the BENZODIAZEPINE TOOLKIT

By Reconnexion



Acknowledgements

The 2018 edition of the Beyond Benzodiazepines toolkit has been revised from the 1997 original updated in 2000 and again in 2010. For this version thanks to Dr Erin Oldenhof, James Szeto and Jane Anderson-Wurf.

The 2010 version was updated by Tomi Redman and Gwenda Cannard with additional material by Janet Haynes, Jo Marston and Laurence Hennessey. Reconnexion (now a service of EACH) is grateful for the support of ExxonMobil Australia for enabling the revision and update on the 2010 manual.

The 1997 original manual was written by Elin Ree and supported by ExxonMobil for which Reconnexion is grateful.

Thanks to the Psychotropic Expert Group, Therapeutic Guidelines Limited for permission to use the Comparative Information for Benzodiazepines, Zolpidem and Zopiclone table in Chapter Four.

Updates, revisions and feedback retained in the revised version were provided by Therese Barry (Alcohol & Drug Counsellor, Western Region Community Health Centre), Dr Robert Cummins (Deakin University), Hilde Edward (Swinburne University), Lisa Frank (University of Melbourne), Melanie Hands (Project Manager, Drug & Alcohol Clinical Advisory Service, Turning Point Alcohol & Drug Centre), Terrie Hollingsworth (Counsellor, Sunbury Community Health), Dr Peter Johnson (GP), Dr Len Klimans (Chemical Dependency Unit, Royal Women's Hospital), Dr Nic Lintzeris (Turning Point Alcohol & Drug Centre), Dr Mike McDonough (Consultant, St. Vincent's Alcohol & Drug Program, Western General Hospital Alcohol & Drug Program), Peter McManus (Secretary, Drug Utilisation Sub Committee, Pharmaceutical Benefits Scheme, Department of Health & Ageing), Dr Robert Moulds (Director, Department of Clinical Pharmacology & Therapeutics, Royal Melbourne Hospital), Jackie Shaw (Manager, Depaul House, St Vincent's Hospital, Melbourne), Lyn Walker (Manager, CASA House, Royal Women's Hospital, Melbourne) and Dr Sally Wilkins (North East Melbourne Psychiatric Services, Department of Human Services, Victoria).

Reconnexion a service of EACH
Revised Edition 2018 Reconnexion
ISBN 978 0 646 32895 6
1939 Malvern Road Malvern East, 3145

+61398098200

Contents

CHAPTER ONE: ABOUT BENZODIAZEPINES		CHAPTER THREE: COMMENCING TREATMENT	
1.1. What are benzodiazepines?	8	3.1. Psychological Counselling	25
1.2. How benzodiazepines work	8	3.1.1. History Taking / Assessment3.1.2. Case History questions	
1.3. Benzodiazepines available in Australia	9	3.2. Information giving	30
 1.4. Effects of benzodiazepines 1.4.1 – Length of action 1.4.2 – Strength of individual benzodiazepines 1.5. Medical uses of benzodiazepines 	10	 3.3. Treatment Plan 3.3.1. Timing 3.3.2. The role of the General Practitioner 	30
·		3.4. Inpatient Withdrawal	31
1.6. Safe and appropriate use of benzodiazepines	12	3.5. Support Groups	31
1.7. Extent of benzodiazepine prescribing and use	12	3.6. e-Therapy	32
 1.8. Effectiveness of benzodiazepines 1.8.1 – Anxiety and anxiety disorders 1.8.2 – Insomnia 	13	3.7. Secondary Consultations	32
• 1.8.3 – Non-benzodiazepine hypnotics		CHAPTER FOUR:	
 1.9. Harm related to benzodiazepines 1.9.1 – Long term harmful effects 1.9.2 – Harmful effects for older adults 	14	REDUCING BENZODIAZEPINES	
	4.5	4.1. Step 1: Stabilising large doses	34
1.10. Benzodiazepine overdose1.11. Benzodiazepines, pregnancy and the newborn	15 15	 4.1.1. Stabilising large doses 4.1.2. Benzodiazepines taken at night only for sleeping 	
 1.12. Benzodiazepines combined with other drugs 1.12.1 - Prescription Medicines 1.12.2 - Alcohol 	16	 4.1.3. Examples of dose stabilisation Case 1: Insomnia Case 2: Anxiety/erratic use Case 3: Multi benzodiazepine use 	
• 1.12.3 – Illicit drugs		4.2. Step 2: Substituting a short acting benzodiazepine for a long acting one4.2.1. Stop and think	36
CHAPTER TWO: IDENTIFYING BENZODIAZEPINE DEPENDENCY	Y	4.2.2. Diazepam equivalents for benzodiazepine substitution	
2.1. Dependency	20	• 4.2.3. Example of substitution to Diazepam	
•		4.3. Step 3: Gradually reducing the dose	40
2.2. Development of dependency	20	 4.3.1. Benzodiazepines available in more than one strength 	
2.3. Identifying someone dependent on benzodiazepines	Δ Ι	4.3.2. Cutting down tablets4.3.3. Remembering reduction rates	

Contents

CHAPTER FIVE: BENZODIAZEPINE WITHDRAWAL

5.1. Withdrawal from drugs	44	• 6.2.7. Massage	
5.2. Benzodiazepine withdrawal	44	• 6.2.8. Support groups	
5.3. Onset of symptoms	45	6.2.9. Using local resources 6.7. Management of common withdrawal	55
5.4. Benzodiazepine withdrawal syndrome	45	6.3. Management of common withdrawal symptoms	55
 5.5. Symptoms of benzodiazepine withdrawal 5.5.1. Common withdrawal symptoms 5.5.2. Less common withdrawal symptoms 5.5.3. Rare withdrawal symptoms 5.6. Severity of withdrawal symptoms 5.7. Duration of withdrawal 5.8. Nature of the withdrawal 5.9. Other features of withdrawal 5.10. Sudden, abrupt withdrawal - "cold turkey" 	45 47 47 48 48 48	 6.3.1. Anxiety (withdrawal related) 6.3.2. Insomnia 6.3.3. Depression 6.3.4. Suicidal thoughts 6.3.5. Agoraphobia 6.3.6. Panic attacks 6.3.7. Gastrointestinal symptoms 6.3.8. Headaches 6.3.9. Blood Nose 6.3.10. Lethargy 6.3.11. Sore mouth or ulcers 6.3.12. Craving sweet food 	
CHAPTER SIX: SUPPORT THROUGH BENZODIAZEPINE WITHDRAWAL		 6.3.13. Changes in libido 6.3.14. Dissociation 6.4. Overcoming the challenges to recovery 6.4.1. Fear 	62
 6.1. Support strategies 6.1.1. Provide information 6.1.2. Prioritise the client's needs 6.1.3. The possibility of relapse 6.1.4. Differentiating withdrawal symptoms 6.1.5. Consistent and ongoing support 6.1.6. Withdrawal and older people 	50	 6.4.2. Fear of withdrawal symptoms 6.4.3. Loss of identity 6.4.4. Family and intimate relationships 6.4.5. Incest and sexual assault 6.4.6. Anger 6.4.7. Low self-esteem and poor self-image 6.4.8. Other illnesses or conditions 	
 6.2. Lifestyle influences to help manage withdrawal symptoms 6.2.1. Relaxation and meditation 6.2.2. Slow abdominal breathing 6.2.3. Nutrition during withdrawal 6.2.4. Alcohol use 6.2.5. Exercise 6.2.6. Keeping a diary 	51	 6.5. Use of other drugs to alleviate withdrawal symptoms 6.5.1. Flumazenil 6.5.2. Carbamazepine (Tegretol) 6.5.3. Antidepressants 6.5.4. Analgesics 6.5.5. Melatonin 6.5.6. Pregabalin 	65

Contents

RESOURCES AND HANDOUTS

Conta	act Numbers	68
R1.1.	Benzodiazepine Equivalence Chart	69
R2.1.	Client questionnaire. Identifying benzodiazepine dependency	70
R3.1.	Client checklist benzodiazepine withdrawal symptoms	71
R3.2.	Case History for benzodiazepine dependency	72
R4.1.	Reduction Plan Template	75
R4.2.	Reduction Plan Template 0.25mg	76
R4.3.	Reduction Plan Template 0.50mg	77
R5.1.	Range of possible withdrawal symptoms	78
R5.2.	Benzodiazepine Withdrawal Symptoms Severity Questionnaire (Tyer et al)	79
R6.1.	Relaxation Technique – Repeating a mantra or phrase	80
R6.2.	Relaxation Technique –Visualisation	81
R6.3.	Relaxation Technique – Tightening and releasing muscles	82
R6.4.	Relaxation Technique – Total body relaxation	83
R6.5.	Abdominal Breathing Techniques	84
R6.6.	Fight or flight response	85
R6.7.	Hints for Good Sleep	86
R6.8.	Activities that can help with depression	87
R6.9.	Managing Panic Attacks	88
R6.10	. What is a panic attack and how to manage it (Reconnexion)	89
Refer	ences	91

Rationale

WHO IS THIS TOOLKIT FOR?

The toolkit is designed for health practitioners to assist people who are dependent on benzodiazepines. It will be useful for:

- Alcohol and drug practitioners
- Counsellors
- General Practitioners
- · Community health nurses
- Psychologists
- Social workers
- · Youth workers.

The toolkit is designed to provide information about benzodiazepine use, dependency and withdrawal. The toolkit provides a guide to benzodiazepine reduction and withdrawal support that will enable practitioners to successfully help people through the recovery process.

WHY IS THIS TOOLKIT NECESSARY?

Although prescribing benzodiazepines has reduced to some extent since their introduction and use in the 1960's and 1970's, they are still prescribed and used both inappropriately and long-term.^{1,3}

Tolerance and dependence on benzodiazepines can occur within weeks, and iatrogenic dependence (i.e., dependence as the result of prescription for legitimate purposes) is widespread.⁴

Use of benzodiazepines in association with illicit drug use is commonplace,^{2,5} with the concomitant problems relating to obtaining the supply of benzodiazepines from General Practitioners (GPs), as well as difficulties in supporting dependent people through benzodiazepine withdrawal in addition to withdrawal from other drugs.

Due to the potential severity of withdrawal symptoms, the fear of coping without the drug or the unresolved issues that long-term drug use has masked, many people require professional assistance to reduce or stop their benzodiazepine use.⁶

WHO CAN YOU CONTACT FOR ADDITIONAL INFORMATION AND ASSISTANCE?

Reconnexion, a service of EACH, is a not for profit program specialising in treating benzodiazepine dependency, anxiety disorders and depression. It was established in 1986 as TRANX with the motto "Reconnect with Life". It was renamed "Reconnexion" in 2007 and is partly funded by the Department of Health and Human Services, Victoria.

Reconnexion counselling staff members are available to provide specific advice about any problems or difficulties you may encounter assisting people dependent on benzodiazepines.

The Reconnexion Telephone Information and Support Service is available for people experiencing benzodiazepine withdrawal. Trained volunteers operate the phone service from Monday - Friday 9:00 am to 5:00 pm to offer advice and support when reducing from benzodiazepines or going through withdrawal.

Additional resources are listed in the resources & handouts section of the toolkit.

About benzodiazepines

Chapter 1

1 About benzodiazepines

1.1 WHAT ARE BENZODIAZEPINES?

Benzodiazepines are psychotropic drugs, that is, drugs that affect the mind and are mood altering. They are also known as minor-tranquillisers, anti-anxiety medication, sedatives and hypnotics and are prescribed predominantly for anxiety and sleeping problems. According to the RACGP⁶ and RANZCP Guidelines,⁷ it is now well recognised that there is a significant risk of dependence on benzodiazepines when taken regularly, and recommended length of use is for no longer than four weeks of daily use.



"Use of benzodiazepines beyond 4 weeks should be uncommon and should be prescribed with caution." 6

Confusion often exists between benzodiazepines and other psychotropic drugs. Information about benzodiazepines is not applicable to other psychotropic drugs, therefore it's very important that practitioners are sure about the type of drug a person is taking before providing information or advice. Common psychotropic drugs (other than benzodiazepines) are:

- Antipsychotics
- Antidepressants
- Sedative hypnotics (not in the benzodiazepine group)
- Drugs for specific conditions such as Bipolar Disorder, and ADHD.

1.2 HOW BENZODIAZEPINES WORK

Benzodiazepines are:

- Absorbed in the stomach and small intestine and metabolised by the liver (when taken orally)
- Highly fat soluble and accumulate in fatty tissue
- Excreted through sweating, saliva, urine, faeces and breast milk.

Benzodiazepines exert their influence widely across the brain, emotional reactions, memory, thinking and the control of consciousness, as well as muscle tone and coordination.⁸

Benzodiazepines are a central nervous system (CNS) depressant that work by increasing the efficacy of our brains natural calming chemical, gamma - aminobutyric acid (GABA). GABA is one of the main neurotransmitters of the CNS, the chemicals responsible for communicating messages between our brain cells (neurons), and GABA's message is inhibitory.

Almost 40% of the brain's neurons have GABA receptors, which is the specialised site where GABA binds. It produces its inhibitory effect by changing the chemistry of that neuron so that it either slows down or stops firing. Benzodiazepines work by binding to a specific site on the GABA receptor, and enhances the action of GABA. This results in greater inhibition, or an increased likelihood that the neuron will stop firing altogether.

Benzodiazepine binding sites (see diagram 1) are most commonly found in the areas of the brain controlling our consciousness, coordination, emotions, memory, muscle tone and thinking. The location of the binding sites may explain the significant effects of benzodiazepines in these areas and why these functions are often severely affected during withdrawal.



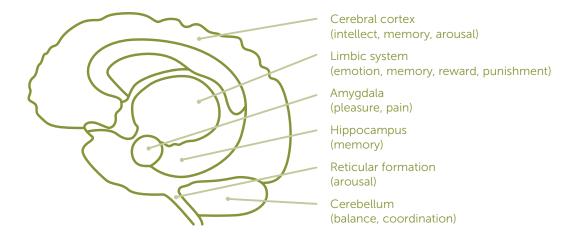


Diagram 1: Benzodiazepine binding sites (Dr Heather Ashton. Anything for a quiet life? New Scientist 1989. Reproduced with permission.)

1.3 **BENZODIAZEPINES AVAILABLE IN AUSTRALIA**

A large number of benzodiazepines are available on prescription in Australia. The most common ones are Temazepam and Diazepam. Table 1 provides a list of currently available benzodiazepines.

Table 1: Benzodiazepines available in Australia

Generic Name	Trade Name
Alprazolam (S8)	Alprax, Kalma, Xanax, Ralozam, Aprazolam –DP, Genrx Alprazolam, Zamhexal
Bromazepam	Lexotan
Clobazam	Frisium
Clonazepam	Rivotril, Paxam
Diazepam	Valium, Ducen, Antenex, Genrx Diazepam, Diazepam –DP, Valpam, Ranzepam
Flunitrazepam (S8)	Hynodorm, Rohypnol
Lorazepam	Ativan
Nitrazepam	Alodorm, Mogadon
Oxazepam	Alepam, Murelax, Serepax
Temazepam	Euphynos, Nocturne, Normison, Temaze, Temtabs
Triazolam	Halcion

Non-benzodiazepine hypnotics		
Zolpidem	Dormizol, Somidem, Stildern, Stilnox, Zolpibell	
Zopiclone	Imovane, Imrest	

1.4 **EFFECTS OF BENZODIAZEPINES**

Although benzodiazepines are often categorised as either sleeping pills or anti-anxiety agents, they all have the same basic effects – in the short term their sedative action relieves anxiety and promotes sleep. They also have amnesic effects, are muscle relaxants, and have anticonvulsant properties. The main difference between the drugs is their strength and length of action in the body.

1.4.1 - LENGTH OF ACTION

Benzodiazepines have a complex metabolic structure. They are short, medium and long acting – depending upon the metabolic structure of each drug. Table 2 identifies long, medium and short acting benzodiazepines.

Table 2: Length of action of Benzodiazepines

Short acting benzodiazepines (half-life 6-12 hours)		
Alprazolam	Oxazepam	
Temazepam	Triazolam (very short < 6 hours)	

Medium acting benzodiazepines (half-life 12-24 hours)	
Bromazepam	Lorazepam

Long acting benzodiazepines (half-life > 24 hours)	
Clobazam	Clonazepam
Diazepam	Flunitrazepam
Nitrazepam	

Non-benzodiazepine hypnotics (very short)	
Zolpidem	Zopiclone

Note: Information reproduced with permission from Psychotropic Expert Group. Therapeutic guidelines: psychotropic. Version 7. Melbourne: Therapeutic Guidelines Limited; 2013.

Length of action is also influenced by other factors such as the health of the liver, age and weight, and short acting benzodiazepines may last as long as the long acting drugs in some people.18

In prescribing practice, the shorter acting benzodiazepines are usually prescribed as sleeping pills and the longer acting ones for the alleviation of anxiety. This is because the longer acting benzodiazepines have a generalised effect on anxiety, whereas short acting benzodiazepines help promote sleep without giving a 'hangover' effect the next day. Other factors such as the age of the patient and common usage of a particular brand may also influence which benzodiazepine a doctor will prescribe.¹⁹

1.4.2 - STRENGTH OF INDIVIDUAL BENZODIAZEPINES

The milligram amount of each benzodiazepine varies and is not indicative of the strength of the drug compared with other benzodiazepines. For example, Alprazolam is available in 0.5 mg up to 2mg, but this does not mean that it is weaker than, for example, Oxazepam which is available in 15mg and 30mg.

Table 3: Strength of benzodiazepines available

Benzodiazepine	Strength(s) available in
Alprazolam	0.25mg, 0.5mg, 1mg, 2mg
Bromazepam	3mg, 6mg
Clobazam	10mg
Clonazepam	0.5mg, 2mg
Diazepam	2mg, 5mg
Flunitrazepam (S8)	1mg
Lorazepam	1mg, 2.5mg
Nitrazepam	5mg
Oxazepam	15mg, 30mg
Temazepam	10mg
Triazolam	0.125mg

Non-benzodiazepine hypnotics		
Zolpidem 10mg (6.25 mg and 12.5 mg modified release)		
Zopiclone	7.5mg	

1.5

MEDICAL USES OF BENZODIAZEPINES

Benzodiazepines have a number of common medical uses, including being used:

- As a muscle relaxant
- For endoscopy procedures
- As an anaesthetic or a pre-med before surgery or chemotherapy
- To assist with acute alcohol or drug withdrawal (in residential care under medical supervision)
- To treat epilepsy (usually where other medications have not been effective)
- In palliative care.

Appropriate benzodiazepine use could include:

- One or two nights' use for prolonged sleeplessness when all other methods have failed and provided that the insomnia is not due to circadian rhythm disturbance or a chronic sleep problem (appropriate use could be for recent grief or acute stress)
- Insomnia due to jet lag
- Severe and acute muscle spasm where conventional methods like massage have not eased the spasm
- Severe and acute recent anxiety if no other appropriate support is available or while counselling support is arranged.

1.6 SAFE AND **APPROPRIATE USE OF BENZODIAZEPINES** If benzodiazepines are necessary a prescription should be for:

- A limited length of time a few days only and not exceeding two weeks
- Intermittent use if used occasionally there is no risk of dependency.6

If a prescription is warranted, information should be provided about:

- The potential risk of dependency and withdrawal if used for longer than a few weeks
- Effects on the emotions and the possible impairment of concentration
- The possibility of rebound insomnia and anxiety when ceasing to use benzodiazepines
- Effects when used with other drugs
- Risks associated with driving or working with heavy machinery.

Benzodiazepines should not be prescribed for people currently using excessive amounts of alcohol or illicit drugs.

1.7 **EXTENT OF** BENZODIAZEPINE PRESCRIBING AND **USE**

Benzodiazepines are among the most commonly prescribed drugs in Australia. PBS and RPBS data shows that 6.3 million prescriptions for benzodiazepines were dispensed in 2015. This figure does not include inpatient prescriptions or private prescription items. The highest number of prescriptions were for Diazepam (2,433,638), Temazepam (2,137,491) and Oxazepam (1,040,270).9

Most prescriptions for benzodiazepines are written to help people cope with anxiety or insomnia which are often associated with social or personal problems. Prescribing for insomnia is most common, especially for older people (over 65 years). People suffering from panic attacks and agoraphobia are also frequently prescribed benzodiazepines. 15,6

In a 2013 report, ¹¹ The Coroners Court of Victoria cites a range of inappropriate prescribing and dispensing issues such as ongoing and extended prescribing, high doses, multiple benzodiazepines and prescriptions at first request by new patients. Benzodiazepines were involved (causal or contributive) in approximately half of the drug-related deaths in Victoria in 2010.12 In the last decade, the number of deaths involving benzodiazepines has increased by 168 per cent.

According to the Australian Bureau of Statistics (ABS) in 2016, an individual dying from a drug induced death in Australia was most likely to be a middle-aged male, living outside of a capital city who is misusing prescription drugs such as benzodiazepines or oxycodone in a polypharmacy and the death is most likely to be accidental. Benzodiazepines have been consistently the most common single substance identified on toxicology and were the most common substance present in drug induced deaths in 2016, being identified in 663 (36.7%) deaths.¹³

In a 2010 submission to the Australian National Drug Strategy, the Victorian Alcohol and Drug Association cites inappropriate prescribing of benzodiazepines as a serious issue requiring ongoing policy intervention.14

Data from Reconnexion clients indicates that almost half of Reconnexion clients have been taking benzodiazepines as prescribed by their doctor for more than 5 years and around 8% for more than 20 years.

1.8

EFFECTIVENESS OF BENZODIAZEPINES

1.8.1 - ANXIETY AND ANXIETY DISORDERS

Benzodiazepines quickly relieve the symptoms of anxiety with few side effects for most people. However, the long-term effects of anxiety reduction remain debatable. No reliable research exists to demonstrate anxiety reducing properties of the drug after four months, even though many practitioners argue that such therapeutic effects are present for many years. Controversy exists regarding the therapeutic benefit from long periods of use, and insufficient empirical evidence is available to support their use in the long-term.^{20,23}

Physical dependency can often mean a paradoxical increase in anxiety. Anxiety and panic are common withdrawal effects of benzodiazepines and if not correctly identified as such, can lead the person to conclude that the initial anxiety is still present or has worsened.24

1.8.2 - INSOMNIA

In the short-term, benzodiazepines induce sleep in approximately 50 per cent of cases. The therapeutic effects of the inducing action of benzodiazepines are short lived, however – about one to two weeks.²⁷ As there is a risk of dependency associated with the long-term use of benzodiazepines, insomnia shouldn't be viewed as a diagnosis, but as a symptom requiring further investigation.²⁸ Research into the causes of insomnia^{29,30} concludes that benzodiazepines have limited value in the treatment of sleep disturbances and that long-term benzodiazepine use actually worsens the quality of sleep. Long-term benzodiazepine use (over a number of months or years) results in less time in the deep sleep stage, less REM or dreaming sleep and more frequent waking during the night. 31,32

Women receive approximately twice as many scripts for benzodiazepines than men.

In older adults, changes in circadian rhythm may mean a tendency to wake up earlier and feel sleepy earlier in the evening. Older adults in general tend to have more fragmented sleep, with less time in the deep sleep phase. Although frequently prescribed to older adults, benzodiazepines don't correct these physiological changes.

1.8.3 - NON-BENZODIAZEPINE HYPNOTICS

There are a number of hypnotics available that are not benzodiazepines. Zolpidem (Stilnox and Ambien) and Zopiclone (Imovane) are among the most well-known of these sleeping pills.

The same "safe use" rules apply to the use of these drugs as to the benzodiazepines that is, the drugs are recommended for short term use only (up to 2 weeks maximum) and there is a risk of dependence with longer term use.

Sleep problems warrant proper investigation and diagnosis to determine the type and cause, and are most successfully treated using behavioural strategies. 29,32

(See R6.7: Hints for Better Sleep in resources and handouts)

1.9 HARM RELATED TO **BENZODIAZEPINES**

Although benzodiazepines relieve the symptoms of anxiety and insomnia in the shortterm, they don't cure the problem and have a number of unwanted and potentially harmful effects.

Benzodiazepines, even in small doses taken regularly for only a few weeks, can produce tolerance and dependence. For people using the benzodiazepines for months or years, the risk of drug withdrawal is significant and the withdrawal syndrome can be painful and protracted.

Many people take prescribed benzodiazepines for many years, without dose escalation, prescribed from a single doctor or practice. They may not appear to have marked problems in relation to benzodiazepine use, but often have great difficulty stopping.33

Additional harmful effects include:

- Impaired memory and concentration
- Emotional 'anaesthesia' (being unable to respond normally and feeling isolated or 'cut off' from people and feelings)
- Depression
- Loss of balance
- Impaired motor coordination
- Mood swings
- Irritability and outbursts of rage.

1.9.1 - LONG TERM HARMFUL EFFECTS

Harms associated with long-term use include: cognitive deficits ³⁴⁻³⁶, reductions in quality of life,^{37,38} depression and anxiety,³⁹⁻⁴³ risk for road accidents,^{44,45} and specific to older adults the risk of falls,⁴⁶⁻⁴⁸ of developing dementia^{49,50} and of mortality.^{51,52} The most troubling of these statistics relating to BZDs, is its position as leading contributor to overdose deaths in Australia.^{11,53,54} Despite these risks, however, by far the most widely reported harm related to BZD use is dependence, with a significant risk for dependence developing after just one month of continued use.⁵⁵

1.9.2 - HARMFUL EFFECTS FOR OLDER ADULTS

Older adults may experience a number of unwanted effects in addition to dependency. Using benzodiazepines long term can cause older people to suffer from:

- Loss of balance
- Falls
- Increased risk for dementia
- Over sedation (related to slower metabolism)
- Increase of dementia
- Mortality.

Older people in residential care are more likely to be prescribed benzodiazepines than those living at home.¹⁶

1.10 BENZODIAZEPINE OVERDOSE

Large quantities of benzodiazepines taken with other central nervous system depressants, such as alcohol, opioids (i.e. codeine, morphine, heroin) or antipsychotics, can result in death.

Death can also occur when large amounts of benzodiazepines only are taken, if the airway becomes obstructed. Obstruction of the airway usually occurs by inhaling vomit when unconscious

1.11 BENZODIAZEPINES, PREGNANCY AND THE NEWBORN CHILD

Benzodiazepines freely cross the placenta to the developing foetus, therefore have the potential to adversely affect foetal development. Despite some research indicating an increased risk of congenital malformations (i.e. cleft palate, septal defects) in women treated with benzodiazepines during pregnancy,⁵⁶ more commonly no evidence is found to support this relationship,⁵⁷⁻⁶⁰ therefore if the risk does exist, it is thought to be relatively low. Nonetheless, maternal benzodiazepine use has been related to an increased likelihood of caesarean delivery, low birth weight, and use of ventilatory support for the newborn.^{60,61}

If moderate to large amounts of benzodiazepines are taken continuously during most of the pregnancy, withdrawal symptoms can be experienced by the baby following birth. Withdrawal symptoms consist of respiratory distress, irritability, disturbed sleep patterns, sweating, tremors, feeding difficulties and fever. 62.63 When exposed to more than one psychotropic medication, for example opioid analgesics, the risk for the infant to experience withdrawal syndrome increases substantially.⁶⁴ High benzodiazepine use during the later stages of pregnancy can lead to floppy infant syndrome.⁶² A newborn child with floppy infant syndrome has poor muscle tone and sucking response. As such, continuous benzodiazepine use during pregnancy and administration of high doses during delivery should be avoided.

Pregnant women using benzodiazepines should withdraw slowly in consultation with expert, specialised medical assistance. Contact Reconnexion, specialist maternity units (available at most maternity hospitals) or the Royal Women's Hospital (Melbourne) for specialist advice on pregnancy, birth and benzodiazepine withdrawal.

Benzodiazepines are also passed from mother to child through breastmilk, and as the baby cannot easily process the drugs, the accumulation can lead to lethargy, sedation and weight loss. However, these risks are typically associated with higher potency benzodiazepines, higher doses or a greater number of medications^{65,66} therefore low doses are thought to pose minimal risks.

1.12 **COMBINING BENZODIAZEPINES** WITH OTHER **DRUGS**

1.12.1 - PRESCRIPTION MEDICATIONS

Antipsychotics

Benzodiazepines are often used in conjunction with antipsychotics, either in the treatment of schizophrenia or bipolar as adjunctive therapy, or conversely where antipsychotics are used to complement benzodiazepine treatment of anxiety disorders. When combined, the sedating properties of an antipsychotic may contribute to adverse effects such as over sedation and respiratory depression and Clozapine has specifically been associated with delirium.⁶⁷ Therefore co-administration of these drugs should be closely managed by a medical professional.⁶⁸

Antidepressants

Antidepressants are often concurrently prescribed with benzodiazepines for the high rates of comorbidity between anxiety and depression, or to treat insomnia and agitation associated with depression. In the process of being metabolised, some benzodiazepines (i.e. alprazolam and diazepam) have the potential to interact with SSRIs (i.e. fluvoxamine, fluoxetine, nefazidone, paroxetine, and sertraline), whereby the process of eliminating these benzodiazepines can be impeded, which results in an increase in the plasma concentrations of these benzodiazepines. 69,70



Benzodiazepines are frequently used with other drugs such as heroin, alcohol, methadone, amphetamines, cocaine, opioids and analgesics.¹⁷

Analgesics (pain relievers)

Opioid analgesics such as tramadol, oxycodone, codeine, fentanyl are powerful central nervous system depressants, meaning they slow down many of our bodies regulatory processes, and when taken at higher doses can lead to decreased heart rate, breathing, and loss of consciousness. As benzodiazepines potentiate the effects of opioids, the risk for lethal overdose becomes very real when these two types of drugs are combined.^{71,72}

Opioid Pharmacotherapy

A significant number of methadone/buprenorphine users also use benzodiazepines. Many people on opioid replacement programs use benzodiazepines which may or may not be prescribed, to alleviate symptoms of discomfort, to manage sleep disturbances, or heighten the effect of methadone/buprenorphine. The combination of these drugs forms a synergistic effect, and consequently increases the risk of accidental overdose. Although opioid replacement programs have dramatically reduced the harms associated with heroin use, they are increasingly involved in polydrug overdose deaths, where benzodiazepines are the most commonly implicated in the lethal combination.

Other pharmaceuticals

Some pharmaceuticals inhibit the metabolism of benzodiazepines and consequently may increase their effects, which include: first generation antihistamines (i.e. diphenhydramine), some antacids and reflux medications (i.e. cimetidine, omeprazole, omeprazole), azole antifungals (i.e. itraconazole, fluconazole, ketoconazole), macrolide antibiotics (i.e. erythromycin, roxithromycin, and troleandmycin), antiretrovirals, valproic acid (i.e. valproate), propranolol and carbamazepine. 69.76.77 As these medications can reduce the rate at which benzodiazepines are cleared from the body, potentially increasing their duration of action, primary care providers should exercise caution when administering any of medications concomitantly with benzodiazepines.

Conversely, some antibiotics (i.e. rifampin and fluoroquinolone), hypercium (or St. John's Wort), bupropion, and antiepileptic drugs (i.e. phenytoin and phenobarbital) can increase the rate at which benzodiazepines are metabolised, and lead to a reduction in the concentration of benzodiazepines.⁶⁹,⁷⁷ This is a particular concern when reducing benzodiazepines, and should be monitored throughout a taper as taking these medications has the potential to exacerbate withdrawal symptoms.

1 About benzodiazepines



1.12.2 - ALCOHOL

Using benzodiazepines and alcohol together can be dangerous. Alcohol has a synergistic effect with benzodiazepines, meaning that together they become more potent, as they work at the same site in the brain, and the rate which benzodiazepines are metabolised is slowed by the presence of alcohol.⁷⁸ This can lead to temporary amnesia ("blackouts"), and decrease the protective upper airway reflexes, which increases the risk of inhaling vomit when unconscious.

Benzodiazepine use among young homeless people, often in combinations with other drugs, is common.

1.12.3 - ILLICIT DRUGS

A significant number of illicit drug users regularly take benzodiazepines. Among people with a history of regular and heavy illicit drug use, benzodiazepines exert a reinforcing effect with repeated doses, and are typically used to either increase the effects of depressants, or manage the unwanted effects of stimulants.

The effects of depressants such as heroin, ketamine and GHB are significantly enhanced when combined with benzodiazepines, greatly increasing the risk of overdose. Although there is some suggestion that people using benzodiazepines in addition to heroin are more likely to partake in risk taking behaviour, it is difficult to determine whether benzodiazepines contribute to these risks or whether risk- taking injecting drug users are more likely to use benzodiazepines. The most commonly used illicit substance in Australia, Cannabis, is also a depressant which can lead to increased effects when combined with benzodiazepines. Interestingly, when an individual is acutely intoxicated the most common adverse effects are anxiety and panic symptoms, which may also be a reason for concurrent use of benzodiazepines.

With stimulants such as cocaine, speed, ice, and ecstasy, benzodiazepines are more likely to be used when individuals are 'coming down', to help mitigate the effects of restlessness, paranoia, irritability hyperarousal, and hypertension. It is possible that amphetamine users may unintentionally take dangerously large amounts of benzodiazepines because of the delay recognising an effect, or a reduction in inhibition.⁸⁰ The competing effects of both drugs can put the body under a greater amount of stress that can lead to health complications.

Chapter 2



Benzodiazepines are very addictive – tolerance and dependence can occur within weeks of continuous use. Up to 30% of patients taking benzodiazepines as prescribed for just 4–6 weeks develop withdrawal symptoms¹⁵ and 40% to 80% of long-term users of benzodiazepines experience withdrawal.⁸¹

As the lack of recognition of benzodiazepine dependency is common, it often goes undetected or is misdiagnosed. Be alert for dependency, even though it may not be initially identified as a problem.

2.1 DEPENDENCY

Drug dependence usually has physical and psychological elements. People who are dependent on benzodiazepines may:

- Feel unable to cope without the drug
- Find it extremely difficult to stop taking the drug
- Find the drug no longer has the same effect, so may increase the dose or drink alcohol to achieve the same effect
- Perceive that they need the drug to function normally
- Have withdrawal symptoms if the drug is cut down or stopped
- Crave the drug
- Feel unable to leave the house without the drug
- Take relief knowing they have access/enough of the drug.

2.2 THE DEVELOPMENT OF DEPENDENCY

Not everyone who takes benzodiazepines on a daily and long-term basis will become physically dependent, although they are at a high risk of dependency.

Some people taking benzodiazepines don't realise that they are dependent until they stop a dose or try to cut down and experience withdrawal symptoms.

Even low-dose benzodiazepine consumption may lead to dependence, with perhaps 1% of people developing withdrawal after 6 weeks. After 3-12 months, 15-50% may have developed tolerance and are likely to experience withdrawal.³³

Unless people are well informed about the risks associated with continuous use, they are likely to continue to use the drugs long term and hence develop dependency.

Most people initially receive a script to help them cope with anxiety or insomnia associated with a crisis (such as a death in the family, marriage break-up or a combination of things which makes the person feel that he or she is unable to cope). 19,15

In the short-term, benzodiazepines are very effective in relieving the symptoms of anxiety and promoting sleep. People using them initially feel much better and will often continue using the drug because they may not have been made aware of the risks

Over time, a physical tolerance to the drug develops.⁸ It feels like the drug is wearing off. Trying to achieve the same effects as before, people may increase their dose or change brands.

After a while the drugs no longer stop the symptoms of anxiety or insomnia and people usually start to feel a lot worse. At this stage, cutting down or trying to stop taking the drugs makes people feel a high level of anxiety and other physical symptoms like rebound insomnia. It's common for people to resume their dose, mistaking the anxiety or insomnia associated with withdrawal for their original problem.

People can experience withdrawal symptoms while still taking their benzodiazepines.

People can experience withdrawal symptoms while still taking their benzodiazepines. Many people have exhaustive tests for their ongoing physical symptoms and when the tests show a negative result, they sink deeper into despair – sometimes assuming that they must be going mad. Depression, suicidal thoughts, paranoia and occasionally even hallucinations are withdrawal symptoms, and many people are referred to psychiatrists.

People suffering benzodiazepine withdrawal symptoms feel as if they are always sick, have no self-confidence and have lost all their former skills. They may leave their jobs because they cannot manage and withdraw socially. Afraid to be left alone, they may keep their children home from school, and simple activities like doing the supermarket shopping or making minor decisions become almost insurmountable tasks. Suicide is often contemplated.

Psychologically and physically dependent on benzodiazepines, people feel unable to cope or survive without taking their tablets. The increasing decline in physical and mental health has not been associated with their long-term benzodiazepine use and they rely more than ever on their drugs to help them cope. Without information on the long-term effects of benzodiazepines, people assume that their mental and physical distress is related to their original problem.

2.3
IDENTIFYING
SOMEONE
DEPENDENT ON
BENZODIAZEPINES

Long-term benzodiazepine users who answer yes to one or more of the following questions may be benzodiazepine dependent. [see R2.1 for client questionnaire].

1. Have you taken sleeping pills or tranquillisers each day or night for six months or longer?

Most people taking benzodiazepine for longer than six months are taking them to prevent the onset of withdrawal symptoms rather than for any therapeutic effect. (Benzodiazepines are only effective for sleep for the first 3-7 nights, while there is not adequate research to suggest that the anxiety relieving properties of benzodiazepines are effective for more than 4-6 months.)

2. Have you ever increased your dose or felt you need to increase the dose to have the same effect as you did initially? Have you ever changed brands for the same reason?

Increasing the dose and trying other brands of benzodiazepine in an attempt to achieve the same feeling as when the drugs were first taken is a good indication that the body has become tolerant to the drug and therefore the person taking the benzodiazepine needs an increase in dosage or a stronger drug to achieve the same effect.

3. Have you ever tried to cut down or stop your benzodiazepine use?

Some people aren't able to cut down or stop their benzodiazepine use even though they've made numerous attempts. This is usually due to the discomfort of withdrawal symptoms. However, it might be related to the initial reason the person was prescribed the drug. Careful questioning may be necessary to understand what the person is actually experiencing. This can sometimes be difficult as increased anxiety and insomnia are the most common withdrawal symptoms.

4. If you miss a dose of do you feel unwell or highly anxious?

People missing a dose and feeling agitated, sweaty, sick or unable to sleep will often see this as a reason to quickly start taking their dose again because they 'need' the tablets. Usually, however, it is an indication of benzodiazepine withdrawal.

5. Are the effects of the benzodiazepines interfering with your life in some way?

Are you, for example, missing work regularly, having family or relationship problems, experiencing difficulty in coping or remembering things? People who have taken benzodiazepines for a long-time may not have made the connection between the deterioration of their abilities and relationships with the long-term use of drugs.

6. In addition to your benzodiazepines, are you drinking alcohol or using other drugs?

'Topping up' with alcohol to achieve the same sedative effect is indicative of tolerance. Increasing the amount of alcohol may occur quite subtly and the person may not realise the extent to which they have increased their drinking over time. Often, antidepressants or other psychotropic drugs are prescribed in an attempt to alleviate some of the anxiety or depression that has actually been caused by the long-term use of benzodiazepines.

7. Do you make sure that you never miss a dose?

Being careful to always take their dose on time could mean that psychological or physical dependence is present. The symptoms of anxiety or sleep difficulties that the person is hoping to control may well be benzodiazepine withdrawal symptoms rather than the original problem.

8. Do you feel that you need your benzodiazepines to help you get through the day?

Needing to take a benzodiazepine just to feel normal is an indication of the development of physical tolerance as the brain adapts to the presence of the drug.

9. Do you ever take any additional pills to help you cope with a stressful situation?

Relying on benzodiazepines to alleviate extra stress or anxiety is indicative of an increasing psychological dependence on using the benzodiazepines as the main coping strategy.

10. Do you carry your benzodiazepines with you just in case?

A strong indication of dependency is when a person takes great care to make sure that they always have a supply of tablets and never run out of scripts. Some people always ensure they have some benzodiazepines on hand in their wallet or purse as security just in case they should feel anxious.

Commencing treatment

Chapter 3

The aim for most people is to reduce from their benzodiazepine dose and eventually become totally drug free. If this is not possible, a reduction in the amount taken is an appropriate aim which should minimise some of the harm associated with taking the benzodiazepines. For example, for very high dose users or polydrug users, stabilisation and close monitoring may lower the risk of accidental overdose and risk taking behaviours. The available evidence supports slow reduction of benzodiazepines as the safest, most cost effective and most successful way for people to become pill-free. Slow reduction is best achieved in a counselling or home based withdrawal setting. 82-84

3.1 PSYCHOLOGICAL COUNSELLING

If possible, allow one to one and a half hours for the initial interview and cover the following steps:

- Take a thorough history to ensure all factors are considered in decision making about withdrawal plans and supports required and to enable the client to make a connection between current experiences and the effects of long-term benzodiazepine use
- Ensure the person has all their questions answered and is given the necessary information
- Explain your program to the person about to go through the reduction process
- Reassure them that counselling is collaborative and they will control
 the reduction process and make the decisions around reduction of their
 benzodiazepine intake.

Steps in counselling approach

- 1. History taking and assessment
- 2. Information to client
- 3. Treatment plan options

Although the aim of the first session is to complete a full history, this will not always be possible or appropriate and issues which demand immediate attention sometimes need to be dealt with first.

People often feel relief when given an opportunity to talk about their personal experiences taking benzodiazepines. While many people are relieved they are being listened to and can easily recall their story, others find it difficult to talk or recall specific details, which may be due to drug induced short-term memory loss.

Give people written material to take home, as memory impairment is a common side effect of benzodiazepine use, making it difficult for people to retain details of the program and withdrawal information.

Commencing treatment

3.1.1 - HISTORY TAKING / ASSESSMENT

The overall aim of the assessment is to obtain a clear picture of the client's needs in order to tailor the reduction and withdrawal process to their individual circumstances. Specifically, you will need to identify whether the person is dependent on benzodiazepines.

It is important to ask and record information about the following:

- Current medication(s)
- Current symptoms and discomfort
- Length of benzodiazepine use
- History of benzodiazepine use
- Reason for the initial prescription
- Past and current history of other prescribed and non-prescribed substance use (including alcohol and pain killers, which many people do not think to report)
- Increase or decrease in dose
- Previous reductions
- Other agency involvement
- Medical history
- Social network and current living situation
- Any history of trauma or abuse
- Other factors which may affect the person's well being.

3.1.2 - CASE HISTORY QUESTIONS

Current Medications (record all)

What medications are you currently prescribed?

What dosage are you prescribed?

Do you always take the same amount?

How frequently are you taking the medication?

Are you taking any other medications (not prescribed)?

- ** Be aware of both generic and brand names, making sure to view the medication if there is any confusion. Use MIMS for identifying information about all the drugs they are taking. The Australian Medicines Handbook provides information about all classes of drugs, or call the Psychotropic Drug Advisory Service or the National Prescribing Service Medicines Line
- ** When people have other problems for which they are taking medications, it will be important to liaise with their doctor or other health professional.

General Wellbeing

At the moment how are you feeling:

- Physically?
- · Mentally?
- Emotionally?

** If the person describes withdrawal symptoms ask the following question:

How frequent and severe are the symptoms?

(see Client Benzodiazepine Withdrawal Symptom Checklist R3.1 in Resources)

** The person may describe symptoms without identifying them as withdrawal. This is an opportunity to introduce the connection between withdrawal symptoms from benzodiazepines and symptoms relating to the initial condition for which the benzodiazepines were prescribed (i.e. anxiety and sleep issues). The current symptoms may be benzodiazepine withdrawal rather than the underlying condition.

Current Benzodiazepine Use

How many weeks, months or years have you been taking benzodiazepines?

In what dosages?

Who prescribed/prescribes them?

Have you experienced any changes in behaviour after commencing benzodiazepines?

Have you experienced any family or relationship problems after commencing benzodiazepines?

If so, how soon after commencing the benzodiazepines did you experience these problems or notice any changes?

Are the changes and problems intermittent or continuous?

History of Benzodiazepine Use

Who prescribed the benzodiazepines originally and for what reason?

If you do not remember the original reason, what is your recollection of why you take benzodiazepines?

Have you ever been prescribed more than one benzodiazepine?

Have you ever changed to a different benzodiazepine?

Increases or Decreases in Dose

Have you ever increased the dose?

What was the effect?

Have you ever taken an extra dose before a stressful event?

Do you carry your tablets with you?

**It is important to ask about dosage, as these questions will alert you to a pattern that may not have been identified as dependent use. It will also indicate whether recommended doses are being exceeded.

Recommended daily limits vary according to the kind of drug taken. If benzodiazepines have been inappropriately prescribed and taken for both anxiety and for sleep, the combination of both pills may mean the recommended limit has been exceeded. (see resources R1.1 for Benzodiazepine Equivalence Chart)

Previous Reductions

Have you ever skipped a dose?

If so, why?

What was the result of skipping the dose?

Have you ever tried to cut down your dose?

If so, why?

What was the result of cutting down the dose?

Have you ever gone cold turkey? (i.e. stopped taking medication suddenly)

If so, why – what were the circumstances?

What was the result of going cold turkey"?

Past Treatment

Have you had other treatment to help reduce your benzodiazepines?

If yes, what treatment did you receive?

Have you ever visited a psychiatrist? If yes, what were the circumstances?

Have you ever visited a psychologist or counsellor?

How helpful was it?

Past History of other prescribed and non-prescribed drug use

Have you ever taken antidepressants or other mood altering drugs?

Have you ever used illegal drugs?

Do you smoke?

Do you drink caffeine? (in coffee, tea, cola or energy drinks)

Do you take pain killers containing codeine? (e.g. panadeine)

In a normal week, how much alcohol would you drink?

**It is important to ask about a person's alcohol habits. It is not uncommon for people to be dependent on both alcohol and benzodiazepines and both dependencies will need to be addressed appropriately

Medical History

Have you had any major illnesses or operations?

Do you have any other conditions?

Have you tried any alternative therapies? For example, homeopathy or naturopathy.

Social Networks

Do you have support from family and friends for your recovery? Are you in a relationship?

Has anyone else in your family used benzodiazepines, alcohol or other drugs? Are you involved in any activities? (e.g. sport or music)

Other factors which may affect the person's wellbeing

Are there any major changes occurring in your life at the moment, for example, retirement, moving house, family changes?

Have you experienced any traumas in your life, for example, abuse, accidents, sudden deaths, fires etc?

Do you exercise? What type of exercise and how frequently?

In a normal week, what would you eat for main meals and in between snacks? Do you practise any relaxation or meditation?

Do you know how to use deep breathing techniques to help you relax?

(See resources: R3.2 Case History – Benzodiazepine Dependency)

3

Commencing treatment

3.2

INFORMATION GIVING

Once you have taken a clear history:

- Explain to the person the possible connection between their physical and emotional problems and their long-term use of benzodiazepines. This connection gives people enormous encouragement for the future. Understanding the connection between the long term use of the benzodiazepines and how they have been feeling relieves the concern that something is wrong with them and that they are somehow responsible.
- Outline the elements of the treatment process slow reduction of pills, alternative anxiety and sleep management, and support through withdrawal.
- Discuss the possibility of withdrawal symptoms and the length of time the person may experience these be open and honest about how long withdrawal symptoms may last.
- Discuss treatment options (e.g. Residential withdrawal, home based withdrawal, counselling, telephone support). When providing counselling for adjunctive problems such as anxiety or depression, inform the client about the theoretical framework you use.

3.3 TREATMENT PLAN

The proposed treatment plan will differ from person to person but needs to include:

- Length of time between visits
- Proposed reduction program
- Teaching relaxation techniques or appropriate referral
- Teaching deep breathing techniques
- Possible issues to be addressed in counselling
- Anxiety management and coping skills
- Sleep strategies
- Contact with prescribing doctor
- Counsellors preferred way of working and options (not necessarily in the first session).

3.3.1 - TIMING

Once the decision has been made to come off the benzodiazepines, the client and counsellor can discuss the best time to start the reduction. Reducing the dose is likely to result in withdrawal symptoms, so the client needs to be prepared to cope with these.

If the client is going through a period of added stress or has a number of functions to attend in the near future, it will usually be preferable to wait before starting to reduce the dose.

Other problems may need to be addressed first in counselling.

Relaxation training might be necessary to help manage the symptoms of anxiety before any reduction is commenced.

Commencing treatment

Some people will need only minimal help to reduce their benzodiazepines, requiring a reduction regime, some information and encouragement.

Others will need more intensive counselling and support to enable them to cope effectively during and after withdrawal, or because of unresolved issues relating to their initial commencement on benzodiazepines (e.g. trauma).

3.3.2 - THE ROLE OF THE GENERAL PRACTITIONER

With the permission of the client, contact the client's GP. (If the client does not have a current GP, they will need to find a new one to provide medical support through the reduction and withdrawal process.)

The GP will:

- Prescribe benzodiazepines for a tapering dose
- Prescribe other drugs if necessary
- Examine any physical symptoms if necessary. (Some withdrawal symptoms are similar to symptoms of more serious conditions)
- Provide information about the physical symptoms of stress
- Provide information about the use of benzodiazepines with other drugs, alcohol or while working with machinery.

3.4

INPATIENT WITHDRAWAL

Inpatient withdrawal can be helpful if the person:

- Has significant medical problems
- Has a history of withdrawal seizures (fits)
- Has a psychiatric disorder as well as benzodiazepine dependency
- Is a high dose user (>50 mg diazepam equivalent per day)
- Feels that they will be able to reduce their dose more successfully
- Is a polydrug user.

3.5 SUPPORT GROUPS

Support or recovery groups are an important element during treatment of benzodiazepine dependence. Although benzodiazepine dependence is a widespread problem, it often goes unrecognized and unacknowledged, and as a result, benzodiazepine dependence can be a very stigmatizing and isolating experience.

A peer support group can offer individuals the opportunity for dependence to be normalized, thereby reducing fear, isolation, and stigma, as well as offering an opportunity to receive support and encouragement from peers. Offering a peer support group as an adjunct to individual counselling can enhance treatment engagement, reduce substance use and relapse rates, and increases self-efficacy. Although support groups can be difficult to maintain, this additional layer of support can be extremely valuable for clients, particularly those that have difficulty engaging with individual counselling and phone-based support.⁸⁵

Commencing treatment

3.6 e-THERAPY

eTherapy and computer-assisted therapies may be useful for individuals withdrawing from benzodiazepines. Although research into eTherapy is in its early stages, existing evidence indicates that these treatments can lead to less substance use, higher motivation to change, and similar levels of engagement and retention to conventional counselling. eTherapy can be particularly helpful for individuals who live in rural or remote settings, or for individuals who may have concerns around engaging in therapy, such as concerns about confidentiality.

The BDZ eHealth program was developed by Federation University in association with Reconnexion, and comprises five modules designed to assist individuals withdrawing from benzodiazepines. The BDZ ehealth program is available free of charge and is accessible via web, mobile, and tablet and consists of five program modules, including:

- 1. Benzodiazepine and Dependence
- 2. The Pathway to Reduction
- 3. A Gradual Reduction Program (Case Example)
- 4. Withdrawal Symptoms
- 5. Managing Withdrawal Symptoms

The program includes a symptom quiz, a tracking system to monitor progress throughout withdrawal, and practical strategies for the management of withdrawal symptoms, including controlled breathing and progressive muscle relaxation. BDZ eHealth can be found at benzodiazepine.fedehealth.org.au

Similarly, individuals withdrawing from benzodiazepines may find MoodGym moodgym.com.au or mental health online mentalhealthonline.org.au useful for managing symptoms of anxiety and depression that are associated with withdrawal.86

3.7 **SECONDARY CONSULTATIONS**

Support is available for clinicians, medical practitioners or counsellors who would like more information to assist clients in reducing their Benzodiazepine use. Reconnexion counsellors are trained personnel with additional expertise in helping clients through benzodiazepine withdrawal and are available for secondary consultations over the telephone. Clients can be referred to the Reconnexion counselling service for face to face support with their benzodiazepine use and the counsellors often work in partnership with medical practitioners.

Reducing benzodiazepines

Chapter 4

Reducing benzodiazepines

4.1 STEP 1: STABILIZING THE DOSE Many people seeking assistance to reduce or cease their dose of benzodiazepines will be taking their medication irregularly – often when they perceive their need is greatest.

Before commencing to reduce the overall dose, aim to stabilise the current dose taken by spacing the tablets at regular intervals throughout the day.

Some clients may have already commenced reducing their benzodiazepines before having come to see you. If this is causing too much distress because of the withdrawal symptoms, it might be advisable to increase the dose slightly.

If the dose taken has been very erratic, with large amounts taken one day and smaller amounts the next, it may be difficult to determine an average daily dose. A retrospective diary of the past week could be useful in determining what this might be. It may be useful to liaise with the GP who can advise on the number of scripts written. Once the average daily dose has been determined, observe the client closely for withdrawal symptoms and adjust the dose accordingly.

Switching to a long acting benzodiazepine, such as Diazepam, can help better manage withdrawal symptoms.

Evenly spacing the dose throughout the day helps to:

- Stabilise the level of benzodiazepines in the bloodstream, thus reducing the possibility of withdrawal symptoms occurring between doses
- Reinforce that taking a pill is no longer the strategy for coping in times of higher stress
- Allow time for you to establish a relationship with the client
- Allow time to address other issues or commence anxiety reduction, for example, relaxation training.

Once stabilized, encourage the client not to deviate from the agreed dose schedule - not to skip a dose or take an extra dose. The aim is for the client to feel reasonably comfortable before commencing to reduce if possible.

Aim to schedule the benzodiazepine dose evenly throughout the day.

Stabilizing the dose can take as little as one to two weeks or much longer, depending on a number of factors. For some people it may take many attempts to stabilise their dose. If this is the case, reassure the client that he or she hasn't failed but that it demonstrates the degree of dependency. Explore the reasons that have contributed to the client taking extra benzodiazepines and offer alternative strategies.

4.1.1 - STABILIZING LARGE DOSES

For people who have developed tolerance to an extremely high dose of benzodiazepines (e.g. 20-30 tablets per day) a reasonably high dose may need to be prescribed initially for the person to stabilise.

This process may need to occur in an inpatient setting or residential withdrawal unit to ensure the person's safety.

If the client does not enter a residential withdrawal unit, they will need to agree to pick up his or her supply each day at the pharmacy and to see the same GP, who will monitor the reduction.

4.1.2 - BENZODIAZEPINES TAKEN AT NIGHT ONLY FOR SLEEPING

If the client takes the pills only at night, advise them to continue doing this rather than to distribute the dose evenly throughout the day. The client has already tolerated daytime withdrawal.

The possible sedating effects during the day make staying on the night time dose the preferred option.

4.1.3 - EXAMPLES OF DOSE STABILIZATION

The following case examples provide a guide to stabilizing different people using different benzodiazepines and a variety of doses.

Case 1: Insomnia

Jenny takes 10mg of Temazepam at night when she goes to bed. Bedtime ranges anywhere between 9.30pm and 11.30pm. Sometimes (about twice a week) Jenny misses taking her pill and therefore gets no sleep that night. To compensate Jenny will take two tablets the following night.

Stabilise Jenny's dose by suggesting she take her Temazepam every night and at the same time, say 10.00pm.

Case 2: Anxiety / erratic use

Phillip takes 0.5mg tablets of Kalma (Alprazolam) for anxiety. Typically he takes one tablet when he wakes up in the morning, one to two tablets late afternoon, and a further one to two tablets before going to bed. Phillip says he usually takes the higher doses in the afternoon and evening four times a week. (Maximum dose of 2.5mg a day; minimum of 1.5mg daily, with a usual weekly dose of 14.5mg).

If Phillip is agreeable, stabilise his dose as follows:

7:00AM	12:00PM	5:00PM	10:00PM
1 tablet (0.5mg)	1 tablet (0.5mg)	1 tablet (0.5mg)	1 tablet (0.5mg)

Case 3: Multi Benzodiazepine use

Katie takes erratic daily doses of Valium, Serepax and Temazepam. A minimum daily amount for her would usually be eight x 5mg Valium tablets, six or eight x 30mg Serepax and five or six x 10mg Temazepam.

Convert the entire dose to an equivalent Diazepam dose. (See equivalency information under Step 2 and Benzodiazepine Equivalence Chart resource R1.1). Katie's intake is approximately equivalent to 120mg Diazepam. The usual recommended maximum stabilizing Diazepam dose is between 50mg and 80mg daily, so Katie's intake is too high to convert to an equivalent Diazepam dose. She will therefore need to make a reduction in her usual dose straight away. Although she is unlikely to have seizures if she is stabilized on more than 50mg Diazepam, she may prefer to make this reduction in a withdrawal unit to provide her with 24 hour support and medical monitoring.

Reassure Katie that she will most likely stay on the reduced dose for some weeks before contemplating further reduction. Katie would need to agree to see only one GP, and to pick up her daily supply of Diazepam from the pharmacist.

4.2
STEP 2:
SUBSTITUTING A
SHORT ACTING
BENZODIAZEPINE
WITH A LONG
ACTING ONE

Substituting a short acting benzodiazepine with a long acting benzodiazepine, such as Diazepam, is recommended before reducing the benzodiazepine dose. Substituting the longer acting benzodiazepine helps to make the withdrawal process more tolerable by minimising the withdrawal symptoms between doses.

Other reasons for considering substituting Diazepam include:

- It is listed on the Pharmaceutical Benefits Scheme (PBS) and may be cheaper
- Diazepam is available in 5mg and 2mg tablets, which provides more flexibility when cutting down smaller doses
- Diazepam tends to have a less severe withdrawal syndrome than other shorter acting benzodiazepines.

4.2.1 - STOP AND THINK

Before substituting to a long acting benzodiazepine, take into consideration:

- It is not necessary to substitute short acting benzodiazepines with long acting ones if the person is only taking one benzodiazepine at night.
- If the person is over 65 years of age, substitution to a long acting benzodiazepine is not advisable, as older people metabolise drugs more slowly and there may be an increased risk of drug accumulation and over sedation.
- If a person is taking a medium acting benzodiazepine it is not necessary to change to a long acting one. Space the doses evenly throughout the day. Substitution to a long acting benzodiazepine can always be an option if the person is having difficulty reducing because of withdrawal symptoms.
- Substitution to a long acting benzodiazepine can be done at any stage of the reduction process if difficulty is experienced reducing from short or medium acting benzodiazepines.

- A person may have had a negative experience with Diazepam or simply does not want to change. Their wishes should be respected. Substitution may be an option at a later stage.
- Some people taking Alprazolam (Kalma) or Lorazepam (Ativan) experience difficulties when their benzodiazepine is substituted with Diazepam (Valium). (This is most likely due to the fact that both Lorazepam and Alprazolam are associated with a more severe withdrawal syndrome.) It may be necessary to transfer more slowly, or to transfer only half the dose for Diazepam while maintaining some of the original drug. Given the high equivalent dose of Diazepam for Alprazolam, it may also be advisable to reduce people from higher doses (e.g. 4mg Kalma) to about 2mg Kalma before substituting Diazepam.
- Sometimes the substitution is problematic and the person experiences severe withdrawal symptoms, even when they are on an equivalent dosage. In this case it may be best to recommend commencing the reduction from their original medication and skip the substitution to Diazepam.
- For people already taking a long acting benzodiazepine (e.g. Mogadon, Rivotril), it is not necessary to transfer to Diazepam.
- Substituting a short acting benzodiazepine with a long acting one should usually be a gradual process. One dose of the long acting benzodiazepine should be substituted for one dose of the original short acting benzodiazepine every two to three days, until the person is taking the long acting benzodiazepine only. It is advisable to allow a further period of one to two weeks for the person to stabilise on the Diazepam.
- If the person is taking high doses of several different benzodiazepines, it is advisable to substitute all the doses with one long acting benzodiazepine. In this case, the Diazepam substitution is usually done straight away rather than dose by dose (see the example of Katie in Case 3).

Reconnexion is available for secondary consultation on the process of stabilisation and substitution to a long acting benzodiazepine.

Once substitution is complete, stabilise again for **one to two weeks** before reducing the dose.

During this process of substitution, close communication should be maintained between the counsellor, the GP prescribing the dose and the client.

4.2.2 - DIAZEPAM EQUIVALENTS FOR BENZODIAZEPINE SUBSTITUTION

An accurate conversion of the benzodiazepine dose to Diazepam can be problematic as the equivalent dose calculations are approximate.

The correct dose equivalent will depend on the individual. Age, weight, health and liver function may all impact on how a drug is metabolised.

Maintain close contact with your client during the substitution period.

Be alert for under or over sedation. The aim is for the client to feel about the same when taking the long acting benzodiazepine as they did on their previous benzodiazepine dose. Many people report feeling calmer and more in control when taking the long acting benzodiazepine.

To establish if the substituted dose is about right, look for signs of too much sedation on the one hand or too severe withdrawal on the other. For example, if the person is feeling drowsy and euphoric then the substituted dose is too high. If the person is feeling highly anxious with other signs of withdrawal such as headaches, shaking or sleep disturbance then the substituted dose is too low. In consultation with the GP, you suggest that the client adjusts the dose accordingly.

Table 4: Comparative information for benzodiazepines, zolpidem and zopiclone

Drug	Approximate equivalent dose (mg)* to diazepam 5mg	Length of action †
Alprazolam	0.5	short-acting
Bromazepam	3	medium-acting
Clobazam	10	long-acting
Clonazepam	0.25	long-acting
Diazepam	5	long-acting
Flunitrazepam	1	long-acting
Lorazepam	1‡	medium-acting
Midazolam	acute use only	very-short-acting
Nitrazepam	5	long-acting
Oxazepam	15	short-acting
Temazepam	10	short-acting
Triazolam	0.25	very-short-acting
Zolpidem	10	very-short-acting
Zopiclone	7.5	very-short-acting

* the widely varying half-lives and receptor binding characteristics of these drugs make exact dose equivalents difficult to establish

t very-short-acting (half-life <6hours; short-acting (half-life 6 to 12 hours; medium-acting (half-life 12 to 24 hours; long-acting (half-life>24 hours.

Note that even very-short-acting and short-acting benzodiazepines can have a long half-life in some patients

‡ lorazepam may be relatively more potent at higher doses.

Reproduced with permission from Psychotropic Expert Group. Therapeutic guidelines: psychotropic. Version 7. Melbourne: Therapeutic Guidelines limited; 2013.

4.2.3 - EXAMPLE OF SUBSTITUTION TO DIAZEPAM

The following is an example of substituting to a long acting benzodiazepine, Diazepam.

Phillip has been taking 0.5mg of Alprazolam (Kalma) three to five tablets daily for four years. He was originally prescribed them for panic attacks during a stressful period at work. He is stabilised on four doses x 0.5mg daily and is coping well.

Current dose of Alprazolam

7am	12 noon	5pm	10pm
1 tablet Kalma	1 tablet Kalma	1 tablet Kalma	1 tablet Kalma
0.5mg	0.5mg	0.5mg	0.5mg

Substitute Phillip's dose of Alprazolam with an equivalent dose of Diazepam (Valium) in the following way:

Substitute the 10pm Kalma dose with Valium for the next 3 days (days 1,2,3)

7am	12 noon	5pm	10pm
1 tablet Kalma	1 tablet Kalma	1 tablet Kalma	1 tablet Valium
0.5mg	0.5mg	0.5mg	5mg (may need to increase to 10mg)

If stabilised, also substitute the morning Kalma dose for Valium for 3 days (days 4,5,6)

7am	12 noon	5pm	10pm
1 tablet Valium	1 tablet Kalma	1 tablet Kalma	1 tablet Valium
5mg	0.5mg	0.5mg	5mg

Reducing benzodiazepines

If stabiised, also substitute the 5pm Kalma dose with Valium for 3 days (days 7,6,9)

7am	12 noon	5pm	10pm
1 tablet Valium	1 tablet Kalma	1 tablet Valium	1 tablet Valium
5mg	0.5mg	5mg	5mg

If stabilised, also substitute the 12noon Kalma dose for Valium for 3 days (days 10,11,12)

7am	12 noon	5pm	10pm
1 tablet Valium	1 tablet Valium	1 tablet Valium	1 tablet Valium
5mg	5mg	5mg	5mg

Suggest Phillip remains on the Valium dose for 1-2 weeks before commencing reductions.

This example assumes that all has gone well with each of the conversions to Valium. You may need to adjust the dose as described if it becomes clear that too much or too little Valium has been substituted. Depending on the symptoms, you would recommend that Phillip discuss with his GP an increase or decrease of ½ tablet initially.

4.3 STEP 3: GRADUALLY REDUCING THE DOSE A gradual reduction, dose by dose, is the most comfortable way for people to withdraw from benzodiazepines and is most likely to be successful.

The aim is for the client to eventually become drug free.

If it is not possible for the client to completely reduce their intake, then a reduction in dose is advantageous, particularly for high dose users where obtaining the supply of benzodiazepines has previously involved illegal or harmful behaviour.

When gradually reducing a person's benzodiazepine dose:

- Start with a small reduction this can be increased later if well tolerated
- Consult with the client regarding which dose they prefer to reduce at the start (i.e. morning/ afternoon/evening etc.)
- Reassure the client that decisions regarding reductions are in their control
 how they feel will determine the timing of the reduction
- Reduce a maximum of 10-15 % of the total daily dose every 10-14 days. The actual amount reduced will need to take into account the strength of the individual benzodiazepine tablet, and what is practical (For example, $4 \times 5 \text{mg}$ Diazepam tabs taken daily = $20 \text{mg} \times 15 \%$ is 3. As it is easiest to half a 5 mg tablet, the reduction would most likely be by 2.5 mg.)

Use common sense when calculating a reduction program from a small daily dose (e.g. 1 tablet) as 15% will be too small to be practicable.

4

- It is important to wait until at least one to two weeks has passed before considering the next reduction, as withdrawal symptoms from long acting benzodiazepines may not be experienced until a few days following the reduction
- Adjust the percentage of reduction according to how well or poorly the client is able to tolerate the ensuing withdrawal symptoms
- Adjust the timing of the reductions according to how well or poorly the client is able to tolerate the withdrawal symptoms; and taking into account other stressful life events
- Encourage the person reducing his or her intake to keep in close contact with you by phone or email after a dose reduction
- Monitor the person's progress on a daily, weekly or fortnightly basis
- Check that the dose has been taken correctly
- Provide a written reduction chart to follow
- Allow time for the person to stabilise before attempting the next reduction most people have an increase in withdrawal symptoms after each reduction
- The time it takes to reduce the dose will usually depend on the length of time the client has been taking the benzodiazepines. For example, if the client has only been taking benzodiazepines for a number of months, one would anticipate a fairly quick reduction with minimal withdrawal symptoms, whereas someone who has been taking the drugs for many years may only be able to tolerate small reductions each fortnight or longer
- During the reduction and stabilising process most people will need to take a break or rest. A break from reductions is often needed because the constant symptoms of withdrawal can be debilitating and tiring
- Avoid "cold turkey" withdrawal if the person stops taking their benzodiazepines all at once, it is likely to result in severe withdrawal symptoms and may induce a withdrawal seizure (fit).

4.3.1 - BENZODIAZEPINES AVAILABLE IN MORE THAN ONE STRENGTH

Many benzodiazepines are produced in a number of different strengths, which can be useful when cutting a tablet into smaller portions becomes impractical.

Table 5: Benzodiazepine strengths available

Benzodiazepines available in more than one strength	Strength(s) available
Alprazolam	0.25mg, 0.5mg, 1mg, 2mg
Bromazepam	3mg, 6mg
Clonazepam	0.5mg, 2mg
Diazepam	2mg, 5mg
Lorazepam	1mg, 2.5mg
Oxazepam	15mg, 30mg

4.3.2 - CUTTING DOWN TABLETS

Cutting down the tablets into very small amounts can often be difficult. It may be necessary to crush the tablet or portion of the tablet and then divide. Be sure to warn against cutting or crushing too many tablets in advance. Once cut, the tablet becomes vulnerable to deterioration through exposure to the air, which may impact upon its potency and trigger further withdrawal symptoms. Compounding chemists can also be of assistance with dosages.

4.3.3 - REMEMBERING REDUCTION RATES

Visual guides (see resources: R4.1, R4.2, R4.3 for examples of reduction guides) to reducing benzodiazepines are a useful tool for both practitioners and people coming off benzodiazepines. Many people taking benzodiazepines have problems with memory and concentration and it isn't unusual for people to make mistakes about the agreed reduction. Write the agreed reduction on a chart as a reminder. The reduction schedule chart can be adapted to suit the agreed reduction program.

Chapter 5

5.1 WITHDRAWAL FROM DRUGS

Withdrawal is a series of physical, psychological and behavioural changes experienced when a drug is cut down, ceased or loses its effectiveness.

5.2 BENZODIAZEPINE WITHDRAWAL

Available studies estimate that 50-80 % of people who have taken benzodiazepines continuously for six months or longer will experience withdrawal symptoms on ceasing or reducing the drug.¹⁵

People seeking assistance with benzodiazepine reduction and withdrawal often want to know how these drugs affect their bodies.

Although the mechanism of benzodiazepine dependence and withdrawal is not fully understood, it is thought that the symptoms of withdrawal are partly due to the lack of activity of the major inhibitory (calming) neurotransmitter GABA.

In simple terms, the brain is continually seeking to achieve a state of balance between its inhibitory and excitatory neurotransmitters. Benzodiazepines work by enhancing the effect of GABA. This means that when benzodiazepines are continually present in the brain, the brain responds by producing fewer GABA receptors. When the benzodiazepine levels are reduced or stopped, the brain has a low level of receptors for GABA and therefore nothing to counterbalance the excitatory neurotransmitters, or hormones such as adrenalin. The lack of balance in the brain chemistry may explain withdrawal symptoms such as increased anxiety, panic attacks, perceptual distortions and insomnia.

To regain a state of balance, the brain responds by producing extra GABA receptors. In time, brain functioning and levels of GABA and excitatory neurotransmitters return to normal.

It is possible that people experience long lasting withdrawal symptoms due to the brain chemistry taking a longer time than usual to return to normal.

Although many people experience a range of uncomfortable, painful or disturbing symptoms in withdrawal, the total experience is not necessarily a negative one. It helps to remind people of the positive changes that occur at the same time as withdrawal.

These changes include:

- Improvements in their ability to concentrate
- An increase in confidence
- · The realisation that they can manage anxiety far better than before
- Family and friends noticing physical improvements it is encouraging for people to see that they look healthier, even if they don't feel it.

5.3 ONSET OF SYMPTOMS Symptoms may occur within hours (usually 24 hours) after ceasing or reducing the benzodiazepine dose. When withdrawing from long acting benzodiazepines the onset of symptoms of withdrawal will take longer and may be noticed as late as a week following a reduction.

5.4 BENZODIAZEPINE WITHDRAWAL SYNDROME

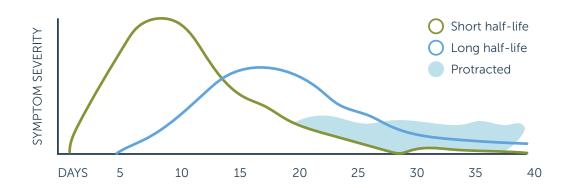


Diagram 2: Time course for short-acting and long-acting benzodiazepine withdrawal.

Lisa Frank & John Pead New Concepts in Drug Withdrawal Monograph 4, 1995 p.59 University of Melbourne & Drug Services Victoria. Reproduced with permission.

Informing people of the range of possible withdrawal symptoms is important. Apart from helping to eliminate fear, knowledge of the range of symptoms can also help to normalise their situation.

If there is any uncertainty about whether symptoms are related to benzodiazepine withdrawal, these will need to be examined more closely by a medical practitioner. For example, chest pains (which are common in withdrawal) may signify some other health problem and need to be investigated.

All systems of the body can be affected by withdrawal and a wide range of symptoms may be experienced. Usually the hormonal, immune and metabolic systems are affected.

5.5 SYMPTOMS OF BENZODIAZEPINE WITHDRAWAL Benzodiazepine withdrawal has a wide range of symptoms. Withdrawal can effect the hormonal, immune and metabolic systems. Common symptoms include anxiety, depression, insomnia, sweating, nausea, dizziness, blurred vision and muscle or joint pain.

The following tables show the range of symptoms a person may experience during benzodiazepine withdrawal. (See resource R5.1 for a list of range of withdrawal symptoms).

5.5.1 - COMMON WITHDRAWAL SYMPTOMS

- Abdominal pains and cramps
- Agoraphobia
- Anxiety
- · Breathing difficulties
- Blurred vision
- Changes in perception (faces distorting and inanimate objects/surfaces moving)
- Depersonalization (a feeling of not being connected with yourself or your body, or a feeling of not knowing who you are)
- Depression
- Distended abdomen
- Dizziness
- Extreme lethargy
- Fears (uncharacteristic)
- · Feelings of unreality
- Flu-like symptoms
- Heavy limbs
- Heart palpitations
- Hypersensitivity to light and/or sound
- Indigestion

- Insomnia
- Irritability
- Lack of concentration
- Lack of coordination
- · Loss of balance
- Loss of memory
- Muscular aches and pains
- Nausea
- Nightmares
- Panic attacks
- Rapid mood changes (crying one moment and laughing the next)
- Restlessness
- Severe headaches
- Shaking
- Sore eyes
- Sweating
- Tightness in the chest
- Tightness in the head (feeling of a band around the head)

5.5.2 - LESS COMMON WITHDRAWAL SYMPTOMS

- Aching jaw
- Craving for sweet food
- Constipation
- Diarrhoea
- Difficulty swallowing
- Feelings of the ground moving
- Hallucinations (auditory and visual)
- Hyperactivity
- Incontinence or frequency and urgency (needing to urinate often and in a hurry)
- · Increasing saliva
- Loss or changes of appetite
- Loss of taste, or changes in taste (e.g. a metallic taste in the mouth or when eating)

- Menstrual problems (painful periods, irregular periods or periods ceasing to occur)
- Morbid thoughts
- Numbness in any part of the body
- Outbursts of rage and aggression
- Paranoia
- Painful scalp
- Persistent, unpleasant memories
- Pins and needles
- Rapid changes in body temperature
- Sexual problems (changes in libido)
- Skin problems (dryness, itchiness, rashes, slow healing, boils)
- Sore mouth and tongue (ulcers, cracked lips, cold sores)

- · Speech difficulties
- Suicidal thoughts
- Tinnitus (buzzing or ringing in the ears)
- Unusually emotionally sensitive (unable to watch the news on television or read newspapers)
- Vaginal discharge
- Vomiting
- Weight loss or gain

5.5.3 - RARE WITHDRAWAL SYMPTOMS

- Blackouts (blackouts are rare with low dose use, but less rare when large amounts have been taken. A blackout is a period of time during which a person appears to act normally but of which they have no recollection.)
- Bleeding from the nose
- Burning along the spine
- Burning sensation around the mouth
- Discharge from the breasts
- Haemorrhoids
- Hair loss

- Hypersensitivity to touch
- · Rectal bleeding
- Sinus pain
- Seizures (fits) (these are rare with gradual reductions, but are less rare with cold turkey withdrawal, large reductions, or when large doses have been taken)
- Sensitive or painful teeth
- Swollen breasts

Benzodiazepine withdrawal rating scales can be of some use in assessing benzodiazepine dependence and monitoring improvement in withdrawal over time. (See resource R5.2 for the Benzodiazepine Withdrawal Symptom Severity Questionnaire by Tyer et al 1990.)

5.6 SEVERITY OF WITHDRAWAL SYMPTOMS

The severity of withdrawal symptoms varies from person to person, from quite mild to severely debilitating. For many people the intensity of benzodiazepine withdrawal symptoms is surprising and overwhelming.

When you are offering withdrawal support it is important to reassure people that what they are experiencing is normal for benzodiazepine withdrawal and that their symptoms will pass.

5.7 DURATION OF WITHDRAWAL

Withdrawal symptoms from benzodiazepines can be present for weeks, months or, occasionally, years. In most cases, the length of time a person has been taking benzodiazepines or the amount they have been taking will affect the length of time withdrawal symptoms are experienced.

Generally, the longer the body has been accustomed to functioning with the benzodiazepine, the longer the withdrawal will take. For a small percentage of long term benzodiazepine users, withdrawal symptoms may last for two to three years.

5.8

NATURE OF THE WITHDRAWAL

The withdrawal period can be very erratic in nature. People withdrawing from benzodiazepines may experience days when they are totally free of withdrawal symptoms, followed by days of mild to severe withdrawal. These symptom-free days are unpredictable and vary in duration throughout the recovery process.

During withdrawal:

- The presence and severity of symptoms tend to fluctuate
- People often experience a wide range of symptoms at different stages of withdrawal
- One symptom which is particularly severe or troublesome may predominate for a time or for most of the withdrawal period
- People are often seriously ill or distressed.

5.9 OTHER FEATURES OF WITHDRAWAL

- Some research indicates that withdrawal from short acting benzodiazepines can be more uncomfortable between doses than from long acting benzodiazepines.
- Withdrawal from Alprazolam and Lorazepam appears to be more severe and prolonged.
- The severity of withdrawal is not dose related someone taking large quantities of benzodiazepines will not necessarily experience a more difficult withdrawal than someone taking small quantities. The length of time the person has been taking benzodiazepines is a more relevant predictor.
- Withdrawal varies in severity from person to person and there are no reliable predictors of withdrawal difficulty apart from dose and length of time taking benzodiazepines.
- The possibility of having a withdrawal seizure (fit) is greater in high dose benzodiazepine users, particularly if cold turkey withdrawal is attempted.

5.10 SUDDEN, ABRUPT WITHDRAWAL – "COLD TURKEY"

"Cold turkey" is the expression used when drug intake is stopped completely and suddenly. Cold turkey cessation of benzodiazepines can be dangerous and is usually extremely painful and distressing. For high dose benzodiazepine users, cold turkey may induce a withdrawal seizure.

Aside from the danger of cold turkey withdrawal, the usual outcome is an inability to tolerate the withdrawal symptoms and the person starts taking the benzodiazepines again. This can leave the person feeling afraid of the whole process of withdrawal and with a sense of failure.

Sometimes people choose to come off their benzodiazepines cold turkey, for a variety of reasons. If a person has made a decision to choose cold turkey withdrawal they need to:

- Be informed of the dangers
- Be in close proximity to expert medical care (preferably a residential withdrawal facility)
- Have support and understanding about what is happening to their body.

Reducing benzodiazepines should ideally be undertaken with a gradual tapered reduction, which is safer and easier.

Chapter 6

When supporting someone through benzodiazepine withdrawal:

- Recognize the uniqueness of benzodiazepine withdrawal
- Provide supportive, empathetic counselling and be able to **respond to immediate needs** (such as managing panic attacks
- Make sure the person has all the relevant information to help them make informed decisions
- Be familiar with the likely pattern of benzodiazepine withdrawal
- Inform the person about the possibility of a relapse and how to prevent it
- Be prepared for the length of time withdrawal support may be required
- Be confident to teach at least two relaxation techniques
- Remain open to supporting all age groups through reduction and withdrawal
- Involve and inform family members as appropriate.

Withdrawal from Benozodiazepines:

- is unique
- takes time
- requires ongoing support

6.1 SUPPORT STRATEGIES

6.1.1 – PROVIDE INFORMATION

People often express a strong need for detailed information about withdrawal. Providing information usually allows people to make informed decisions about reductions. Handouts and access to websites complement the verbal information provided in counselling sessions.

Advise clients, however, that stories on "chat rooms" on some benzodiazepine related websites are very individual and not necessarily representative of a typical experience of withdrawal

6.1.2 - PRIORITISE THE CLIENT'S NEEDS

Benzodiazepine reduction may be either the most important element of recovery or the least important. Sometimes other problems must be resolved before the person is able to commence benzodiazepine reduction.

6.1.3 - THE POSSIBILITY OF RELAPSE

It may take many attempts for a person to stabilise their dose, or to maintain a dose reduction as planned. Sometimes a person will have been drug free for a period of time and then start taking benzodiazepines once more. Reassure the person that a relapse to the original dose does not mean failure. A relapse can provide helpful insight to a person, as it becomes clear just how dependent they have become using the benzodiazepines to cope.



You may need to encourage the person to see the relapse as an opportunity to begin learning new skills which will eventually replace the old habit of taking the benzodiazepine. Such skills might include relaxation or deep breathing training, helping the person to generate alternatives for managing stress, improving selfesteem, assertiveness and communication.

6.1.4 - DIFFERENTIATING WITHDRAWAL SYMPTOMS

It is sometimes difficult to know if symptoms experienced during the withdrawal syndrome, such as anxiety, depression, insomnia or panic attacks, are symptoms of withdrawal or conditions that were present before taking benzodiazepines.

It can help in differentiating to ask if more than one symptom of withdrawal is present. If only one is present, for example, high anxiety, then one could usually assume that the anxiety is not withdrawal related.

Until the assessment becomes clearer, provide symptom management strategies initially. For example, for high anxiety, teach relaxation and breathing techniques as an initial intervention rather than initiating a Cognitive Behavioural Therapy program.

6.1.5 - CONSISTENT AND ON-GOING SUPPORT

Many people will experience acute and prolonged physical, emotional or psychological distress during withdrawal. Recovery from the withdrawal symptoms can also take a long time. Be supportive and reassuring for however long it takes the person to recover from the withdrawal symptoms.

6.1.6 - WITHDRAWAL AND OLDER PEOPLE

There is no discernible difference between the outcomes of withdrawal for older and young people. Withdrawal from benzodiazepines for older people is often successful if it is accompanied by adequate support and encouragement. A very slow reduction and help to manage the withdrawal symptoms will increase the possibility of becoming drug free, which can lead to improvements in physical health, reduce the risk of falls and improve anxiety and insomnia.

6.2

LIFESTYLE INFLUENCES TO HELP MANAGE **WITHDRAWAL SYMPTOMS**

Influences which can help the person cope during the withdrawal process include:

- Relaxation and meditation techniques
- Slow abdominal breathing
- A good diet
- Abstaining from alcohol
- A regular exercise routine
- Keeping a diary
- Massage
- Support groups.

6.2.1 - RELAXATION AND MEDITATION

Relaxation can help to decrease the intensity of a range of symptoms in benzodiazepine withdrawal. It is a useful therapeutic tool in decreasing anxiety, which is a common withdrawal symptom, and often a reason for benzodiazepines being initially prescribed.

Relaxation is a state of deep rest for the mind and body, which is not achievable through normal rest or sleep. In deep relaxation, the body responds by relaxing the muscles and lowering blood pressure and heart rate. The mind becomes calm and peaceful.

Over a period of time, tension, stress and anxiety have negative effects on the body. These effects include an overactive bowel or bladder, muscle stiffness or soreness and abdominal pain. The immune system is also affected, as is the circadian rhythm.

There are many different types of relaxation techniques. All have the same goal – releasing the tension in the body and promoting a calm peaceful experience.

When teaching relaxation aim to be competent in at least two techniques. People relate more readily to some techniques and sometimes it is necessary to experiment. Progressive muscle relaxation, tense and release, creative visualisation and meditation are useful techniques.

Provide a relaxation CD to take home to practise the technique. Relaxation should be practised at least once a day, preferably twice.

(See R6.6, R6.2, R6.3, R6.4 in resources for Relaxation Techniques.)

6.2.2 - SLOW ABDOMINAL BREATHING

Slow breathing techniques decrease the escalation of anxiety and feelings of panic and have a calming effect on the mind. The message to the mind and body is one of relaxation and while the mind is concentrating on the breathing technique it cannot concentrate on anxiety producing thoughts.

Once the breathing technique has been mastered, it can be practised anywhere including:

- Waiting in a queue
- · While driving
- · Waiting for a job interview
- At a social gathering.

Slow or abdominal breathing techniques are important and basic skills for people in withdrawal. They are essential relaxation tools and are always readily available. Frequent rehearsal and reminders are often necessary. For people who have experienced long term anxiety, learning how to breathe slowly may take some practice so encouragement and persistence are needed.

(See R6.5 in resources for Abdominal Breathing techniques).

6.2.3 - NUTRITION DURING WITHDRAWAL

Many people experience either an increase in appetite or loss of appetite during withdrawal and need encouragement to maintain a healthy diet. Sometimes people feel too sick to prepare or eat food. A healthy diet can be an important factor in improving energy levels and the ability to cope with withdrawal.

Encourage clients to:

- 1. Drink lots of water, preferably warm water as it aids digestion.
- 2. If not feeling very hungry, or if feeling weak or faint at certain times during the day, eat small amounts of healthy food more frequently, rather than sticking to large amounts three times daily. Regular and small meals will help to stabilise the blood sugar levels and avoid fluctuations in the body's fuel source.
- 3. Eat a well-balanced diet. The Australian Dietary Guidelines brochure is a useful guide for people in withdrawal. Eat plenty of complex carbohydrates including bread, potatoes, pulses and plenty of fresh fruit and vegetables. Eat less fat and sugar and reduce or limit fried foods, pies, cream, butter, chocolates and snack foods. A copy of the guidelines is available at www.eatforhealth.gov.au.
- 4. Eliminate unhealthy foods (like stimulants) and refined or "junk" foods.
- 5. Caffeine is a stimulant that should be avoided during withdrawal. Caffeine stimulates the adrenal glands and increases a person's heart rate, blood pressure and blood sugar level. When the initial effect of the caffeine wears off, the blood sugar level drops and leaves the adrenal glands in a state of depletion. The effects are magnified if sugar is taken with coffee, as it puts more stress on the adrenal glands. Coffee also interferes with the absorption of minerals (in particular magnesium and iron) and depletes Vitamins B and C. Refined or junk foods provide no nourishment for the body and are usually high in sugar and fats.

You may need to help the client to plan a healthy daily or weekly menu.

6.2.4 - ALCOHOL USE

People reducing their benzodiazepine intake should be encouraged to abstain from alcohol. The key concerns for people drinking alcohol whilst taking benzodiazepines are:

- The combined effect when alcohol and benzodiazepines are used together increases the sedative effect
- It has been reported that drinking alcohol during benzodiazepine withdrawal worsens the withdrawal symptoms
- The risk of the client increasing the alcohol intake as the benzodiazepine intake decreases Be alert for signs of alcohol dependency and include screening in your initial assessment.

6.2.5 - EXERCISE

Gentle exercise, such as walking or swimming, can be undertaken daily.

People who are usually very active and use sport as their preferred method of relaxation need to be aware that muscle spasms are common during withdrawal and that they may feel exceptionally sore or tired after their usually sporting activity.

Finding the balance is important for each individual. Exercise has been shown to lift depression and induces a relaxed state of body and mind. This can be useful for people who find it difficult to use other types of relaxation techniques. Exercise helps to increase the circulation which assists in the elimination of the drug from the body.

6.2.6 - KEEPING A DIARY

A diary can be a useful tool for understanding the withdrawal process. Keeping a diary of progress gives people a sense of a goal to reach. It is also a useful vehicle for expressing and working through emotional issues. Because short-term memory loss is a common problem in withdrawal, many people find a diary useful to help remember what medication they take, symptom changes and other important things.

6.2.7 - MASSAGE

Massage is beneficial for people going through the withdrawal process because it relaxes the muscles which can become very tense and sometimes spasm. Massages also improve the circulation, which assists in eliminating the drug from the body. Additionally, massage is a useful relaxation technique.

6.2.8 - SUPPORT GROUPS

Support groups or recovery groups can be an important element of treatment. Through exchanging information on strategies for managing withdrawal and sharing of experiences, support groups can be very reassuring.

6.2.9 - USING LOCAL RESOURCES

Local facilities usually provide important resources that can be used in conjunction with treatment. These resources include:

- Community Health Services/Centres, which may provide services relevant to benzodiazepine withdrawal and recovery such as relaxation groups, discussion or therapy groups and support groups dealing with issues including domestic violence or incest.
- Neighbourhood Houses/Community Centres, which provide group activities such as discussion groups, walking groups or relaxation classes.

It is a good idea to have readily available a list of other relevant local services such as yoga classes and relaxation centres.

6

Support through benzodiazepine withdrawal

6.3

MANAGEMENT

OF COMMON

WITHDRAWAL

SYMPTOMS

The following suggestions can help with alleviating some of the most common withdrawal symptoms.

6.3.1 - ANXIETY (WITHDRAWAL RELATED)

- 1. Take the benzodiazepines dose at regular intervals, ensuring a stable dose.
- 2. Practice relaxation breathing techniques.
- 3. Practise daily relaxation or meditation techniques.
- 4. Accept the anxiety as a normal part of withdrawal.
- 5. Use distractions. For example, focus attention on an object, listen to music or go for a walk or swim.
- 6. Inform the client about the physical symptoms of stress and anxiety. Understanding the purpose of these symptoms (the" fight or flight" response) reduces the fear associated with the symptoms. (See R6.6 in resources).
- 7. Teach the client to use supportive "self -talk".

6.3.2 - INSOMNIA

Insomnia during withdrawal is one of the most common problems people face and is often very distressing. Insomnia can make it even more difficult for people to cope with withdrawal symptoms during the day.

- 1. Help the person to accept that it is normal in withdrawal to have sleeping difficulties. This will minimise the degree of anxiety related to not sleeping. Make a plan of what to do when awake during the night, e.g. listen to music, read etc.
- 2. Practice relaxation. Relaxation can help the person to go back to sleep if they have woken during the night, and ensures the person has some rest even if they are unable to sleep. Relaxation practiced during the day will also improve sleep at night.
- 3. Give advice against engaging in activities which are likely to be stimulating late at night, including limiting screen time on television, tablets etc.
- 4. Reduce or cut out alcohol-particularly late at night.
- 5. Have a warm milk drink or chamomile tea when going to bed or if unable to get back to sleep.
- 6. Have a warm bath before bed time.
- 7. Promote sleep by suggesting activities such as a regular wind-down routine each night Reading, listening to music or having a warm bath before going to bed will help the person sleep. Going to bed at the same time and waking up at the same time will also help to promote sleep.
- 8. Some herbal remedies can help promote sleep in withdrawal, but many cannot be taken safely for long periods of time. Seek a professional opinion from a qualified naturopath rather than self-medicating
- 9. Cut down on caffeine in coffee, tea and soft drinks.

10. Cut down or stop smoking as nicotine is a stimulant.

(See R6.7 resources for Handy Hints for Good Sleep)

- 1. <u>Healthy Sleep Clinic Monash www.monash.edu/medicine/base/about/clinics/healthy-sleep-clinic</u>
- 2. Melbourne Sleep Disorders Centre www.msdc.com.au/MSDC/Home.html
- 3. Epworth Sleep Centre www.epworthsleepcentre.com.au
- 4. Geelong Sleep Disorders Centre http://geelongsleep.com.au
- 5. <u>Australasian Sleep Association www.sleep.org.au (resources)</u>
- 6. <u>Sleep Health Foundation www.sleephealthfoundation.org.au (fact sheets)</u>

6.3.3 - DEPRESSION

Depression is common in withdrawal and can be one of the most difficult symptoms to manage. Some people experience persistent daily depression for quite long periods of time, while for others the depression may be intermittent – lasting for a few days and then disappearing.

- 1. Maintain close contact with the person in withdrawal. Monitor the degree of depression and ensure the client is coping.
- 2. Suggest activities which will distract the person from their feelings of depression. If the depression is sporadic, and clearly withdrawal related, the best techniques to deal with it are daily exercise; making sure the client does not become isolated; maintaining activities; ensuring home and work environments are light.
- 3. Remind the person that the depression is related to withdrawal and will, therefore, eventually pass.
- 4. Set daily goals that are small and achievable.
- 5. Give additional support. Depressed people appreciate and respond to extra support, which may need to be daily. Telephone help lines may be of benefit for example, the Reconnexion Telephone Support & Information Service, BeyondBlue telephone help line, DirectLine.
 - (www.reconnexion.org.au, www.beyondblue.org.au, www.directline.org.au) (Phone numbers are in the resources section of the manual)
- 6. Suggest having a discussion with the GP about taking antidepressants (for on going unrelieved depression). Antidepressants can assist in lifting the mood to allow facilitation of strategies to deal with the withdrawal process. It is important to review the use of antidepressants regularly, as they are not effective for everyone and can worsen agitation and anxiety initially.
- 7. Assess the risk of a suicide attempt. This will include assessing the:
 - level of depressed mood frequency and effects, desire to attempt suicide (actively or passively)
 - characteristics of the suicide wish does the person have a plan, and the means to enact that plan?

• relevant background factors such as whether the person has attempted suicide in the past, or whether a close friend or family member has attempted or committed suicide.

Ensure that you have adequate support and information when assisting clients who are depressed and may be suicidal.

If the person has a plan, the intent to act and the means to act, it is important that you respond as per your agency's procedures for working with suicidal clients (e.g. call the Crisis Assessment and Treatment (CAT) Team).

(See R6.8 resources for Activities that can help with Depression)

6.3.4 - SUICIDAL THOUGHTS

Having suicidal thoughts is a separate withdrawal symptom, not necessarily related to depression in withdrawal. Clients usually describe suicidal thoughts as distressing but that they don't have any intention of acting on them. Clients reporting suicidal thoughts during benzodiazepine withdrawal usually state that the thoughts come and go.

It is important to assess suicide risk

Assess the person's suicide risk by asking them the following questions:

- Are you having thoughts of suicide or of harming yourself?
- Do you have a plan of what you will do?
- Do you intend to put that plan into action?
- Do you have the means to do so?
- Do you know someone close to you (a friend or relative) who has committed suicide?
- Have you attempted suicide previously?

Most of the time, people will respond that they are having thoughts but have no intent or plan to put those thoughts into action. With these people, follow the three points below.

- Reassure people that these thoughts sometimes happen in withdrawal and are not a sign of a psychiatric disorder
- Keep close contact with the person by telephone
- Distraction techniques can be suggested, such as exercise, going out, calling a friend or listening to the radio.

6.3.5 - AGORAPHOBIA

Agoraphobia is a term commonly used to describe an abnormal fear of having a panic attack (or experiencing high anxiety) in particular places. After long-term use of benzodiazepines, agoraphobia can develop and it is a very common withdrawal symptom. Experiences of agoraphobia in withdrawal may be constant or intermittent.

6

Support through benzodiazepine withdrawal

The morbid dread people have about being outside their home or familiar surroundings can express itself in a range of specific fears. These fears are typified in situations like going to the supermarket, being in a crowd, travelling on public transport and interacting with people.

It is important to distinguish between agoraphobia which is related to withdrawal from benzodiazepines, and that which is a separate condition. If the person was experiencing agoraphobia before they were prescribed benzodiazepines, they may require additional or alternative therapy. Agoraphobia associated with withdrawal resolves itself in most instances, and therefore does not require specific behavioural counselling.

To support the person while they are experiencing agoraphobia, there are two main approaches:

- 1. Encourage the person to accept the fear and control anxiety associated with it. The most important feature of recovery is allowing sufficient time to learn new skills and acquire coping mechanisms, such as using breathing control as a way of controlling agoraphobia.
- 2. Going for a daily walk should be encouraged. For people experiencing agoraphobia, a daily walk may help to prevent a build-up of fear by avoiding going out.

6.3.6 - PANIC ATTACKS

Panic attacks are common in benzodiazepine withdrawal. A panic attack is an experience of sudden and overwhelming anxiety - commonly known as the "flight or fight" response. Panic attacks are characterised by extreme fear and people often believe they are going to die or lose control during the attack.

Help the client to recognise the early warning signs of panic attack. Stay with the client if they are having a panic attack.

Follow these steps:

- Help the client to learn to recognise the first signs of over breathing
- Encourage the client to hold the breath and count to 10. (Don't take a deep breath, just hold the breath)
- When up to 10, breathe out through the nose and say the word "Relax" or "Let go" in a calm soothing manner
- Breathe in and out slowly in the six second cycle (In for three seconds and out for three seconds.) Say the word "Relax" each breath out
- After 10 breaths, hold the breath again for the count of 10.

When completed, continue again with the six second breath cycle

• Continue breathing in this way until all the symptoms of over breathing have disappeared.



During the breathing:

- Tell the client to close the eyes or lower the gaze
- Remind the client that these feelings are normal and they cannot hurt you
- Remind the client that these feelings will soon pass.

(See R6.9 and R6.10 in resources for Breathing Training to Prevent or Control Panic Attacks.)

6.3.7 - GASTROINTESTINAL SYMPTOMS

Gastrointestinal symptoms can be persistent during withdrawal, including constipation, diarrhoea, nausea, abdominal pains and cramps.

Constipation

A total vegetarian diet (high in raw foods) for a short period of time is often sufficient, with plenty of fresh fruit and warm water.

Diarrhoea

Ensuring a high fluid intake and resting the bowel by eating as little as possible may help and soothing cream (eg Vitamin E oil) will relieve a sore anus. Eating wholemeal toast, boiled rice or drinking the fluid which is left after boiling rice or potatoes may also help alleviate the diarrhoea.

Nausea

Nausea is a common symptom during withdrawal, which can be quite debilitating. Deep breathing, sucking an ice cube, chewing peppermint leaves, drinking peppermint tea, snacking frequently on dry biscuits or distraction will often ease the discomfort. Ginger is also an effective remedy and tablets are available.

Abdominal pains and cramps

A hot water bottle or heat pack on the abdomen can give relief; also lying on the back with knees flexed.

6.3.8 - HEADACHES

Headaches during withdrawal may be caused by muscle tension around the scalp, shoulders, neck or jaw.

- 1. Rest and do a relaxation technique.
- 2. Massage the face, neck and shoulders.
- 3. Tiger balm on the temples or the back of the neck has been shown to relieve headache. Avoid the eyes and use sparingly because of the strong menthol.

4. Analgesics may be useful if the suggestions above don't work. For many people, chronic headache pain is very debilitating and Paracetemol, Ibuprofen or Aspirin can give short-term relief. Ensure the analgesic is only used for the short-term and in recommended doses. The prolonged use of analgesics is not advised because of unwanted side effects. It isn't unusual for withdrawal headaches not to improve with the use of analgesics.

6.3.9 - BLOOD NOSE

Although the symptom is rarely reported in relation to withdrawal it can be distressing and tedious. Blood noses are easily treated by following this procedure:

- 1. Sit in a forward position.
 - This will help the blood to drop out of the nose, rather than back into the throat.
- 2. Hold pressure on the nose.
 - Using the thumb and fingers, pinch the nostrils closed beneath the bridge of the nose, the pressure will help to stop the bleeding.
- 3. Maintain the position and pressure.
 - Generally the bleeding will stop if the person holds pressure on the nose and sits in the forward position for two minutes.
- 4. Apply a cold pack on the nose.

Other aids which will assist the blood to clot are an ice pack or cold face washer applied to the nose.

6.3.10 - LETHARGY

People are often surprised by how lethargic they feel when going through withdrawal.

- 1. Accept it and rest as much as needed.
- 2. If there is a time of day when the lethargy is better, plan activities around this time and rest for the remainder of the day.
- 3. Family members or friends may be required to assist with household tasks.
- 4. Maintain daily exercise, even it if is for a reduced period of time.

6.3.11 - SORE MOUTH OR ULCERS

These may be caused by vitamin depletion due to the added stress of withdrawal on the body.

- 1. Ulcer or cold sore preparations will often be effective, both in relieving pain and for healing the ulcers.
- 2. Warm lemon and honey drinks help alleviate a sore mouth or throat.
- 3. Suggest a vitamin supplement, particularly Sodium Ascorbate (Vitamin C).

6.3.12 - CRAVING SWEET FOOD

Craving sweet food is common in all drug withdrawal and can be satisfied only briefly by the intake of sugar.

The craving is decreased by an overall increase in complex carbohydrate intake. Eat more bread, pasta, grains, fruit and nuts.

6.3.13 - CHANGES IN LIBIDO

For some people undergoing benzodiazepine withdrawal, an increase in libido can be so extreme it's embarrassing. For others, a loss of libido has been a feature of long-term benzodiazepine use.

Provide reassurance that the situation is not uncommon in withdrawal and will pass. Discuss ways of ensuring safety and minimising future embarrassment.

6.3.14 - DISSOCIATION

Dissociation can cause great distress and anxiety for the person experiencing it. Dissociation is a mental state where sufferers feel separated or detached from their reality (derealisation) or themselves (depersonalisation). Many people feel like they are 'going mad' with these changes in perception, and are afraid to discuss the symptoms with family, friends or health practitioners. Many people describe dissociation as feeling "spaced out".

Feeling dissociated from reality is not uncommon for people in withdrawal and can cause great distress.

- Routinely assess for dissociation when working with people in withdrawal. Introduce
 the idea that some people in withdrawal will experience changes in perception
 about their environment or themselves, and may feel quite disconnected from reality
 or from themselves or their bodies.
- Reassure the person that these symptoms are not uncommon in withdrawal and that they will pass.
- Inform the person that dissociation is not a sign of madness or psychosis. It is generally thought to be a form of coping or self-defence when a person feels overwhelmed, their mind detaches from the situation to allow space to process and cope with the sensations.
- Normalise dissociation. We all dissociate at times. For example, we may be
 experiencing mild dissociation when we drive on 'autopilot', or when we daydream
 and lose track of time.
- Provide people with strategies to help them break out of a dissociative state. Blinking is often enough to break dissociation. Alternatively, a mild startle can break the trance- like state for example, snap your fingers or wave your hand in front of their face. Grounding techniques are also helpful ask the person to bring their focus back to the room with you, encourage them to describe the room or feel the texture of the chair they are sitting on.

6

Support through benzodiazepine withdrawal

6.4

OVERCOMING THE CHALLENGES TO RECOVERY

During the recovery process people may face a number of challenges, including:

- Fear
- Family and intimate relationship issues or tensions
- · Coping with the memory and ramifications of incest, sexual assault, trauma or grief
- Anger
- A poor self-esteem or self-image
- · Other illnesses and conditions
- A loss of identity.

6.4.1 - FEAR

Fear can be an overwhelming emotion for the person going through benzodiazepine withdrawal.

Initially, people fear change. People are often frightened about what their life will be like and if they will cope when they are benzodiazepine-free.

It is not uncommon for people going through the withdrawal process to be frightened of changes in behaviour. Often they worry about whether they will be able to predict these changes and if they will be able to cope with them.

Labels from the past can present problems. For example, if someone has been labelled as neurotic, or has been told they will need to take benzodiazepines for the rest of their life, if often takes a long time to shake these beliefs and to trust in their own judgement. Developing this trust is particularly difficult during withdrawal because of the range and intensity of psychological symptoms. The client will need frequent reassurance that their symptoms are due to the benzodiazepine withdrawal and will pass in time.

6.4.2 - FEAR OF WITHDRAWAL SYMPTOMS

It is quite common for people to fear withdrawal symptoms during the recovery process. Lack of information, misinformation or doubts about managing the physical stress of symptoms can cause fear. Once people have understood their own pattern of withdrawal and how to manage symptoms, the fear usually disappears. It is important to address the fear of symptoms because withdrawal may become more severe if the fear of its symptoms isn't dealt with.

Fear is often a withdrawal symptom in itself. To help people deal with fear during the recovery process, it is important you give them plenty of reassurance and support. Remind people that many others have recovered from benzodiazepine use, or are currently going through benzodiazepine withdrawal and that they are not alone. Cognitive behavioural techniques, symptom management and slow reduction rates should be used to help overcome fears during the recovery process.

6.4.3 - LOSS OF IDENTITY

Many people who have used benzodiazepines for many years feel uncertain about their sense of identity.

Changes in mood and behaviour are common during withdrawal. Some people talk about not knowing who they are because their physical and mental states are so dramatically altered. Many people talk about forgetting large parts of their lives.

People going through the recovery process may also find it difficult to relate to the person they used to be when they were taking benzodiazepines and may question their relationships with their partners or family members. The years of taking benzodiazepines are often described as the 'the lost years' or 'the wasted years'. People will need support while coming to terms with these realisations, which are understandably very distressing.

People often change during the recovery process. It is important to help people going through the recovery process to accept changes, to encourage positive development and to reassure them that the identity confusion they are experiencing can be resolved.

6.4.4 - FAMILY AND INTIMATE RELATIONSHIPS

The effect of long-term benzodiazepine use on close relationships can be devastating. During the recovery process people may become irritable, depressed, aggressive, moody and generally difficult to get along with.

People suffering the effects of benzodiazepine withdrawal may be unwell a lot of the time, not participate in family life and feel uncomfortable and panicky when socialising. It is not uncommon for children to be kept home from school because their parent is too fearful to be left alone.

People who are close to someone taking benzodiazepines often feel confused or resentful and the person taking the drugs may feel concerned or guilty about the impact of their benzodiazepine use on family and friends. It is often useful, therefore, to involve family (including older children) and close friends in counselling sessions or support groups.

6.4.5 - INCEST AND SEXUAL ASSAULT

As with most drug dependence, there is a significant correlation between long-term benzodiazepine use and past experience of incest or sexual assault.

For some people, memories begin to surface for the first time during benzodiazepine reduction. This may be due in part to the memory suppressant effects of the drugs. It is important that if forgotten memories are coming back, the reduction of the benzodiazepines is slowed down or halted and intensive support or counselling provided.

Specific principles and support guidelines are available from sexual assault centres and referral may be appropriate at some point during reduction. Counsellors may be able to support people dealing with issues of sexual assault using sexual assault centres as a resource.

When working with someone who has a history of sexual assault, it is important to:

- Establish trust with the person and work at their pace
- Assess the importance of the issue, find out if the person wants to deal with their experience of sexual assault, withdrawal or both
- Be aware of the time commitment a supportive environment for a person going through withdrawal is paramount
- Allow space for memories to surface and then validate recollections of assault
- Reassure the person and supply them with relevant information.

6.4.6 - ANGER

Anger, especially toward doctors who have prescribed the benzodiazepines, is a common feature of benzodiazepine withdrawal. It is not surprising that people feel very angry and betrayed when they have been encouraged to take benzodiazepines, are reassured by the prescriber that they are taking a safe drug and then discover at a later stage that they are dependent on this drug.

It is important to validate this anger. Acknowledging the anger exists will reduce the likelihood of someone being immobilised by it. Information about the historical context for benzodiazepine prescribing will help people come to terms with their current situation. A good strategy for dealing with people's anger is to:

- Listen to what they have to say
- Express your understanding and inform them of the historical context
- Help them to prepare to move on.

6.4.7 - A LOW SELF-ESTEEM AND POOR SELF-IMAGE

Given that many people have lost their self-confidence through the experience of benzodiazepine dependence and have often been labelled and given forecasts by other health professionals, you should aim to encourage self-belief and confidence in their own abilities and experiences.

- People's experiences of withdrawal need to be validated reinforce that their experience is the most important
- Guilt and shame are common emotions during drug use and withdrawal. Guilt often stems from lack of confidence in dealing with stress by resorting to medication.
 Shame can result from perceived negative self-image and not wanting others to know that they cope in this way. Information about the prevalence of use of these drugs will usually help an individual place their experience in context. Prescribing benzodiazepines as a solution to stress or insomnia is common practice and not something the person need feel stigmatised about.

When people feel a sense of control because they understand the withdrawal symptoms and can make positive decisions about their dose reduction, it follows that self-esteem will improve. Counsellors may need to assist people in other ways to improve self-esteem, such as providing anxiety management or helping the person develop coping skills.

6.4.8 - OTHER ILLNESSES OR CONDITIONS

Some people with physical and psychiatric disabilities use benzodiazepines in addition to other medication and are also likely to have stress related problems.

Because of limited services, people with dual or multiple problems are likely to be doubly disadvantaged if we do not attempt to meet their needs. If there is no specialist service available, then generally it will be appropriate to provide some level of care, within the constraints of your role or expertise.

It is essential with dual disability to work in consultation with an appropriate practitioner or specialist who can advise you or treat the component with which you are unfamiliar. You may want to contact your local Community Health Service, Dual Diagnosis Team or Primary Mental Health Care Team. Reconnexion can also be utilised as a resource to assist in decision making with dual disability.

Careful assessment and consultation are necessary prior to commencing benzodiazepine reduction.

For some people with dual or multiple problems, the withdrawal process may be a stressor. This stress does not necessarily prohibit reduction from benzodiazepines, but a careful risk/benefit analysis will need to be undertaken in consultation with the client and relevant treating specialist.

6.5
USE OF OTHER
DRUGS TO
HELP ALLEVIATE
WITHDRAWAL
SYMPTOMS

While no medication is approved for the treatment of benzodiazepine-use disorders there are some pharmacological interventions that may assist in alleviating the symptoms of withdrawal.

6.5.1 - FLUMAZENIL

Flumazenil is a benzodiazepine antagonist and has had some success in lessening withdrawal effects when administered at a low-dose intravenously in an in-patient hospital setting.^{87, 88} This procedure requires close monitoring and involves a person rapidly withdrawing to a lower dose or abstinence. Evidence supporting Flumazenil use is inconclusive with more research needed to recommend safe use.⁸⁹

6.5.2 - CARBAMAZEPINE (TEGRETOL)

Carbamazepine has been used in open trials on small numbers of people and has been used occasionally when treating a person in hospital. Carbamazepine appears to have useful adjunctive properties for assisting withdrawal but the available data is insufficient for recommendations regarding safe use.⁸⁸

6.5.3 - ANTIDEPRESSANTS

Antidepressants do not decrease or eliminate benzodiazepine withdrawal symptoms, but may be useful in treating people who are experiencing severe depression in withdrawal. If antidepressants are used, they should be reassessed after four to six months.

6.5.4 - ANALGESICS

Benzodiazepine withdrawal can often cause acute physical pain and analgesics can be used to relieve the pain according to the recommended dose instructions. If the analgesics are not helping, encourage the person to try alternative methods of pain relief, such as rest, hot or cold packs, massage or relaxation or meditation.

6.5.5 - MELATONIN

Melatonin appears to offer no improvement in successful discontinuation from benzodiazepines, and may offer some benefit for sleep quality during withdrawal. However results at this stage are inconclusive. 90

6.5.6 - PREGABALIN

The use of pregabalin during gradual taper from benzodiazepines may offer subjective improvements in sleep quality⁹¹, and shows signs reducing the severity of anxiety and benzodiazepine withdrawal.⁹² Further investigation is recommended.

Many people have reported to Reconnexion that during and post withdrawal they have unusual reactions to other drugs, including heightened sensitivity, particularly to other psychotropic medications. If necessary you will need to advise the person you are helping that they may also experience such a reaction.

Resources and handouts

ALCOHOL AND DRUG FOUNDATION (ADF)

The ADF produces a range of publications on all drug use including benzodiazepines. Brochures, DrugInfo newsletter, Prevention Research Quarterly Issues Paper (n.b. Pharmaceuticals Dec 2008), booklets etc.

Tel: 1300 858 584 www.adf.org.au

AUSTRALIAN MEDICINES HANDBOOK

Available from PO Box 240 Rundle Mall

Adelaide SA 5000 Tel: 08 8303 6977

www.amh.net.au

BEYONDBLUE SUPPORT SERVICE

24/7 information, support and advice.

Tel: 1300 224 636 for phone support, or chat online or join a forum.

www.beyondblue.org.au

MEDICATION SUPPORT AND RECOVERY SERVICE (MSRS)

Addiction treatment service for prescription and overthe-counter medications. Located in East and North-East metropolitan Melbourne.

Tel: 1800 931 101 www.msrs.org.au

NATIONAL PRESCRIBING SERVICE (NPS)

The NPS has a newsletter and other relevant information pertaining to benzodiazepine prescribing.

Tel: 02 8217 8700

MEDICINES LINE (Information for consumers on all

prescription drugs): 1300 888 763

TAIS (Therapeutic Advice & Information Service for health professionals on all prescribed drugs): 1300 138

677

www.nps.org.au

PSYCHOTROPIC DRUG ADVISORY SERVICE

The Psychotropic Drug Advisory Service is a Victorian state wide specialist service providing independent information on psychiatric medicines and other psychoactive substances to health practitioners and consumers.

Tel: 03 9389 2920

Email: cculhane@mhri.edu.au

RECONNEXION: A SERVICE OF EACH

Reconnexion provides information and counselling and has an extensive education program about benzodiazepine use and dependence, anxiety disorders and depression.

Secondary consultation is available by phone or email.

Tel: 03 9809 8200

Telephone Support & Information Service: 1300 273

266

www.reconnexion.org.au

THERAPEUTIC GUIDELINES

TG is an independent not-for-profit organisation dedicated to deriving guidelines for therapy from the latest world literature, interpreted and distilled by Australia's most eminent and respected experts. Psychotropic drug guidelines available.

Tel: 03 9329 1566

www.tg.org.au

TURNING POINT ALCOHOL & DRUG CENTRE

Research relating to benzodiazepines; practice guidelines are available for prescribing for substance withdrawal. A counselling service is provided offering treatment for all drugs.

Tel: 03 8413 8413

DACAS (Clinical Drug Advisory Service for

practitioners) 24/7: 1800 812 804

DIRECT LINE (Drug & Alcohol Information referral and

counselling support) 24/7: 1800 888 236

www.turningpoint.org.au



Drug	Brand Names	Half Life	Peak Onset	Doses	5mg Diazepam Equivalent**	Schedule	
SHORT ACTING	SHORT ACTING*						
Alprazolam	Xanax, Kalma, Alprax	6 - 20hrs	1 - 2hrs	0.25mg, 0.5mg, 1mg, 2mg	0.5mg×	S8	
Midazolam	Dormicum, Versed, Hypnovel	1.5 - 5hrs	0.5 - 1hr	1ml, 3ml, 5ml, 10ml	5mg	S4	
Oxazepam	Serepax, Murelax, Alepam	5 - 20hrs	2 - 4hrs	15mg, 30mg	7.5-15mg	S4	
Temazepam	Nocturne, Normison, Restoril, Temaze, Temtabs	8 - 20hrs	0.5 - 3hrs	10mg	10mg	S4	
Triazolam	Halcion	1.5 - 5hrs	0.5 - 2hrs	0.125mg	0.25-0.5mg	S4	
Zolpidem	Dormizol,Somidem, Stildem, Stilnox, Zilpebell	2 - 3hrs	1 - 2.5hrs	10 mg (6.25mg & 12.5mg CR)	10mg	S4	
Zopiclone	Imovane, Imrest	4 - 6hrs	1 - 2hrs	7.5mg	7.5mg	S4	
MEDIUM ACTIN	lG*						
Bromazepam	Lexotan	11 - 22hrs	0.5 - 4hrs	3mg, 6mg	3mg	S4	
Lorazepam	Ativan	9 - 20hrs	1 - 2hrs	1mg, 2.5mg	0.5-1mg‡	S4	
LONG ACTING*							
Clobazam	Frisium	36 - 80hrs^	0.5 - 4hrs	10mg	10mg	S4	
Clonazepam	Rivotril, Paxam, Klonopin	18 - 50hrs	1 - 4hrs	0.5mg, 2mg	0.25mg†	S4	
Diazepam	Valium, Ducene, Antenex, Valpam	20 - 100hrs^	1 - 2hrs	2mg, 5mg	5mg	S4	
Flunitrazepam	Hypnodorm, Rohypnol	18 - 26hrs	0.5 - 2hrs	1mg	0.5 - 1mg	S8	
Nitrazepam	Alodorm, Mogadon	15 - 48hrs	0.5 - 5hrs	5mg	5mg	S4	

Source: Therapeutic Guidelines: Psychotropic, Version 7 (2013). Therapeutic Guidelines Limited, North Melbourne, Australia.

- * Length of action may vary according to the individual's metabolism, gender, weight, health of liver and age. It is an indicator of how long the chemical is active in the blood stream after ingestion. Long acting may be active for over 24 hours, while short acting benzodiazepines may only act for 6-10 hours.
- ** Widely varying half-lives and receptor-binding characteristics of these drugs make exact dose equivalents difficult to establish.
- x Professor Ashton's guidelines suggest an equivalence of .25mg is more realistic. RECONNEXION counsellors find many clients need 5mg Diazepam for every 0.25mg Alprazolam.
- ‡ May be relatively more potent at higher doses
- ^ These longer half-lives are a result of active metabolites
- † Particular care is needed if changing from clonazepam to a different benzodiazepine because there is a wide variety of reported equivalencies.

 NB: If swapping between medications be alert for under or over sedation.





PLEASE INDICATE IF:

you have taken a tranquilliser or sleeping pill for four months or longer
you feel you cannot cope without taking benzodiazepines
you have cut down or stopped taking benzodiazepines and have felt ill, anxious or experienced unusual symptoms as a result
you feel the medication is not having the same effect as when you first started taking it
you take an extra pill during a stressful time
you experience increasing discomfort close to the time of your next pill
you have tried to cut down or stop taking benzodiazepines and could not sleep
you have increased your dose
you have increased your alcohol intake
you always make sure you never run out of benzodiazepines
you carry your benzodiazepines with you 'just in case'
the benzodiazepines are interfering with your life in some way, for example, time off work, family or relationship problems, difficulty coping, difficulty remembering things.

If two or more of these statements apply to you, you can seek further information from a GP, another health professional or contact Reconnexion.





Clie	nt Name:		Clinician:		Date:
CO	MMON WITHDRAWAL SYMPTOMS				
00000000000	Abdominal pains & cramps Agoraphobia Anxious or Depressed mood Breathing difficulties Blurred vision Changes in perception Dizziness Extreme lethargy Fears Feelings of unreality Flu-like symptoms	00000000000	Heavy limbs Heart palpitations Hypersensitivity to light Indigestion Insomnia Irritability Lack of concentration Lack of coordination/balance Loss of memory Muscular aches & pains Nausea	0000000000	Nightmares Panic attacks Rapid mood changes Restlessness Severe headaches Shaking Seeing spots or sore eyes Sweating Tightness in the chest Tightness in or around the head
LES	S COMMON WITHDRAWAL SYMPTOMS				
0000000000	Aching jaw Craving for sweet food Constipation Depersonalisation Diarrhoea Difficulty swallowing Hallucinations Hyperactivity Hypersensitivity to sound Incontinence or increased urinary frequency Loss or change in appetite	0000000000	Loss or changes in taste Menstrual problems Morbid thoughts Numbness in any part of the body Outbursts of rage & aggression Paranoia Painful scalp Persistent, unpleasant memories Pins & needles Rapid changes in body temperature	0 00000000	Sexual problems (changes in libido) Skin problems Sore mouth & tongue Speech difficulties Suicidal thoughts Tinnitus Unusually emotionally sensitive Vomiting Weight loss or gain
RAF	RE WITHDRAWAL SYMPTOMS				
00000	Blackouts Bleeding from the nose Burning along the spine Burning sensation around the mouth Discharge from the breasts	00000	Hair falling out Haemorrhoids Hypersensitivity to touch Menorrhagia Rectal bleeding	0000	Sinus pain Seizures Sensitive or painful teeth Swollen breasts





CURRENT MEDICATIONS (RECORD ALL)

•	Current prescriptions –	
	dosage, frequency, any	
	non-prescribed?	

CEN	EDVI	\\/	LRFING

- Physical health? Mental health? (K10)
- Any withdrawal symptoms? (BZD withdrawal symptom questionnaire)

HISTORY OF BENZODIAZEPINE USE

- Who prescribed the benzodiazepines originally and for what reason?
- If you do not remember the original reason, what is your recollection of why you take benzodiazepines?
- Have you ever been prescribed more than

one benzodiazepine?	
 Have you ever changed to a different benzodiazepine? 	

BENZODIAZEPINE USE

?

- Dosages?
- · Who prescribed/ prescribes them?
- Any changes in behavior after commencing benzodiazepines?
- Any family or relationship problems after commencing benzodiazepines?
- How soon after commencing the benzodiazepines did these problems start? Intermittent or continuous?

INCREASES OR DECREASES IN DOSE

- Have you ever increased the dose?
- What was the effect?
- Have you ever taken an extra dose before a stressful event?
- Do you carry your tablets with you?





PREVIOUS REDUCTIONS	5

- Have you ever skipped a dose? If so, why?
- What was the result of skipping the dose?
- Have you ever tried to cut down your dose? If so, why?
- What was the result of cutting down the dose?
- Have you ever gone cold turkey? (ie. stopped taking medication suddenly).
 If so, why? Result?

PAST TREATMENT

- Have you had other treatment to help reduce your benzodiazepines?
 Psychiatrist, psychologist, counsellor?
- How helpful was it?

MEDICAL HISTORY

- Have you had any major illnesses or operations?
 Do you have any other conditions?
- Have you tried any alternative therapies? For example, homeopathy or naturopathy.

PAST HISTORY OF OTHER PRESCRIBED AND NON-PRESCRIBED DRUG USE

- Have you ever taken antidepressants or other mood altering drugs?
- Have you ever used illegal drugs?
- Do you smoke?
- Do you drink caffeine? (in coffee, tea, cola or energy drinks)
- Do you take pain killers containing codeine?
 (e.g. panadeine)
- In a normal week, how much alcohol would you drink?

SOCIAL NETWORKS

- Do you have support from family and friends for your recovery?
- Are you in a relationship?
- Has anyone else in your family used benzodiazepines, alcohol or other drugs?
- Are you involved in any activities? (e.g. sport or music)





OTHER FACTORS WHICH MAY AFFECT THE PERSON'S WELLBEING

• Are there any major • In a normal week, what changes occurring in would you eat for main your life at the moment, meals and in between for example, retirement, snacks? Do you practise moving house, family any relaxation or changes? meditation? • Have you experienced any • Do you know how to use traumas in your life, for deep breathing techniques example, abuse, accidents, to help you relax? sudden deaths, fires etc.? • Do you exercise? What type of exercise and how frequently?



Client Name:



Date Commenced:	Cour	nsellor:	
Please Note: This is a guide only and modericumstances. It provides a starting pospaced around 2 week's apart ¹ , howev doctor authorises the plan before com	oint and should be reviewed er this may vary based on th	throughout the taper.	Reductions should be
	Time:	Time:	Reduction
Current dose:			
Reduction 1 Date:			
Reduction 2 Date:			
Reduction 3 Date:			
Reduction 4 Date:			
Reduction 5 Date:			
Reduction 6 Date:			
Reduction 7 Date:			
Reduction 8 Date:			
Reduction 9 Date:			
Reduction 10 Date:			

¹ Psychotropic Therapeutic Guidelines (2013)

General Practitioner:



commencing.



Client Name:	General Practitioner:
Date Commenced:	Counsellor:
Please Note: This is a guide only and may need to be adjusted depending on withdrawal symptoms and/or	0.25mg Tablet
circumstances. It provides a starting point and should be reviewed throughout the taper. Reductions should be spaced around 2 week's apart ¹ , however this may	= 1/4 tablet or .0625mg = 1/2 tablet or .125mg
vary based on the circumstances. It is important the prescribing doctor authorises the plan before	$= \frac{3}{4} \text{ tablet or } 0.1875 \text{mg}$

	Time	e:	Time:	Reduction
Current dose:				
Reduction 1 Date:				
Reduction 2 Date:				
Reduction 3 Date:				
Reduction 4 Date:				
Reduction 5 Date:				
Reduction 6 Date:				
Reduction 7 Date:				
Reduction 8 Date:				
Reduction 9 Date:				
Reduction 10 Date:				

¹ Psychotropic Therapeutic Guidelines (2013)



commencing.

Client Name:	General Practitioner:
Date Commenced:	Counsellor:
Please Note: This is a guide only and may need to be adjusted depending on withdrawal symptoms and/or	0.5mg Tablet
circumstances. It provides a starting point and should be reviewed throughout the taper. Reductions should be spaced around 2 week's apart ¹ , however this may	$= \frac{1}{4} \text{ tablet or .125mg} $ = \frac{1}{2} \tablet \text{ tablet or .25mg}
vary based on the circumstances. It is important the prescribing doctor authorises the plan before	$= \frac{3}{4}$ tablet or .375mg

	Time:	Time:	Reduction
Current dose:			
Reduction 1 Date:			
Reduction 2 Date:			
Reduction 3 Date:			
Reduction 4 Date:			
Reduction 5 Date:			
Reduction 6 Date:			
Reduction 7 Date:			
Reduction 8 Date:			
Reduction 9 Date:			
Reduction 10 Date:			

¹ Psychotropic Therapeutic Guidelines (2013)





The following handout identifies the range of symptoms a person may experience during benzodiazepine withdrawal.

Photocopy the handout for people planning to begin a benzodiazepine reduction program.

COMMON WITHDRAWAL SYMPTOMS

- Abdominal pains and cramps
- Agoraphobia
- Anxiety
- Breathing difficulties
- Blurred vision
- Changes in perception (faces distorting and inanimate objects/surfaces moving)
- Depersonalisation (a feeling of not being connected with yourself or your body, or a feeling of not knowing who you are)
- Depression
- Distended abdomen
- Dizziness
- Extreme lethargy
- Fears (uncharacteristic)
- · Feelings of unreality
- Flu-like symptoms
- Heavy limbs
- · Heart palpitations
- · Hypersensitivity to light and/or sound
- Indigestion
- Insomnia
- Irritability
- · Lack of concentration
- Lack of coordination
- Loss of balance
- Loss of memory
- Muscular aches and pains
- Nausea
- Nightmares
- Panic attacks
- Rapid mood changes (crying one moment and laughing the next)
- Restlessness
- Severe headaches
- Shaking
- Sore eyes
- Sweating
- Tightness in the chest
- Tightness in the head (feeling of a band around the head)

LESS COMMON WITHDRAWAL SYMPTOMS

- Aching jaw
- Craving for sweet food
- Constipation
- Diarrhoea
- Difficulty swallowing
- · Feelings of the ground moving

- Hallucinations (auditory and visual)
- Hyperactivity
- Incontinence or frequency and urgency (needing to urinate often and in a hurry)
- · Increasing saliva
- Loss or changes of appetite
- Loss of taste, or changes in taste (e.g. a metallic taste in the mouth or when eating)
- Menstrual problems (painful periods, irregular periods or periods ceasing to occur)
- Morbid thoughts
- Numbness in any part of the body
- Outbursts of rage and aggression
- Paranoia
- Painful scalp
- Persistent, unpleasant memories
- Pins and needles
- Rapid changes in body temperature
- Sexual problems (changes in libido)
- Skin problems (dryness, itchiness, rashes, slow healing, boils)
- Sore mouth and tongue (ulcers, cracked lips, cold sores)
- Speech difficulties
- Suicidal thoughts
- Tinnitus (buzzing or ringing in the ears)
- Unusually emotionally sensitive (unable to watch the news on television or read newspapers)
- Vaginal discharge
- Vomiting
- · Weight loss or gain

RARE WITHDRAWAL SYMPTOMS

- Blackouts (blackouts are rare with low dose use, but less rare when large amounts have been taken. A blackout is a period of time during which a person appears to act normally but of which they have no recollection.)
- Bleeding from the nose
- · Burning along the spine
- Burning sensation around the mouth
- Discharge from the breasts
- Haemorrhoids
- Hair loss
- Hypersensitivity to touch
- Rectal bleeding
- Sinus pain
- Seizures (fits) (these are rare with gradual reductions, but are less rare with cold turkey withdrawal, large reductions, or when large doses have been taken)
- Sensitive or painful teeth
- Swollen breasts





Benzodiazepine Withdrawal Symptoms Severity Questionnaire

Each moderate score is given a rating of 1 and each severe score a rating of 2.

The maximum score possible is 40, unless of course additional symptoms are included.

Note also whether the symptoms occurred when the tablets were reduced or stopped, or if the symptoms occurred when the tablets were the same.

NO = 0 YES - MODERATE = 1 YES - SEVERE = 2

Feeling unreal	0	1	2
• Very sensitive to noise	0	1	2
Very sensitive to light	0	1	2
• Very sensitive to smell	0	1	2
Very sensitive to touch	0	1	2
• Peculiar taste in mouth	0	1	2
• Pains in muscles	0	1	2
Muscle twitching	0	1	2
Shaking or trembling	0	1	2
• Pins and needles	0	1	2
• Dizziness	0	1	2
Feeling faint	0	1	2
Feeling sick	0	1	2
Feeling depressed	0	1	2
• Sore eyes	0	1	2
Feeling of things moving when they are still	0	1	2
Seeing or hearing things that are not really there (hallucinations)	0	1	2
• Unable to control your movements	0	1	2
• Loss of memory	0	1	2
Loss of appetite	0	1	2

ANY NEW SYMPTOMS (DESCRIBE EACH BELOW)

1.	
2.	
3.	
٥.	
4	
4.	
	ODE:
3C	ORE:
	ne individual attains an overall score above 20 seek
	ecialist medical help.
	he individual endorses a number of severe symptoms ek specialist medical help.
	he individual reports a number of new symptoms seek
	ecialist medical help.



Source – Tyrer P, Murphy S, Riley P (1990). 'The benzodiazepine withdrawal symptom questionnaire'. Journal of Affective Disorders,

19(1): 53-61.





Relaxation should be practised at least once daily, preferably at the same time and in the same place.

It doesn't matter which relaxation technique you use, as long as it works for you and you enjoy doing it.

Enjoy your relaxation!

REPEATING A MANTRA OR PHRASE

- 1. Sit comfortably in a chair with your feet flat on the floor and slightly apart.
- 2. Relax your head so it is slightly bent (so you can easily focus about a metre in front of your feet).
- 3. Rest your arms on the top of your thighs with your palms facing upwards (or rest one open palm upon the other in your lap if this is more comfortable). Close your eyes.
- 4. Take a few deep and slow breaths through your nose.
- 5. Become aware of any muscle tension and consciously let this tension go.
- 6. Concentrate on your breathing, gently breathe into your abdomen and slow the rate you are breathing without causing discomfort or stress.
- 7. As you breathe out say a phrase or a word, such as 'relax' or 'let go' to yourself.
- 8. Repeat the word or the phrase of your choice for 10 to 20 breaths for a short relaxation or repeat the phrase for 15 minutes for a longer relaxation. As you find the mind wandering, gently bring it back to repeating the word or phrase. Open your eyes and check the time on your watch. Return to your meditation for a few more minutes before you bring it to a close.
- 9. You should now be feeling calm and peaceful. Wriggle your toes.
- 10. Stretch your hands and arms.
- 11. Open your eyes.
- 12. When you stand, ensure you take your time, as your blood pressure may have lowered during relaxation.

An alternative version you may like to try is to imagine the word or phrase is printed on the inside of your forehead. Focus on the image of this word as you breathe out.



Relaxation should be practised at least once daily, preferably at the same time and in the same place. It doesn't matter which relaxation technique you use, as long as it works for you and you enjoy doing it.

Enjoy your relaxation!

VISUALISING OR IMAGING A PEACEFUL SCENE

- 1. Use the repeat a mantra technique or one of the deep breathing exercises to help you breathe deeply and easily.
- 2. Once your breathing has become slow and regular, visualise a peaceful scene which makes you feel relaxed. You may visualise you are lying on a warm sandy beach, walking through a rainforest, sitting on a warm rock by the river or lying on a grassy hill looking at the sky.
- 3. Focus on each of your senses in great detail once you are in your peaceful scene.
- 4. Feel the warmth of the sun on your skin, the texture of the sand or grass under you.
- 5. Listen to the soft sound of the waves or the wind.
- 6. See the refreshing colours of the sky, the water or the trees.
- 7. Smell the ocean, the trees or the flowers.
- 8. Stay at your scene until you feel ready to leave and then imagine yourself getting up, stretching and walking away.
- 9. Wriggle your toes.
- 10. Stretch your hands and arms.
- 11. Open your eyes.





Relaxation should be practised at least once daily, preferably at the same time and in the same place.

It doesn't matter which relaxation technique you use, as long as it works for you and you enjoy doing it.

Enjoy your relaxation!

- 1. Sit comfortably in a chair with your feet flat on the floor slightly apart and your hands resting on your knees (if it is more comfortable, lie on the floor in the relaxation position lying flat on your back with your arms beside and a small distance away from your body, palms facing upwards, your legs straight and a little bit apart, feet falling outwards, chin tucked in a little so your nose is not sticking up in the air and your neck is straight, mouth closed and tongue resting behind your top teeth, your eyes closed).
- 2. Work your way through your body, tensing and relaxing each part. Begin with your hands.
- 3. Clench your left hand into a fist as tight as you can and hold if for a few seconds. Relax the clenched hand so it is really floppy. Tense and relax your left forearm and then your upper arm in the same way. Lift the arm off the floor and then release.
- 4. Tense and relax your right hand and arm in the same way.
- 5. Move through each body part, tensing and relaxing each of your muscles (some parts will be easier to tense and relax than others). It does not matter in what order you choose to relax each muscle group.
- 6. When you have tensed and relaxed all your muscles, lie quietly for a moment and take some breaths in to your abdomen, with a long and slow exhale.
- 7. Bring the relaxation to a close. Wriggle your toes.
- 8. Stretch your hands and arms.







Relaxation should be practised at least once daily, preferably at the same time and in the same place.

It doesn't matter which relaxation technique you use, as long as it works for you and you enjoy doing it.

Enjoy your relaxation!

- 1. You may wish to use some relaxation music in the background for this exercise. If not, make sure you are somewhere quiet.
- 2. Sit comfortably in a chair with your feet flat on the floor slightly apart and your hands resting on your knees (if it is more comfortable, lie on the floor in the relaxation position lying flat on your back with your arms beside and a small distance away from your body, palms facing upwards, your lefts straight and a little bit apart, feet falling outwards, chin tucked in a little so your nose is not sticking up in the air and your neck is straight, mouth closed and tongue resting behind your teeth, your eyes closed).
- 3. Take a few slow breaths, deepening the breath each time and exhaling slowly.
- 4. Beginning with the toes on one foot, work through your body saying to yourself 'relax the toes... relax the foot... relax the ankle... relax the calf... relax the knee' and so on until you have covered your entire body.
- 5. Do not actually move the parts of your body as your speak but be aware of the body part and be aware of it relaxing and becoming heavy.
- 6. After you have finished with each body part, remain in the relaxed state and take your attention to the music, or, if you are not playing music, lie quietly in the silence.
- 7. Bring the relaxation to a close. Wriggle your toes.
- 8. Stretch your hands and arms.
- 9. Open your eyes.





There are a number of abdominal breathing techniques. The techniques offered below are two variations.

TECHNIQUE 1:

When practising the following technique, sit in a comfortable chair or lie on the floor with knees bent. Your eyes can be open or closed.

- 1. Place your hands on the abdomen, around the area of the navel, with the fingertips touching.
- 2. Push the abdominal muscles out.
- 3. Breathe in deeply through the nose, feeling your abdomen rise as your lungs fill with air.
- 4. Tuck the abdominal muscles in.
- 5. Breathe out slowly through the nose or mouth, feeling your abdomen deflate.
- 6. Count to 7 for the 'in' breath and 7 for the 'out' breath. If counting to 7 causes you to strain or struggle to hold on for the next breath, then reduce the count to 6 or 5.
- 7. Repeat the process.

The aim of the technique is to deepen each breath (so that the lungs are totally expanded) and also to breathe more slowly each time. Each step should move smoothly into the next.

TECHNIQUE 2:

Sit in a comfortable chair or lie on the floor with the knees bent. Your eyes can be open or closed.

- 1. Breathe in through your nose slowly for the count of four
- 2. Allow a brief pause.
- 3. Breathe out through your nose slowly for the count of four.
- 4. Allow a brief pause.
- 5. Repeat the process.
- 6. When comfortable, increase the count to 5, then 6 and soon, as long as you are still able to breathe comfortably.

If it is difficult for you to breathe in through your nose, breathe through your mouth. A variation:

- 1. Breathe in for the count of 4.
- 2. Hold the breath for the count of 2.
- 3. Breathe out for the count of 4.
- 4. Remain without breath for the count of 2.
- 5. Repeat.
- 6. Increase the count to 6 and 3.
- 7. Increase the count to 8 and 4.

A variation:

- 1. Think of a colour that you either find relaxing or invigorating.
- 2. As you breathe in slowly, imagine that you are drawing that colour in through your nostrils which then spreads throughout the whole body.
- 3. Breathe out.
- 4. Repeat.



WHAT ARE THE SYMPTOMS OF ANXIETY?

- · racing or pounding heart
- irregular heartbeats
- · dizziness or light headedness
- · disorientation and difficulty
- thinking clearly
- · feelings of unreality
- · tightness or pressure in the chest
- · difficulty breathing
- · shortness of breath
- · sweating and shaking
- · hot or cold flushes
- · rising agitation
- numbness or tingling sensations (particularly in the face, hands & feet).

WHAT IS HAPPENING IN THE BODY TO PRODUCE THESE SYMPTOMS?

The brain becomes aware of danger. Hormones are released and the involuntary nervous system sends signals to various parts of the body to produce the following changes:

- · The mind becomes alert
- Blood clotting ability increases, preparing for possible injury
- Heart rate speeds up and blood pressure rises
- Blood is diverted to the muscles which tense, ready for action
- Sweating increases to help cool the body
- Digestion slows down not necessary for survival
- Saliva production decreases, causing a dry mouth
- Breathing rate speeds up to increase oxygen to muscles. Nostrils and air passages in lungs open wider to get in air more quickly
- Liver releases sugar to provide quick energy
- Immune responses decrease, which is useful in the short term to allow a massive response to immediate threat, but can become harmful over a long period.

SYMPTOMS OF OVER BREATHING (HYPERVENTILATION)

Caused by falling level of C02 and increasing level of 02 (in the absence of any actual fight or flight taking place.)

- dizziness
- light headedness
- confusion
- breathlessness
- blurred vision
- feelings of unreality
- dry mouth
- · rapid heartbeat
- trembling hands & leg
- headache
- rising apprehension
- desire to run.

Some symptoms produced by slight reduction of 02 to certain parts of body (02 drops as C02 level falls)

- increase heart rate to pump blood
- numbness and tingling in extremities
- cold clammy hands
- stiffness in muscles
- chest tightness or severe chest pains
- irregular or missed heartbeats
- feeling out of touch with reality (depersonalisation)
- things look & sound different (derealisation)
- feeling faint
- fear of impending doom, heart attack, death
- temporary paralysis of muscles.



- Have a relaxing routine before going to bed. For example have a warm bath, read a book or listen to music.
- Diet. Cut down on caffeine and sugar. Caffeine is long acting, so you may need to have your last cup of coffee at lunch time.
- Time of meals. Lunch should be the largest meal of the day, with a small evening meal no later than 7pm.
- Regular day time activity and exercise will improve your ability to fall asleep and to sleep more deeply.
- Make time for thinking! People often avoid thinking about worries during the day, and so they come up at night. If you allow yourself to think through concerns during the day they are less likely to take over your rest time.
- Go to bed when sleepy, but go to bed at about the same time each night. Going to bed too early (before 9pm) may mean you wake too early in the morning.
- Get up at the same time each day. If you really want to sleep in on the weekends, only do so for one extra hour.
- Do not nap or sleep during the day if you are having trouble sleeping at night. If you are really tired, have a short nap for a maximum of 20 minutes.
- Practice a relaxation technique daily. You can use CDs or apps, or join a relaxation or yoga class in your local area.
- No alcohol after dinner. Alcohol disrupts sleep.
- Have a hot bath before bedtime. This will relax your muscles and help you to fall asleep.
- Only use bed for sleep, so that it is not associated with wakeful activities (e.g. watching television).
- No nicotine. Try and smoke less, especially in the evening, as nicotine in cigarettes disturbs sleep.







- Find appropriate treatment ask for assistance, if necessary ask a friend to make an appointment with a psychologist/counsellor or your GR.
- Ask a friend or support person to accompany you to treatment.
- · Increase light in your environment open your curtains, spend time outside in daylight.
- Exercise 20 minutes or more of exercise increases endorphin levels, which improves mood.
- Structure some activity develop a daily activities schedule, include even small things like showering and dressing.
- Set small goals each day and reward yourself for achieving them.
- Increase contact with other people.
- Seek help with activities if necessary personal hygiene/make up, housework, gardening, etc.
- Look for pleasures and positives even in small things.
- Develop a daily activities schedule such as hourly tasks, even small things like showering and dressing can help.
- Each night before going to sleep, recall three good things that have happened that day and write them down.
- Minimise alcohol use as this usually makes depression worse.
- · Cut down on smoking.
- Have a healthy diet.





- Learn to recognise the first signs of over breathing.
- If possible, stop what you are doing and sit down or lean against something. If you are driving, pull over to the side of the road. If you are in company, excuse yourself for a moment, but make sure you return.
- Hold your breath and count to 10. (Don't take a deep breath, just hold your breath).
- When you get to 10, breathe out through your nose and say the word "Relax" or "Let go" to yourself in a calm soothing manner.
- Breathe in and out slowly in the six second cycle (In for three seconds and out for three seconds.) Say the word "Relax" to yourself each time you breathe out.
- After 10 breaths, hold your breath again for the count of 10. After you have done this, continue again with the six second breath cycle.
- · Continue breathing in this way until all the symptoms of over breathing have disappeared.

If you follow the breathing cycle as soon as you notice the first signs of over breathing or panic attack, your symptoms will subside within a minute or two. (Much faster than swallowing a tranquilliser!)

The more you practice the slow breathing technique, the better you will become at using it to stop panic attacks. If you are unable to start the breathing cycle as soon as you would wish, you might find it useful to breathe first into your cupped hands (to breathe in the carbon dioxide) and then to start the slow breathing cycle.

DURING THE BREATHING:

- Close your eyes or lower your gaze
- Remind yourself that these feelings are normal and they cannot hurt you
- Remind yourself that these feelings will soon pass.







PANIC FEELINGS WILL SUBSIDE WHEN YOU SLOW YOUR BREATHING DOWN:

- Stop what you are doing
- Lower your head

1300 273 266.

- Only focus on 3 second breathing
- Wait until panic symptoms subside

Practice this technique – it will help you get on top of your panic attacks more quickly.

Learn to breathe deeply from your abdomen – it will help you relax.

Counselling is recommended for on-going panic attacks.

Call Reconnexion for help with panic attacks.

WHEN YOU FEEL A PANIC ATTACK COMING ON:

- 1. Stop what you are doing, sit down or lean against something
- 2. If possible lower your head and focus on one thing
- 3. Breathe in slowly for the count of 3
- 4. Hold your breath for the count of 3
- 5. Breathe out slowly for the count of 3
- Concentrate only on breathing and counting
- Remind yourself: these feelings are normal and they cannot hurt you
- Remind yourself: These feelings will soon pass
- Keep breathing and counting until the panic symptoms subside.





References



- (1) Ashton, H. (2011). The Ashton Manual Supplement. www.benzo.org.uk.
- (2) Coroners Court Victoria (2013)"Drug overdose deaths in Inner West Melbourne". Retrieved from: http://www.coronerscourt.vic.gov.au/find/publications.
- (3) Islam, M., Conigrave, K., Day, C. & Haber, P. (2014). Twenty-year trends in benzodiazepine dispensing in the Australian population. *Internal Medicine Journal*, 44(1), 57-64
- (4) Baldwin, D., Aitchison, K., Bateson, A., Curran, H., Davies, S., Leonard, B., Wilson, S. (2013). Benzodiazepines: Risks and benefits. A reconsideration. *Journal of Psychopharmacology*, 27(11) 967-971.
- (5) Australian Institute of Health and Welfare 2017. National Drug Strategy Household Survey 2016: detailed findings. Drug Statistics series no. 31. Cat. no. PHE 214. Canberra: AIHW
- (6) Royal Australasian College of General Practitioners (2015) Prescribing drugs of dependence in general practice, Part B: Benzodiazepines. RACGP House, Melbourne, Australia.
- (7) The Royal Australian and New Zealand College of Psychiatrists (2015) Practice Guideline 5 Guidance for the use of benzodiazepines in psychiatric practice.
- (8) Ashton, H.C. (2002) Benzodiazepines. How They Work and How to Withdraw. University of Newcastle, U.K. www.benzo.org.uk
- (9) Retrieved 22/11/2017 from https://www.pbs.gov.au/info/browse/statistics.
- (11) Dwyer, J., Ogeil, R., Bugeja, L., Heilbronn, C. & Lloyd, B. (2016). Victorian Overdose Deaths: The Role of Pharmaceutical Drugs and Drug Combinations. Turning Point: Melbourne
- (12) Gray, I. (2013) Proposal to reschedule benzodiazepines from Schedule 4 to Schedule 8. Appendix A Coroners Prevention Unit Report -Victorian deaths from acute drug toxicity, 2010-2011.
- (13) ABS, 2016 3303.0 Causes of Death, Australia. Retrieved 22/11/2017 from http://www.abs.gov.au/ausstats/abs

- (14) Victorian Alcohol and Drug Association (VAADA) Response to the Consultation Paper Feb 2010 Australia's National Drug Strategy: Beyond 2009 http://www.vaada.org.au/publications/page/2/
- (15) Lader, M. (2011) Benzodiazepines revisited will we ever learn? *Addiction*, 106, 2086-2109.
- (16) Airagnes, G., Pelissolo, A., Lavallée, M., Flament, M. & Limosin, F. (2016) Benzodiazepine Misuse in the Elderly: Risk Factors, Consequences, and Management. *Current Psychiatry Reports*, 16, 10.
- (17) Australian Institute of Health and Welfare 2017. National Drug Strategy Household Survey 2016: detailed findings. Drug Statistics series no. 31. Cat. no. PHE 214. Canberra: AIHW.
- (18) Stephens, J. and Pollack, M. (2005). Benzodiazepines in Clinical Practice: Consideration of Their Long-Term Use and Alternative Agents. *J Clin Psychiatry*: 66[suppl 2]:21–27
- (19) Sim, M., Khong, E. and Wain, T. (2007). The prescribing dilemma of benzodiazepines. *Australian Family Physician*, 36, 11.
- (20) Denis, C., Fatseas, M., Lavie, E., Auriacombe, M. (2006) Pharmacological interventions for benzodiazepine mono-dependence management in outpatient settings. *Cochrane Database of Systematic Reviews*, Issue 3. Art. No.: CD005194. DOI:10.1002/14651858.CD005194.pub2
- (21) Vinkers, C. & Olivier, B. (2012). Mechanisms underlying tolerance after long-term benzodiazepine use: A future for subtype-selective GABA A receptor modulators? *Advances in Pharmacological Sciences*, 2012. 1-18
- (22) Ipser, J., Stein, D., Hawkridge, S., Hoppe, L. (2010). Pharmacotherapy for anxiety disorders in children and adolescents. *Cochrane Database of Systematic Reviews* 2009, Issue 3. Art. No.: CD005170.
- (23) Bighelli, I., Trespidi, C., Castellazzi, M., Cipriani, A., Furukawa, T., Girlanda, F., Barbui, C. (2016). Antidepressants and benzodiazepines for panic disorder in adults. *Cochrane Database of Systematic Reviews* 2016, Issue 9. Art. No.: CD011567.



- (24) Busto, U., Sellers, E.M., Naranjo, C.A., Cappell, HD., Sanchez-Craig, M. and Simpkins, J. (1986) Patterns of benzodiazepine abuse and dependence. *British Journal of Addiction* 81:87-94
- (25) Campbell-Sills, L., Roy-Byrne, P., Craske, M., Bystrutsky, A., Sullivan, G., & Stein, M. (2016). Improving outcomes for patients with medication-resistant anxiety: Effects of collaborative care with cognitive behavioural therapy. *Depression and Anxiety*, 33, 1099-1106
- (26) Taylor, J., Jakubovski, E. and Bloch, M. (2015). Predictors of anxiety recurrence in the Coordinated Anxiety Learning and Management (CALM) trial. *Journal of Psychiatric Research*, 65, 154-165
- (27) Bateson, A. (2002). Basic pharmacologic mechanisms involved in benzodiazepine tolerance and withdrawal. *Current Pharmaceutical Design*, 8, 5-21
- (28) Morin, C. M., Bastien, C., Guay, B., Radouco-Thomas, M., Leblanc, J., & Vallieres, A. (2004). Randomized clinical trial of supervised tapering and cognitive behavior therapy to facilitate benzodiazepine discontinuation in older adults with chronic insomnia. *American Journal of Psychiatry*, 161(2), 332:334
- (29) Ree, M., Junge, M. and Cunnington, D. (2017) Australasian Sleep Association position statement regarding the use of psychological/behavioral treatments in the management of insomnia in adults. *Sleep Medicine*: 36, S43-S47
- (30) Morin, C.M., Beaulieu-Bonneau, S., Ivers, H., et al. (2014) Speed and trajectory of changes of insomnia symptoms during acute treatment with cognitive-behavioral therapy, singly and combined with medication. *Sleep Medicine*, 15: 701-707
- (31) Roth, T., Hartse, K.M., Saab, P.G., et al. The effects of flurazepam, lorazepam, and triazolam on sleep and memory. *Psychopharmacology* 1980; 70: 231-7
- (32) Cunnington, D., Junge, M. & Fernando, A. (2013) Insomnia: prevalence, consequences and effective treatment. *Med J Aust* 2013; 199 (8 Suppl): S36-S40. || doi: 10.5694/mja13.10718
- (33) Queensland Health. (2012) Queensland Alcohol and Drug Withdrawal Clinical Practice Guidelines. www.health.qld.gov.au

- (34) Barker, M.J., Greenwood, K.M., Jackson. M. & Crowe. S.F. (2004); Cognitive effects of long-term benzodiazepine use: a meta-analysis. *CNS Drugs.* 18 (1):37-48.
- (35) Federico, A., Tamburin, S., Maier, A., Faccini, M., Casari, R., Morbioli, L. & Lugoboni, F. (2017) Multifocal cognitive dysfunction in high-dose benzodiazepine users: a cross-sectional study. *Neurol Sci.* 38(1):137-142. doi: 10.1007/s10072-016-2732-5.
- (36) Tannenbaum, C., Paquette, A., Hilmer., S., Holyroyd-Leduc. J. & Carnahan. R. (2012) A systematic review of amnestic and non-amnestic mild cognitive impairment induced by anticholinergic, antihistamine, GABAergic and opioid drugs. *Drugs Aging*. 29 (8):639-58. doi: 10.2165/11633250-000000000-00000.
- (37) Lugoboni, F., Mirijello, A., Faccini, M., Cossari, A., Musi, G., Bissoli, G., Quaglio, G. and Addolorato, G. (2014). Quality of life in a cohort of high-dose benzodiazepine dependent patients. *Drug Alcohol Depend*.142:105-9. doi: 10.1016/j. drugalcdep.2014.06.020.
- (38) Paltiel, O., Marzec-boguslawska, A., Soskolne, V., Massalha, S., Avitzour, M., Pfeffer, R., Cherny, N., & Peretz, T. (2004) Use of tranquilizers and sleeping pills among cancer patients is associated with a poorer quality of life *Quality of Life Research*. Volume 13, Issue 10, pp 1699–1706
- (39) Charney, D., Paraherakis, A. & Gill, K. (2000). The treatment of sedative-hypnotic dependence: evaluating clinical predictors of outcome. *J Clin Psychiatry*. 61(3):190-5.
- (40) Couvee, J.E., Bakker, A., Zitman, F.G. (2002) The relevance of psychiatric and somatic comorbidity in depressed chronic benzodiazepine users. *Psychother Psychosom* 71:263–268.
- (41) Lader, M. (1994). Treatment of Anxiety. *BMJ: British Medical Journal* Vol. 309, No. 6950, pp. 321-324
- (42) Manthey, L., Giltay, E., van Veen, T., Neven, A., Zitman, F. & Penninx, B. (2011) Determinants of initiated and continued benzodiazepine use in the Netherlands study of depression and anxiety. *J Clin Psychopharmacol*. 31(6):774-9. doi: 10.1097/JCP.0b013e3182362484.



- (43) Parker, G. & Graham, R. (2016), Benzodiazepines: the good, the bad and the ugly. *Journal of Psychiatry Reform*.
- (44) Elvik, R. (2013) Risk of road accident associated with the use of drugs: A systematic review and meta-analysis of evidence from epidemiological studies. *Accident; analysis and prevention*. 60. DOI: 10.1016/j. aap.2012.06.017
- 45) Rapoport, M., Lanctôt, K., Streiner, D., Bédard, M., Vingilis, E., Murray. B., Schaffer, A., Shulman, K. & Herrmann N. (2009), Benzodiazepine use and driving: a meta-analysis. *J Clin Psychiatry*. 70(5):663-73. doi: 10.4088/JCP.08m04325.
- (46) Ballokova, A., Peel, N., Fialova, D., Scott, I., Gray, L. & Hubbard, R. (2014) Use of benzodiazepines and association with falls in older people admitted to hospital: a prospective cohort study. *Drugs Aging* 31(4):299-310. doi: 10.1007/s40266-014-0159-3.
- (47) Berry, S., Placide, S., Mostofsky, E., Zhang, Y., Lipsitz, L., Mittleman, M & Kiel, D. (2016). Antipsychotic and Benzodiazepine Drug Changes Affect Acute Falls Risk Differently in the Nursing Home. *J Gerontol A Biol Sci Med Sci*, Vol. 71, No. 2, 273–278 doi:10.1093/gerona/glv091
- (48) Chen, J. J., & Marsh, L. (2014). Anxiety in Parkinson's disease: identification and management. *Therapeutic Advances in Neurological Disorders*, 7(1), 52–59. http://doi.org/10.1177/1756285613495723
- (49) Billioti de Gage, S., Moride, Y., Ducruet, T., Kurth, T., Verdoux, H., Tournier, M., Pariente, A.& Bégaud, B. (2014) Benzodiazepine use and risk of Alzheimer's disease: case-control study. *BMJ*, 349: p. g5205
- (50) Gomm, W., von Holt, K., Thomé, F., Broich, K., Maier, W., Weckbecker, K., Fink, A., Doblhammer, G. & Haenisch, B. (2016) Regular Benzodiazepine and Z-Substance Use and Risk of Dementia: An Analysis of German Claims Data. *J Alzheimers Dis.* 6; 54(2):801-8. doi: 10.3233/JAD-151006.
- (51) Belleville, G. (2010) Mortality hazard associated with anxiolytic and hypnotic drug use in the National Population Health Survey. *Can J Psychiatry*. Sep; 55(9):558-67.

- (52) Pillans, P., Page, C., Ilango, S., Kashchuk, A. &Isbister, G. (2017). Self-poisoning by older Australians: a cohort study. *Med J Aust* 2017; 206 (4): 164-169. || doi: 0.5694/mja16.00484
- (53) Jann, M., Kennedy, W.K. & Lopez, G. (2014). Benzodiazepines: a major component in unintentional prescription drug overdoses with opioid analgesics. *J Pharm Pract*. 27(1):5-16. doi: 10.1177/0897190013515001.
- (54) Liew, D., Joules, E., Booth, J., Garrett, K., & Frauman, A. (2017) Evidence to inform the inclusion of Schedule 4 prescription medications on a real-time prescription monitoring system. Department of Clinical Pharmacology and Therapeutics and Pharmacy Department, Austin Health. Melbourne.
- (55) Baldwin, D., Aitchison, K., Bateson, A., Curran, H., Davies, S., Leonard, B., Nutt, D., Stephens, D.& Wilson S. (2013) Benzodiazepines: risks and benefits. A reconsideration. *J Psychopharmacol*. 27(11):967-71. doi: 10.1177/0269881113503509.
- (56) Deck, G., Nadkarni, N., Montouris, G. & Lovett, A. (2015). Congenital malformations in infants exposed to antiepileptic medications in utero at Boston Medical Center from 2003 to 2010. *Epilepsy & Behavior*, 51, 166-169
- (57) Bellantuono, C., Tofani, S., Di Sciascio, G. & Santone, G. (2013). Benzodiazepine exposure in pregnancy and risk of major malformations: A critical overview. *General Hospital Psychiatry*, 35, 3–8
- (58) Dolovich, L., Addis, A., Vaillancourt, J., Power, J., Koren, G. & Einarson, T. (1998). Benzodiazepine use in pregnancy and major malformations or oral cleft: Metaanalysis of cohort and casecontrol studies. *British Medical Journal*, 317, 839-843
- (59) Okun, M., Ebert, R. & Saini, B. (2015). A review of sleep-promoting medications used in pregnancy. *American Journal of Obstetrics & Gynaecology*, 212(4), 428-441
- (60) Wikner, B., Stiller, C., Bergman, O., Asker, C. & Källém, B. (2007). Use of benzodiazepines and benzodiazepine receptor agonists during pregnancy: Neonatal outcome and congenital malformations. *Pharmacoepidemiology and Drug Safety*, 16, 1203-1210



- (61) Yonkers, K., Gilstad-Hayden, K., Forray, A. & Lipkind, H. (2017). Association of panic disorder, generalized anxiety disorder, and benzodiazepine treatment during pregnancy with risk of adverse birth outcomes. JAMA Psychiatry, 74(11), 1145-1152
- (62) Convertino, I., Sansone, A., Marino, A., Galiulo, M., Mantarro, S., Antonioli, L., Fornai, M., Blandizzi, C. & Tuccori, M. (2016). Neonatal adaptation issues after maternal exposure to prescription drugs: Withdrawal syndromes and residual pharmacological effects. Drug Safety (in italics), 9 (10), 903-924.
- (63) Swortfiguer, D., Cissoko, H., Giraudeau, B., Jonville-Bera, A., Bensouda, L., Autret-Leca, E. (2005). Neonatal consequences of benzodiazepines used during the last month of pregnancy. *Archives Pédiatrie*, 12(9), 1327–1331
- (64) Huybrechts, K., Bateman, B., Desai, R., Hernandez-Diaz, S., Rough, K., Mogun, H., Patorno, E. (2017). Risk of neonatal drug withdrawal after intrauterine co-exposure to opioids and psychotropic medications: cohort study. *British Medical Journal*, 358, 1-10
- (65) Iqbal, M., Sobhan, T. & Ryals, T. (2002). Effects of commonly used benzodiazepines on the fetus, the neonate, and the nursing Infant. *Psychiatric Services*, 53(1), 39-49
- (66) Kelly, L., Poon, S., Madadi, P. & Koren, G. (2012). Neonatal benzodiazepines exposure during breastfeeding. *The Journal of Paediatrics*, 161, 448-451
- (67) Jackson, C., Markowitz, J. & Brewerton, T. (1995). Delirium associated with clozapine and benzodiazepine combinations. Annals of Clinical Psychiatry, 7(3):139-141.
- (68) Naso, A. (2008). Optimising patient safety by preventing combined use of intramuscular olanzapine and parenteral benzodiazepines. *American Journal of Healthy-System Pharmacists*, 65(15), 1180-1183
- (69) English, B., Dortch, M., Ereshefsky, L. & Jhee, S. (2012). Clinically significant psychotropic drugdrug interactions in the primary care setting. *Current Psychiatry Reports*, 14, 376-390

- (70) Sproule, B.A., Naranjo, C.A., Brenmer, K.E. & Hassan, P.C. (1997) Selective serotonin reuptake inhibitors and CNS drug interactions. A critical review of the evidence. *Clinical Pharmacokinet*. Dec; 33(6):454-71.
- (71) Clarot, F., Goullé, J., Vaz, E. & Proust, B. (2003). Tramadol-benzodiazepines and buprenorphine-benzodiazepines: two potentially fatal cocktails? *Journal of Clinical Forensic Medicine*, 10(2), 125-126
- (72) Rintoul, A., Dobbin, M., Drummer, O. & Ozanne-Smith, J. (2011). Increasing deaths involving oxycodone, Victoria, Australia, 2000-09. *Injury Prevention*, 17, 254-259
- (73) Jones, J., Mogalia, S. & Comer, S. (2012). Polydrug abuse: A review of opioid and benzodiazepine combination use. *Drug and Alcohol Dependence*, 125, 8-18
- (74) Lintzeris, N. & Nielsen, S. (2009). Benzodiazepines, methadone and buprenorphine: Interactions and clinical management. *The American Journal on Addictions*, 19, 59–72
- (75) Pilgrim, J., McDonough, M. & Drummer, O. (2013). A review of methadone deaths between 2001 and 2005 in Victoria, Australia. *Forensic Science International*, 226, 216-222
- (76) Montoro, J., Bartra, J., Sastre, J., Davila, I., Ferrer, M., Mullol, J., Valero, A. (2013). H1 antihistamines and benzodiazepines. Pharmacological interactions and their Impact on cerebral function. *Journal of Investigational Allergology and Clinical Immunology*, 23(Sup. 1), 17-26
- (77) Tanaka, E. (1999). Clinically significant pharmacokinetic drug interactions with benzodiazepines. *Journal of Clinical Pharmacy and Therapeutics*, 24, 347-355
- (78) Tanaka, E. (2002). Toxicological Interactions Between Alcohol and Benzodiazepines. *Clinical Toxicology*, 40(1), 69-75
- (79) Martyres, R., Clode, D. & Burns, J. (2004). Seeking drugs or seeking help? Escalating "doctor shopping" by young heroin users before fatal overdose. *MJA* 180 (5), 211-214



- (80) Spence, A., Guerin, G. & Goeders, N. (2016). Differential modulation of the discriminative stimulus effects of methamphetamine and cocaine by alprazolam and oxazepam in male and female rats. *Neuropharmacology*, 102, 146-157
- (81) Roy-Byrne, P. P., & Hommer, D. (1988). Benzodiazepine withdrawal: Overview and implications for the treatment of anxiety. *American Journal of Medicine*, 84(6), 1041-1052. DOI: 10.1016/0002-9343(88)90309-9
- (82) Russel, V. J. & Lader, M.H. (eds) (1993) Guidelines for the Prevention and Treatment of Benzodiazepine Dependence. London: Mental Health Foundation.
- (83) Voshaar, R., Oude, C., Couvée, J., Balkom, A., Mulder, P., and Frans, G. (2006) Strategies for discontinuing long-term benzodiazepine use. *British Journal of Psychiatry*, 189, 213-220.
- (84) Ashton, H.C. (1987). Benzodiazepine withdrawal: Outcome in 50 patients. *British Journal of Addiction* 82(6), 665-671
- (85) Tracy, K., & Wallace, S. P. (2016). Benefits of peer support groups in the treatment of addiction. *Substance abuse and rehabilitation*, 7, 143.
- (86) Moore, B. A., Fazzino, T., Garnet, B., Cutter, C. J., & Barry, D. T. (2011). Computer-based interventions for drug use disorders: a systematic review. *Journal of substance abuse treatment*, 40(3), 215-223.
- (87) Hood, S. D., Norman, A., Hince, D. A., Melichar, J. K., & Hulse, G. K. (2014). Benzodiazepine dependence and its treatment with low dose flumazenil. *British Journal of Clinical Pharmacology*, 77(2), 285-294. doi:10.1111/bcp.12023

- (88) Lader, M., & Kyriacou, A. (2016). Withdrawing Benzodiazepines in Patients with Anxiety Disorders. *Current Psychiatry Reports*, 18(1), 8. doi:10.1007/s11920-015-0642-5
- (89) Soyka, M. (2017). Treatment of Benzodiazepine Dependence. *New England Journal of Medicine*, 376(24), 2397-2400. doi:10.1056/NEJMc1705239
- (90) Wright, A., Diebold, J., Otal, J., Stoneman, C., Wong, J., Wallace, C., & Duffett, M. (2015). The Effect of Melatonin on Benzodiazepine Discontinuation and Sleep Quality in Adults Attempting to Discontinue Benzodiazepines: A Systematic Review and Meta-Analysis. *Drugs & Aging*, 32(12), 1009-1018. doi:10.1007/s40266-015-0322-5
- (91) Rubio, G., Bobes, J., Cervera, G., Terán, A., Pérez, M., López-Gómez, V., & Rejas, J. (2011). Effects of pregabalin on subjective sleep disturbance symptoms during withdrawal from long-term benzodiazepine use. *European Addiction Research*, 17(5), 262-270. doi:10.1159/000324850
- (92) Bobes, J., Rubio, G., Terán, A., Cervera, G., López-Gómez, V., Vilardaga, I., & Pérez, M. (2012). Pregabalin for the discontinuation of long-term benzodiazepines use: An assessment of its effectiveness in daily clinical practice. *European Psychiatry*, 27(4), 301-307. doi:10.1016/j.eurpsy.2010.12.004