustained although tolerance occurs. When alcohol levels drop then there is a reappearance of the anxiety symptoms given the appropriate environment.

Drug interactions

- Alcohol will enhance the sedation that occurs with tricyclic antidepressants, some of which are still used for severe anxiety disorders.
- Nefazodone has caused liver toxicity so its use with people with established liver disease is best avoided.

Management approaches

- Regardless of aetiology and “what developed first” the combination of an anxiety disorder and alcohol use disorder is problematic as both exacerbate each other.
- Early assessment and management of the anxiety disorder using a behavioural approach is indicated.
- Assessment of the alcohol use is indicated at the same time together with detox if required.
- Drug management of the anxiety disorder with SSRIs nefazodone or venlafaxine may be indicated if behavioural therapy is not possible or successful.
- Specific anti-craving therapies such as naltrexone or acamprosate are worth considering in this group of people.

Major clinical issues anxiety disorders and opiate use

Effect of substance on mental disorder

Opioids can have a positive effect on some symptoms of anxiety through their soporific and sedative effects and euphoria. However withdrawal effects can exacerbate and be exacerbated by anxiety disorders.

Drug interactions

- Benzodiazepines are often used in the management of anxiety despite problems with tolerance and dependence.
- Benzodiazepines and opioids used together increase the risk of fatal opiate overdose.
- Similarly the use of methadone and benzodiazepines increases the risk of sedation.
- Fluoxetine, fluvoxamine, paroxetine and nefazodone potently inhibit some of the cytochrome systems in the liver; these enzyme systems metabolise several opioids including methadone and buprenorphine. Citalopram and sertraline have less risk of this effect.

Management approaches

- The rapidly fluctuating blood levels of heroin exacerbate anxiety disorders due to withdrawal effects when levels are low. Therefore patients should be encouraged to reduce their use and if possible cease.
- Methadone or buprenorphine maintenance improves health status and should be encouraged/offered.
- If medication is indicated for treatment of the anxiety disorder, then non sedating medication (SSRIs, venlafaxine) favoured.
- If long term benzodiazepine use is indicated then this should involve the use of contracts, registration with the relevant local government health authority and the prescribing doctor should be identified as the sole prescriber through the Health Insurance Commission. (Australia)
- Daily dispensing of benzodiazepines with methadone or buprenorphine should be considered.

Major clinical issues anxiety disorders and stimulant use

Effect of substance on mental disorder

Stimulants generally make the symptoms of anxiety disorders worse. Chronic amphetamine, and cocaine use can precipitate anxiety states and panic attacks. High dose use can precipitate obsessive cognitions and compulsive behaviour.

Drug interactions

- Irreversible monoamine oxidase inhibitors (tranylcypamine or phenylzine) should not be prescribed if stimulants are used.
- Some stimulants inhibit the metabolism of tri- and tetra-cyclic antidepressants. If the clinician is aware of stimulant use then other anti-depressants are probably better choices.
- Serotonin syndrome may occur with cocaine, amphetamines or MDMA/ecstasy and SSRIs.

- Paroxetine, fluoxetine and norfluoxetine and nefazodone potently inhibit CYP 2D6 which metabolises cocaine and MDMA. This may result in elevated levels of these latter substances.

Management approaches

- Reduction or cessation of stimulants is a first step in management as this will help to clarify the situation regarding the relative effects of the stimulant vs the disorder in generating anxiety symptoms.
- Benzodiazepines may be helpful in the management of acute withdrawal and emergent acute symptoms but dosages should be slowly reduced.
- When benzodiazepine use is minimised or stopped behavioural therapy can be effective.
- Cognitive therapy can be commenced prior to this provided the person is not acutely intoxicated with stimulants or with benzodiazepines.
- If stimulants have been used to self assist with social phobia then low dose benzodiazepines can be used to assist engagement with group therapy.
- SSRIs (accepting theoretical risks with stimulants causing serotonin syndrome) can be very effective for a variety of anxiety disorders if CBT is not successful or appropriate.
- Citalopram and sertraline have least cytochrome mediated drug interactions but all SSRIs are potential precipitators of serotonin syndrome in people using cocaine and MDMA.

Major issues with benzodiazepines and anxiety disorders

Effect of substance on mental disorder

Benzodiazepines are very effective for treating the acute symptoms of anxiety. However tolerance and dependence develop within a short period of time. If short acting benzodiazepines are used (eg alprazolam, oxazepam, temazepam) rapidly fluctuating blood drug levels may exacerbate the symptoms of the anxiety disorder.

Drug interactions

- Benzodiazepines will exacerbate the sedative effect of the tricyclic and other antidepressants
- Disulfiram will increase the plasma concentrations of diazepam.
- The addition of nefazodone, fluoxetine and fluvoxamine will increase the levels of diazepam, alprazolam, midazolam and triazolam potentially to toxic levels.

Management approaches

- Benzodiazepines should be reduced or stopped. This can be done gradually over a few weeks or months with safety. There should be a management plan that is agreed to prospectively by the patient.

- The patient can sign an authority form to allow all prescribing information to be sent by the HIC to the chief prescribing doctor.
- The assistance of the clinical pharmacist or family member can be invaluable in ensuring restricted daily dispensing.
- Once benzodiazepine dosage is minimised the patient can engage in CBT. Behavioural therapy involving desensitisation will only be effective if the patient feels anxious during exposure. Therefore benzodiazepine dosage should be minimised. In general short acting benzodiazepines should be replaced with long half-life benzodiazepines and dosages reduced steadily over a few weeks or months.
- Specific anti-anxiety medication such as SSRIs can be commenced with the patient still taking benzodiazepines.
- Citalopram and sertraline are the least likely SSRIs to have cytochrome mediated drug interactions.

Psychosis (Schizophrenia and bipolar disorder) and Substance Use

The person experiencing psychosis in the context of concurrent illicit drug use presents a problem that is challenging for the diagnostic and management skills of the clinician.

The psychoses are characterized by a loss of connectedness with reality. A person may develop false *ideas or beliefs* about reality (delusions). These may be based on *false perceptions* of reality (hallucinations). There are also characteristic flaws in the *ways that people think*. These are termed thought disorder. Examples are tangential thinking, loose associations between words and thoughts, and incoherence. Psychoses can occur in response to physical conditions. Eg acute delirium with septicemia. Alternatively psychoses can be *functional*. There are two broad classes of functional psychotic disorders, schizophrenia and bipolar disorder. Generally schizophrenia is a chronic condition with exacerbations, but always with some background symptoms, while bipolar disorder is generally an intermittent condition with full recovery in between episodes. There is considerable overlap between the two conditions and “fluidity of diagnosis”. Schizophrenia itself has so called “negative symptoms” such as social withdrawal and lack of energy and motivation that are similar to those found in depression.

While the clinician may realise that the psychosis could be drug-induced and is cautious in the prescription of neuroleptics or sedatives to control the symptoms, they may be under pressure to respond to the manifestation of bizarre or potentially destructive thinking or behaviour. On the other hand alterations to the way the person behaves and thinks may be subtle in their early stages when early intervention may be most appropriate.

Comorbidity with psychosis

It is important to differentiate between three different phenomena with regard to psychosis and substance use:

- Firstly people can suffer from an acute psychotic episode in response to substance use, in particular cannabis and the stimulants.
- Secondly these substances can precipitate a psychotic disorder in predisposed individuals.
- Thirdly use of substances can exacerbate the symptoms in people with a chronic psychotic disorder. Use of these drugs will often exacerbate their condition and make rehabilitation much more difficult.

People with psychosis tend to use a broad range of substances for a variety of reasons. However because of cost cannabis and alcohol are the most used drugs in this group of people.

Major clinical issues in the management of psychosis and cannabis/hallucinogens.

Effect of substance on mental disorder

As mentioned above cannabis and other hallucinogens certainly can precipitate acute psychotic episodes both in people with established psychotic disorders and in those who do not. Psychotic episodes tend to occur more frequently at high doses and in the person who is using them for the first time. Many people using these drugs realize early on that the drug makes them “a bit paranoid” and make the decision not to use them again.

In some people regular cannabis use may augment metabolism of anti-psychotic agents and lessen side-effects, thus re-inforcing the use of the cannabis. A similar interaction is thought to underlie the high rates of cigarette usage amongst people with psychotic disorders.

Generally outcomes for people with schizophrenia using cannabis are not as good as for those who do not use cannabis.

Drug interactions

- Most of the active ingredients of cannabis are metabolised through the hepatic cytochrome system.
- There is sparse evidence regarding drug interactions between cannabis and most drugs including the anti-psychotic agents both “typical” and “atypical”.
- The sedative effect of cannabis will augment similar side-effects of the antipsychotics.
- Cigarette smoking will induce the metabolism of the typical anti-psychotics and reduce plasma levels. It is unclear whether chronic cannabis consumption does the same.

Management approaches

- As mentioned above it is important to distinguish between people with an acute psychotic episode caused by the drug use, a first episode of a psychotic disorder or an acute episode in someone with an established chronic psychotic disorder.
- In an acute psychotic episode caused by a drug, cessation of the drug will often result in resolution of the episode. Sometimes the use of an anti-psychotic medication or benzodiazepines is indicated for the first few days.
- In general people with psychotic disorders should be counselled against using cannabis. In theory people with a psychotic disorder should avoid cannabis. In practice there are some who use small amounts infrequently and in whom there is no ill effect. For most people with schizophrenia cannabis makes them worse. This needs to be explored with the patient.
- Education about the possible effects of cannabis on schizophrenia should be provided in the context of motivational interviewing and a “stages of change” model.

- Anti-psychotic medications are generally required for the early management of drug induced psychosis.

Major clinical issues with alcohol and psychosis

Effect of substance on mental disorder

- Long term effects on the course of schizophrenia unclear. However alcohol has the potential for making an already disordered lifestyle even more disordered.
- Relapse rates are higher for those people with schizophrenia and harmful alcohol use.
- Alcohol tends to make the negative symptoms of schizophrenia worse. It probably has little effect on the positive symptoms.

Drug interactions

- Alcohol will exacerbate the sedative effects of many of the anti-psychotics and cause additional psychomotor incoordination.
- Alcohol exacerbates the orthostatic hypotension problems associated with many of the anti-psychotics.
- Naltrexone: unknown interactions with anti-psychotics
- Disulfiram: no major interactions with anti-psychotics
- Acamprosate: no known drug reactions with the antipsychotics

Management approaches

- As mentioned above alcohol is used because of its relative accessibility but is often not the preferred drug.
- If there is obvious harmful consumption and dependence then abstinence would be the strategy of choice. Patients need to be counselled accordingly.
- Detoxification needs to be supervised and psychiatric assistance/advice available should there be a flare up of psychotic symptoms.
- In combination with specific psychotherapy some consideration should be given to the use of adjuvant drug therapies such as disulfiram, naltrexone and/or acamprosate.

Major clinical issues with schizophrenia and opiate use

Effect of substance on mental disorder

- As mentioned above the effects of opioids tend to be sedative and do not assist with self-management of the negative symptoms of schizophrenia.
- However the euphoric response from the opioids may alleviate the depression and isolation that is often associated with psychotic illness.

- Opioid use is associated with poorer outcomes for the psychotic disorder.

Drug interactions

- Opioids (including methadone and buprenorphine) have an additional sedative effect to that of the anti-psychotics. Care with driving and machinery.
- No significant pharmacokinetic interactions between methadone or buprenorphine and anti-psychotics.
- No interactions between naltrexone and antipsychotics.

Management approaches

- Concurrent opiate dependence and psychotic disorder often means high levels of dysfunction and harm minimisation approaches should be pursued.
- Psychotherapy may be interfered with by active psychotic symptoms.
- Methadone or buprenorphine maintenance should be encouraged as these will result in better adherence with anti-psychotic management.
- Close liaison with dispensing pharmacist will assist with gaining a good picture of adherence to treatment, levels of self care and general stability.

Major clinical issues with psychosis and stimulant use.

Effect of substance on mental disorder

- Stimulants certainly can precipitate acute psychotic episodes both in people with established psychotic disorders and in those who do not.
- Psychotic episodes tend to occur more frequently at high doses and in the person who is using them for the first time.
- Psychotic symptoms are very common in those with stimulant dependence. Many people using these drugs realize early on that the drug makes them “a bit paranoid” and make the decision not to use them again.
- Generally outcomes for people with schizophrenia using stimulants are not as good as for those who do not use cannabis.
- Occasional use of low dose stimulants is unlikely to induce an acute psychotic episode in most people.

Drug interactions

- Stimulants generally do not interfere with anti-psychotics.

Management approaches

- As mentioned above it is important to distinguish between people with an acute psychotic episode caused by the drug use, a first episode of a psychotic disorder or an acute episode in someone with an established chronic psychotic disorder.

- In an acute psychotic episode caused by a drug, cessation of the drug will often result in resolution of the episode. Sometimes the use of an anti-psychotic medication or benzodiazepines is indicated for the first few days.
- Any use of stimulants in someone with a chronic psychotic disorder will probably exacerbate their symptoms. Patients should be counselled accordingly.
- An acute psychotic episode induced by stimulants is initially difficult to distinguish from that associated with schizophrenia.
- Drug induced psychotic reactions tend to settle more quickly (a few days) than those due to functional psychoses.
- Follow up of psychotic episode is important to ensure that the patient has not developed an underlying functional psychotic disorder.

Major clinical issues with benzodiazepine use and the psychoses.

Effect of substance on mental disorder

- Benzodiazepines can be used for the management of the acute agitation and anxiety associated with an acute psychotic state.
- They are used by patients to self manage positive psychotic symptoms.
- May exacerbate negative symptoms such as depression and psychomotor retardation as well as slowing of cognitions.

Drug Interactions

- Benzodiazepines will increase the sedative effects of the antipsychotics. This is sometimes used to assist with management of acute episodes.
- Benzodiazepines may induce delirium, severe sedation and respiratory collapse when used with clozapine.

Management approaches

- Benzodiazepines can be very useful for the acute management of psychotic episodes in conjunction with major tranquilizers. Eg lorazepam, clonazepam and diazepam.
- In general patients function better off benzodiazepines as they may exacerbate some of the negative symptoms of schizophrenia.
- If the patient is using these for management of positive symptoms consider changing anti-psychotic medication to better address these.
- When withdrawing benzodiazepines do this slowly. May result in flare up of positive symptoms. Converting to an equivalent dose of a long-acting benzodiazepine like diazepam will often make this easier.

Personality Disorders and Substance Use

Personality traits are conspicuous features of personality and are not necessarily pathological, although certain styles of personality traits may cause interpersonal problems. The personality disorders are not regarded as illnesses and so treatment and recovery are not really relevant. However some dominant personality traits and personality disorders result in problematic habitual behaviours that can be modified or at least managed on a system level.

Of all the different types of personality disorders the emotionally unstable personality disorder (including explosive personality disorder and borderline personality disorder) and the dissocial personality disorder come to the attention of health providers and authorities the most. The explosive PD and the dissocial PD tend to end up in the criminal justice system. They are the groups with the highest rates of comorbid drug use.

Other personality disorders include paranoid, schizoid, schizotypal, histrionic, narcissistic, avoidant, dependent, obsessive-compulsive, passive-aggressive, and self-defeating. Rates of comorbid drug use are near average in these groups.

Borderline personality disorder is characterized by a pervasive pattern of instability in interpersonal relationships, self-image, and affect, as well as marked impulsivity as follows:

- frantic efforts to avoid real or imagined abandonment
- Intense and unstable interpersonal relationships alternating between extremes of idealisation and devaluation.
- Identity disturbances with markedly and persistently unstable self-image or sense of self.
- Impulsivity in at least two areas that are potentially self-damaging (eg. spending, sex, substance abuse, reckless driving and binge eating)
- Recurrent suicidal behaviour, gestures or threats, or self-mutilating behaviour
- affective instability due to a marked reactivity of mood (ie intense episodic dysphoria, irritability, or anxiety, usually lasting a few hours and only rarely more than a few days)
- Chronic feelings of emptiness.
- Inappropriate, intense anger or difficulty controlling anger
- Transient, stress-related paranoid ideation or severe dissociative symptoms.

Comorbidity with personality disorders

People with unstable emotional traits frequently use drugs in a non-functional and destructive manner. As stated above drug use is most common in the person with dissocial PD or the emotionally unstable PD group. Drugs tend to be sought out and used early in an attempt to manage the interpersonal difficulties and stresses that develop because of their personality related problems. It is generally thought that the PD predates and leads to the drug use and dependence but one must consider the complex interplay of the drug related lifestyle and its effects on the person over many years. The relationship between the personality disorders and drug use is complex.

- Drug use is generally counter productive and people should be counselled through their use and brought to realise the problems that the drug use produces for them given their particular personalities.
- Limit setting and contracting is extremely important in this client group.
- Early case management with other primary care providers (emergency department staff, locum service, after hours staff and even emergency services and mental health staff) is indicated.
- Drug use should be contracted. If benzodiazepine dependence is a problem then some type of maintenance contract with a single prescriber and pharmacist is indicated. If opiate use is a problem then consideration should be given to opiate substitution programs such as methadone or buprenorphine.
- Regular scheduled consultations with restricted access to emergency services/ last minute appointments. There needs to be a balance between dependency fostering and providing the support that is required.

Major issues with personality disorders and cannabis/hallucinogen use

Effect of drug on disorder

Cannabis may be used in the context of poly drug use in the person with dissocial PD. It may be used alone in many other types of PD, for its euphoric and sedative effects in an attempt to relieve distress.

Drug interactions

The drug-based management of personality related problems is controversial. A variety of medications have been tried for some types of behaviors rather than diagnoses per se. Aggression and impulsivity have been treated with carbamazepine, lithium, sodium valproate, and the SSRIs. Good quality data on efficacy is limited.

- Drug interactions therefore are similar to those encountered in people with co-morbidity with depression and substance use, depending on the medications being used.
- Cannabis has been reported to cause mania with fluoxetine. Confusion, depersonalisation, psychosis and hypomania have also been reported with concurrent use of cannabis and SSRIs.
- LSD may induce a serotonin syndrome with SSRIs.

Clinical Considerations

- Advice regarding cannabis usage in these disorders depends on the degree of dysfunction associated with their use as well as the standard range of problems associated with using an illicit substance.
- Overall approach depends on the persons insight and readiness for change.

Major issues with the personality disorders and alcohol use

Effect of substance on mental disorder

Alcohol tends to cause disinhibition and blur judgement and thinking and so is associated with more acting out in people with dissocial and emotionally unstable PDs. This leads to violence or self-harm attempts. The occurrence of problematic behaviours when intoxicated is often stark.

Drug interactions

The drug-based management of personality related problems is controversial. A variety of medications have been tried for some types of behaviors rather than diagnoses per se. Aggression and impulsivity have been treated with carbamazepine, lithium, sodium valproate, and the SSRIs. Good quality data on efficacy is limited.

Drug interactions therefore are similar to those encountered in people with co-morbidity with depression and substance use, depending on the medications being used.

Management approaches

- Because of the problems associated with alcohol use and impulse control the patient should be guided towards insight regarding this.
- Depending on the amount of insight and readiness for change the patient should be assisted with reducing or stopping alcohol use. The use here of acamprosate or naltrexone should be considered. However disulfiram may be problematic as these patients may drink impulsively despite being warned of the risks.
- Assistance with problem solving skills and with simple behavioural management of stress can be helpful.
- Formal CBT is more difficult with these people due to limited capacity for insight.

Major issues with opiate use in people with personality disorders.

Effect of substance on mental disorder

- Some people with personality disorders use opioids in the context of poly-substance abuse.
- In others opioids are used alone to relieve some of the distress associated with their behavioural and interpersonal problems.
- The chaotic lifestyle associated with opiate abuse certainly exacerbates problems for people with dissocial PD and emotionally unstable PD.

Drug interactions

The drug-based management of personality related problems is controversial. A variety of medications have been tried for some types of behaviors rather than diagnoses per se. Aggression and impulsivity have been treated with

carbamazepine, lithium, sodium valproate, and the SSRIs. Good quality data on efficacy is limited.

Drug interactions therefore are similar to those encountered in people with co-morbidity with depression and substance use, depending on the medications being used.

Management approaches

- People should be counselled according to the degree of problems associated with the drug use.
- Standard motivational interviewing techniques are useful here.
- If dependence is present then maintenance opiate substitution should be considered in an effort to re-instate some order in their lives.
- Once stabilised then specific therapeutic interventions for problematic behaviours can be considered.

Major issues with people with personality disorders and stimulant use

Effect of substance on mental disorder

- Use of stimulants may exacerbate the impulsivity of people with emotionally unstable PD or dissocial PD.
- People with other types of PD may use stimulants to assist with symptom control or for recreation.

Drug interactions

The drug-based management of personality related problems is controversial. A variety of medications have been tried for some types of behaviors rather than diagnoses per se. Aggression and impulsivity have been treated with carbamazepine, lithium, sodium valproate, and the SSRIs. Good quality data on efficacy is limited.

Drug interactions therefore are similar to those encountered in people with co-morbidity with depression and substance use, depending on the medications being used.

- Serotonin syndrome may occur with cocaine or MDMA/ecstasy and SSRIs and patients should be warned about this.
- MDMA metabolised through CYP 2D6. This is inhibited by fluoxetine, paroxetine and norfluoxetine.
- Patients should be told about the signs of serotonin syndrome.
- Citalopram and sertraline have least cytochrome mediated drug interactions but all SSRIs are potential precipitators of serotonin syndrome in people using cocaine and MDMA.

Management approaches

- People should be led to some insight regarding the negative effect of the stimulants on their impulsive behaviour.

- Education on the adverse health effects of stimulants should be discussed.
- Simple problem solving skills and behavioural strategies for managing stress can be useful. However if frequent stimulant use is a factor then success can be limited.
- CBT is best used when the patient is not intoxicated and stimulant use is minimal.

Major issues with personality disorder and benzodiazepine use

Effect of substance on mental disorder

Benzodiazepines have been associated with reduced impulse control, disinhibition and increased levels of violence, particularly with people with dissocial PD, explosive PD and emotionally unstable PD.

The pattern of use is very important. Some people use benzodiazepines in an intermittent binge pattern resulting in intoxication and disinhibition.

Consequently their use should be discouraged.

Drug interactions

The drug-based management of personality related problems is controversial. A variety of medications have been tried for some types of behaviors rather than diagnoses per se. Aggression and impulsivity have been treated with carbamazepine, lithium, sodium valproate, and the SSRIs. Good quality data on efficacy is limited.

Drug interactions therefore are similar to those encountered in people with co-morbidity with depression and substance use, given that the SSRIs and mood stabilisers have been used in this group of patients to assist with problematic violent and other extreme behaviours.

The addition of nefazodone, fluoxetine and fluvoxamine will increase the levels of diazepam, alprazolam, midazolam and triazolam potentially to toxic levels.

Management approaches

- As mentioned above benzodiazepines are used frequently by people with dissocial, emotionally unstable and explosive PDs.
- They are thought to have a negative effect on many of the problematic behaviors associated with these disorders.
- Patients should be counseled to reduce and stop these drugs. They are addictive and dependence is common.
- If dependence is present then gradual reduction is indicated. Initial change to longer acting benzodiazepines for this withdrawal is preferable.
- If this is unsuccessful then maintenance can have a role as part of a containment strategy. However it must be emphasised that there is evidence that even maintenance dosing of benzodiazepines may be

deleterious. If this approach is adopted then the relevant authorities should be notified in each state jurisdiction, the drug use contracted; there should be one dedicated prescriber and dispensing pharmacy.

- Extreme caution should be exercised with maintenance doses above 40mg diazepam daily.

Eating Disorders

Eating disorders such as anorexia and bulimia nervosa are more common in women, but men sometimes develop these disorders too.

Anorexia

Anorexia is characterized by a significant weight loss resulting from excessive dieting.

Most women and an increasing number of men are motivated by the strong desire to be thin and a fear of becoming obese. Anorexics consider themselves to be fat, no matter what their actual weight is. In their attempts to become thinner, the anorexic will avoid food and taking in calories at all costs, which can result in death. People with anorexia usually strive for perfection. They set very high standards for themselves and feel they always have to prove their competence. They usually always put the needs of others ahead of their own needs. A person with anorexia may also feel the only control they have in their lives is in the area of food and weight. If they can't control what is happening around them, they can control their weight. Each morning the number on the scale will determine whether or not they have succeeded or failed in their goal for thinness. They feel powerful and in control when they can make themselves lose weight. Sometimes focusing on calories and losing weight is their way of blocking out feelings and emotions. Anorexics usually have low self-esteem and sometimes feel they don't deserve to eat.

Signs and Symptoms (unique to anorexia nervosa)

- Noticeable weight loss
- Excessive exercise
- Fatigue & muscle weakness
- Obsession with food, calories, recipes
- Unusual eating habits (ie. cutting food into tiny pieces, picking at food)
- Noticeable discomfort around food
- Complaining of being "too fat", even when thin
- Guilt or shame about eating
- Depression, irritability, mood swings
- Evidence of vomiting, laxative abuse, diet pills or diuretics to control weight
- Wearing baggy clothes to hide weight loss (or gain)
- Frequently checking weight
- Fainting spells and dizziness
- Difficulty eating in public
- Feelings of self worth determined by what is or is not eaten

Bulimia

Bulimia is characterised by a cycle of binge eating followed by purging to try and rid the body of unwanted calories. A binge is different for all individuals. For one person a binge may range from 1000 to 10000 calories, for another, one cookie may be considered a binge. Purging methods usually involve vomiting and laxative abuse. Other forms of purging can involve excessive exercise, fasting, use of diuretics, diet pills and enemas.

Bulimia sufferers are usually people that do not feel secure about their own self worth. They usually strive for the approval of others. They tend to do whatever they can to please others, while hiding their own feelings. Food becomes their only source of comfort. Bulimia also serves as a function for blocking or letting out feelings. Unlike anorexics, people with bulimia do realize they have a problem and are more likely to seek help.

Signs and Symptoms of Bulimia

- Binge eating
- Secretive eating
- Bathroom visits after eating
- Vomiting
- Laxative, diet pill or diuretic abuse
- Weight fluctuations (usually with 10-15 lb range)
- Harsh exercise regimes
- Fasting
- Severe self-criticism
- Self-worth determined by weight
- Fear of not being able to stop eating voluntarily
- Self-deprecating thoughts following eating
- Avoidance of restaurants, planned meals or social events
- Substance abuse

Physical and Medical Complications of Eating Disorders

A range of physical/medical complications can occur due to eating disorders, generally associated with the dangerous eating habits and compensatory activities of these disorders.

- Fatigue and lack of energy
- Irregular menstruation
- Dizziness & Headaches
- Dehydration & electrolyte imbalances
- Constipation and diarrhoea
- Shortness of breath & Chest pains

- Irregular heartbeat
- Depression
- Hair loss
- Stomach pain and bloating
- Erosion of teeth enamel
- Chronic sore throat
- Kidney and liver damage
- osteoporosis
- Insomnia
- Low blood pressure
- Gastric dilation and rupture, peptic ulcers and pancreatitis
- Anemia
- Cardiac arrest and death

Comorbidity of eating disorders and substance use

- People with bulimia have high rates of comorbid alcohol dependence. In fact rates are much higher than normal healthy controls and higher than people with anorexia nervosa.
- Bulimic women with alcohol dependency have higher rates of self-harm, higher rates of borderline personality disorders, and poorer outcomes than those without alcohol related problems.
- Cocaine and stimulants may also be used to control appetite and dependence can develop.
- The disruptive symptoms of eating disorders often interfere with therapy for substance use disorders.
- Drug use may assist with weight control, may be part of a risk taking or self harm pattern of behaviour or part of impulsiveness and loss of control.

Major clinical issues with comorbidity of eating disorders and cannabis/hallucinogen use

Effect of substance on mental disorder

Cannabis is not often abused by people with eating disorders.

In moderate dosages cannabis stimulates the appetite. This may give the false impression of recovery from anorexia.

Drug interactions

Drug therapy is generally not used for the eating disorders with the exception of the anti-depressants for co-occurring depression.

Management approaches

- Management of the cannabis use should be determined by the level of problem associated with the use.
- Chronic intoxication will interfere with behavioural and cognitive therapies for the eating disorder.

Major clinical issues with the comorbidity of alcohol abuse and eating disorders

Effect of substance on mental disorder

- Alcohol abuse is common with people with bulimia. (probably 20-25% incidence)
- High rates of self harm and poorer prognosis in people with both eating disorder and alcohol dependence.

Drug interactions

- As drugs are usually not used in the management of the eating disorders the scope for drug interactions is less.

Management approaches

- The alcohol dependence and the eating disorder need to be addressed in an integrated manner.
- Assistance with stress management (structured problem solving, behavioural therapy, cognitive therapy) may assist both impulsive binge eating behaviour and impulsive drinking.

Major issues with eating disorders and opiate use

Effect of substance on mental disorder

- People with eating disorders do not usually abuse opioids.

Drug interactions

- As drugs are usually not used in the management of the eating disorders the scope for drug interactions is less.

Management approaches

- Management of the opiate use will be directed by the level of problems associated with this use.
- While such a combination is unusual, the general approach should be based on stages of change models, harm minimisation and opportunistic management of both conditions in an integrated manner.

Major issues with eating disorders and stimulants

Effect of substance on mental disorder

People with eating disorders frequently use stimulants in an attempt to moderate appetite and assist with exercise bingeing.

Drug interactions

As drugs are usually not used in the management of the eating disorders the scope for drug interactions is less.

Management approaches

- When assessing people with eating disorders a detailed drug history should be elicited. This should include specific inquiry about alcohol, stimulants, as well as diuretics, laxatives and thyroxine.
- The use of stimulants at any level should be discouraged due to the risk of dependence and toxicity.
- Assistance with stress management may assist with impulsive use of stimulants and with bingeing behaviours.
- Standard management of the eating disorders should be commenced if the patient is willing and engaged. The use of stimulants should be addressed as this standard management is commenced.

Major clinical issues with eating disorders and benzodiazepines

Effect of substance on mental disorder

People with eating disorders do not often use benzodiazepines.

Drug interactions

As drugs are usually not used in the management of the eating disorders the scope for drug interactions is less.

Management approaches

- Benzodiazepine use should be discouraged. If some dependence has been established then graduated withdrawal through slow reduction of dosage should be negotiated.
- Standard management of the eating disorders should commence if the patient is willing and engaged.

Somatoform disorders

Somatic presentations of underlying mental disorder or distress are extremely common. Many of these presentations are easy to sort out for the clinician with the underlying stressor or disorder quickly coming to the fore and the patient quite willing to attribute the physical symptoms to the underlying problem.

However within this broad phenomenon of somatic symptoms is a group of people for whom somatic presentations become a predominant and persistent feature of their illness behaviour¹. There is a number of diagnostic subtypes.

Non simulated disorders

Where there is no insight into and even denial of the psychological nature of the problem three diagnoses are used:

Somatization disorder.

Occurs when a person has the following features

- At least two years of multiple and varied presentations without physical diagnosis.
- Persistent refusal to accept reassurance
- Impairment of social functioning.

Persistent Somatoform pain disorder

“Chronic pain syndrome” tend to have persistent pain that is out of proportion with the underlying organic problem and which is refractory to most biomedical treatments. There is symptom hypervigilance, idiosyncratic beliefs in various pharmacological regimes and treatments and a tendency to move from one medical practitioner to another in the search of a cure.

Hypochondriacal disorder.

Occurs where a person presents repeatedly with physical symptoms and refuses to accept reassurances despite thorough [and often repeated] examination and investigation.

Simulated disorders

Where there is awareness that the symptoms and perhaps signs are being simulated but no awareness of gain then *factitious disorder* is likely. Where there is consciousness of the simulation as well as the gain being sought then *malingering* is the correct conclusion. Finally there are the *conversion disorders* where the patient mimics neurological or other phenomena but this mimicry reflects the patients understanding of how the phenomena present. During the simulation the neurological structures said to be non-functional can clearly be made to function by the examining medical practitioner.

¹ Goldberg D, Benjamin S, Creed F *Psychiatry in General Practice* 1994 Routledge London pp 230-246

Comorbidity with the Somatoform disorders

With people with these groups of disorders there is obvious scope for inappropriate drug use and comorbidity as the medical practitioner attempts to deal with some of the symptomatology before the correct diagnosis is recognised. The Somatoform disorders are best managed behaviourally and with cognitive therapy. However to engage in these some degree of insight is required. If this insight cannot be achieved then a health system based containment strategy is required.

Probably the most common Somatoform disorder to end up with comorbidity with substance use problems is *persistent Somatoform pain disorder*. Because of delay with diagnosis people with this disorder may well end up having opioids, benzodiazepines and other psychotropic drugs prescribed and dependence may occur in its own right.

Somatoform disorders and cannabis/hallucinogens

Effect of the cannabis/hallucinogen use on the disorder

- These may have an effect on somatic symptoms in terms of making them more accentuated.
- Some people with persistent Somatoform pain disorder use cannabis to assist with pain relief or with nausea associated with opiate use. Cannabis has no analgesic properties and its role in modulating pain and other symptoms is still being investigated.

Drug interactions

Drug management is not recommended in most Somatoform disorders. However many people with persistent Somatoform pain disorder are on opioids so there is a potential for increased sedation and psychomotor problems with cannabis

Clinical considerations

Approach depends on the nature of the drug use, what other drugs the person is taking and what problems there are associated with the drug use.

If use is frequent an intoxication regular then this may interfere with cognitive behavioural therapy. Use at this level should be discouraged.

Somatoform disorders and alcohol use

Effect of alcohol on the disorder

People with chronic Somatoform pain disorder may use alcohol to reduce pain symptoms. However it is not an analgesic and may interfere with the person's ability to use cognitive strategies to manage their behaviour and their symptoms.

Alcohol use and intermittent withdrawal may result in exacerbation of a variety of physical symptoms particularly associated with anxiety. Depending on the nature of the Somatoform disorder this may be an issue.

Drug interactions

Drug management is not recommended in most Somatoform disorders. However many people with persistent Somatoform pain disorder are prescribed opioids or tricyclics so there is a potential for increased sedation and psychomotor problems with alcohol at any level.

There is no major interaction between disulfiram or acamprosate with the opioids if these are being used. Naltrexone will obviously interfere with opioid management.

Clinical considerations

If alcohol consumption is hazardous or harmful then the person should be counselled accordingly.

Alcohol use that results in intoxication will interfere with CBT and will interfere with any structured problem solving or motivational therapy.

Look for links between the patient's symptomatology and alcohol use so that insight can be raised.

Somatoform disorders and opioids**Effect of opioids on the disorder**

- People with chronic Somatoform pain disorder frequently use opioids. These may be helpful in the management of organic aspects of the pain but because of the chronic nature of the pain and hence the opiate use, dependence is common.
- In some instances the actual prescription of the opiate is seen as a legitimization of the pain and an acknowledgement of its physical source.

Drug interactions

- Several analgesics and pain modulators cause sedation and the addition of an opiate will exacerbate this.
- This is a concern with the use of benzodiazepines as well.

Clinical approaches

- If opioids are to be used then the advice of a specialist pain clinic is advisable. This type of clinic will provide a multi-disciplinary approach to the management of the patient's pain that is not possible in general practice.
- If opiate dependence is identified then this needs to be discussed with the patient and their readiness for change identified.
- Change to a long acting opiate is preferable.
- Use of methadone as part in a formalised program is also possible, as this will allow probable control of the pain and the drug seeking lifestyle.

Somatoform disorders and stimulants

Effect of the stimulant on the disorder

Stimulants may cause a variety of sympathetic nervous system related symptoms that may become clinical presentations. However these are generally short lived and drug level related.

Stimulant use may contribute to the anxiety associated with some of the Somatoform disorders and resultant impulsivity may result in presentation to the health practitioner at a lower threshold than usual.

Drug interactions

Potential interactions between stimulants and SSRIs. These latter may be being used for secondary depression but they should not be used as pain moderators as there is little evidence to support their use. (in contrast with tricyclic antidepressants)

No particular interactions between stimulants and opioids and tricyclics.

Major clinical considerations

Depends on the nature of the stimulant use. The clinician needs to explore the reasons for the drug use and the possible negative effect on the person's health and the Somatoform disorder. As discussed above stimulant use may contribute to symptoms and frequent presentations.

If the use is harmful then the patient needs to be guided towards that realisation and readiness for change determined.

Somatoform disorders and benzodiazepine use.

Effect of benzodiazepines on the Somatoform disorder

- People with Somatoform disorders often use benzodiazepines to alleviate anxiety symptoms or to moderate pain. Dependence is frequent.
- Especially with short acting benzodiazepines fluctuating levels may result in exacerbation of the disorder, with lowered thresholds for presenting to the health system and withdrawal symptoms or "breakthrough anxiety".

Drug interactions

Care with other potentially sedating drugs the person may be using (either prescribed or non prescribed)

Major clinical considerations

- Benzodiazepine use is common and dependence frequent. In general use should be discouraged due to dependence potential and psychomotor effects.
- Withdrawal or dose reduction should be negotiated.
- Change to a longer acting benzodiazepine is preferable both if they are being maintained or for dosage reduction.

- If the person is ready for change and willing to engage in CBT specifically for their Somatoform disorder then minimisation of benzodiazepine dosage is required so that the CBT is not interfered with.
- If maintenance use of benzodiazepines is anticipated then this should be subject to a contract with the patient. Authorities should be advised. Advice from a psychiatrist should be sought.
- Benzodiazepines are frequently prescribed to induce “muscle relaxation”. In reality very large (near anaesthetic doses) doses are required for this and benzodiazepines are not recommended for the relief of acute back pain.

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Appendix 1 Serotonin syndrome

Some medication combinations can cause the development of a condition called serotonin syndrome, due to too much serotonin being released into the nervous system and the rest of the body. The syndrome is potentially fatal.

Common features are as follows:

- *Severe restlessness*
- *Over-excitability and hyperactivity (hypomania)*
- *Sweating and shivering*
- *Diarrhoea*
- *Fever*
- *Lack of coordination*
- *Confusion and altered consciousness*
- *Tremour*
- *Jerking limb movements (termed myoclonus)*

It is important to let your doctor know or attend an emergency department should you develop these symptoms.

The syndrome can be treated with withdrawal of the medications that caused it in the first place. Sedative medications such as diazepam or lorazepam are sometimes needed. If more severe then intensive care is required.