CHAPTER 21

COMORBIDITIES: CO-OCCURRING MENTAL AND ALCOHOL USE DISORDERS

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COMORBIDITIES: CO-OCCURRING MENTAL AND ALCOHOL USE DISORDERS

Co-occurrence of mental and alcohol use disorders presents special challenges in the treatment of people with alcohol problems.

Comorbid mental disorders are common among people with alcohol problems. In Australia, of the 8841 people surveyed in 2007 for the National Survey of Mental Health and Wellbeing, 2.9 per cent met the criteria for harmful alcohol use, and 1.4 per cent met the criteria for alcohol use disorder (AUD). Of this latter group half (53.6%) met the criteria for an anxiety disorder and one-third (34.0%) met the criteria for an affective or mood disorder (ABS 2008). Other disorders associated with alcohol use disorder include other substance use disorders. Conversely, among people with mental disorders, such as depression, 34% of men and 15% of women have concurrent alcohol use problems. Exposure to trauma (such as witnessing serious injury or death, being involved in a life-threatening incident, or being threatened with a weapon etc) is very common among people with an alcohol use disorder. While people with post traumatic stress disorder (PTSD) are more than five times more likely to have an alcohol use disorder than people without PTSD only 5% of people with an AUD meet criteria for PTSD. Approximately one in five people with schizophrenia will have an alcohol use disorder at some time in their life. Thus, comorbid mental disorders are sufficiently common for their presence to be expected and their treatment planned for.

The following section is to be read in the context of the Australian national *Guidelines for the management of co-occurring alcohol and other drug and mental health conditions in alcohol and other drug treatment settings* (Marel et al., 2016) (**www.comorbidityguidelines.org.au**). These national guidelines provide more advice and resources than is contained here. Additional assistance can be obtained from guidelines for specific disorders found in **Appendix 6a**. To these resources, the following section provides specific information and recommendations about alcohol use disorders and adds research published since 2015.

Figure 21.1 shows guiding principles for working with people with comorbid alcohol use and mental disorders adapted from Marel et al (2016, p15)

When working with clients with comorbid mental health conditions, it is recommended that health services and health professionals take the following principles into consideration as described throughout these guidelines:

- As an individual health professional, work within your capacity (your scope of practice, or the bounds of your clinical competence) be realistic about what you can achieve, use the expertise of others, and coordinate care.
- Recognise that the management of comorbidity is part of the core business of health care.
- Provide equal of access to care.

- Adopt a 'no wrong door' policy. The onus isn't on the consumer of health care to understand how health services are organised nor for the consumer to know the best place to seek help, rather it is the responsibility of health care professionals to coordinate care and assist the person to receive optimal care.
- Recognise that comorbidity is common and that all clients should be routinely screened for comorbid conditions.
- Conduct ongoing monitoring of symptoms and assessment of client outcomes.
- Adopt a client-centred approach.
- Emphasise the collaborative nature of treatment.
- Have realistic expectations, a non-judgemental attitude, and a non-confrontational approach to treatment.
- Express confidence in the effectiveness of the treatment program.
- Involve families and carers in treatment.
- Consult and collaborate with other health care providers; and
- Ensure continuity of care.

In discussing comorbid mental disorders, this section uses the terminology of the fifth edition of the *American Psychiatric Association's Diagnostic* and *Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013) or the *World Health Organisation's International Classification of Diseases, 11th edition* because they provide specific criteria that define each disorder. These classifications are useful because they the most common classifications used in the research literature. Alcohol use disorder and the majority of the mental disorders are syndromes defined by characteristic patterns of reported symptoms and observed signs. Reported symptoms and observed signs are real, while syndromes are names to describe patterns of signs and symptoms that occur together, that have a common clinical course and that have some clinical utility. While underlying mechanisms that explain these symptoms and signs may be revealed by future research, these disorders remain descriptive syndromes.

Comorbidity presents diagnostic and management dilemmas. When a person first seeks assistance for an alcohol use disorder, motivation and engagement are crucial, as is gathering information and developing a shared understanding of the issues faced. Symptoms and concerns expressed in those initial contacts may demand immediate attention. With time it may become apparent that some concerns are the direct effects of intoxication or withdrawal from alcohol, and remit with abstinence or significant reductions in drinking. In other cases, mental disorders develop in parallel with alcohol use disorders. Still further cases show signs of mental disorders and alcohol interacting to cause greater problem severity, greater functional impact and poorer response to treatment. In addition, mental disorders may emerge or worsen in early abstinence from alcohol and may have been "masked" by alcohol. Differential diagnosis may be more important for longer term interventions - irrespective of how comorbidity developed initial management and treatment is usually similar.

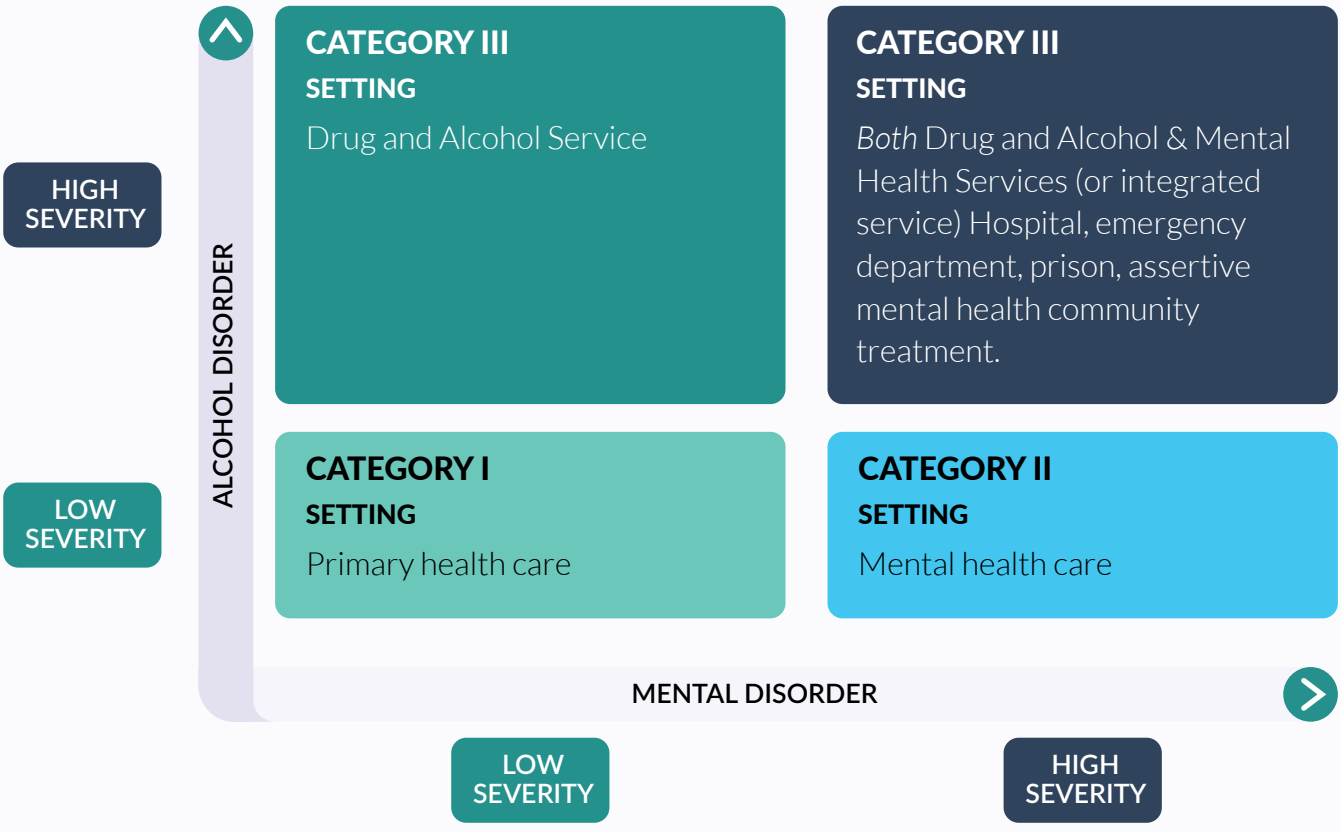
Because comorbidity often implies a person has two related disorders, it may be better to consider mulitmorbidity both as a term and as a reminder to consider a broad range of health and related problems.

People with comorbid alcohol use and mental disorders should be offered treatment for both disorders as part of routine care. Interventions for people with comorbidity should be more intensive, as this population tends to be more complex and carries a worse prognosis than those with single disorders. Care should be taken to co-ordinate interventions so that they are integrated and complement each other.

Integration and coordination of care for people with comorbid alcohol use and mental disorders should occur at service or team level as well as within the care provided to individuals. Specialist services for people with alcohol problems need expertise in the assessment and treatment of comorbid mental disorders. People referred from one service to another sometimes don't take up the referral (for a wide variety of understandable and legitimate reasons), and different services sometimes have different criteria for eligibility. In a siloed healthcare system, it is easy for people with more complex problems to "fall between the cracks". Thus, to ensure the continuity of care, it is desirable to bring mental health expertise into alcohol treatment services rather than expecting people with comorbid disorders to cope with geographic, administrative and clinical differences between services. Guidelines advocating for integrated care for people with chronic and complex health conditions should be applied. Integration of the content of treatment is discussed in following sections.

Figure 21.1 illustrates the levels of integration of specialist drug and alcohol and mental health services. Depending on the relative severity of the alcohol use disorder and mental disorder, care can be provided in an appropriate specialised setting or in a primary care setting. As an example, the Victorian *Guidelines for Alcohol and Drug Programs* list comorbid mental disorders as one of the criteria for admission to subacute beds for withdrawal (VicHealth, 2018).

FIGURE 21.1 Level of care for people with co-occurring alcohol use and mental disorders



Note: Adapted from Cener for Substance Abuse Treatment 2005. Substance abuse treatment for persons with co-occuring disorders. Treatment Improvement Protocol (TIP) Series 42, DHSS publication no. (SMA) 05-3922. Substance Abuse and Mental Health Services Administration, Rockville MD.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.1	People with alcohol use disorder and comorbid mental disorders should be offered treatment for both disorders. Care should be taken to coordinate intervention.	C
21.2	More intensive interventions are needed for people with comorbid conditions as this population tends to be more disabled and carries a worse prognosis than those with single pathology.	GPP
21.3	At a minimum all Alcohol and other drugs (AOD) workers should be 'comorbidity informed', knowledgeable about the symptoms of the common mental disorders and how to manage these symptoms.	GPP

ASSESSMENT AND DIAGNOSIS

Based on Marel et al's (2016, p62) *National Comorbidity Guidelines*

- Given the high rates of mental disorders among people with alcohol use disorders, it is essential that routine screening and assessment be undertaken for these conditions as part of case formulation.
- Screening and assessment set the scene for the future client/worker relationship and need to be conducted in a compassionate and empathic manner while *acknowledging the positive and negative impacts of alcohol use.*
- It is important to consider a comprehensive problem list in the process of case formulation (e.g., sociocultural factors; living situation; legal issues; financial; family and relationships; and medical and personal history), not only AOD and mental health issues.
- Full assessment should ideally occur subsequent to a period of abstinence, or at least when not withdrawing or intoxicated.
- Multiple assessments should be conducted throughout a person's treatment as symptoms may change over time.
- It is important to provide assessment feedback to the client in a positive, easily understood manner.

PEOPLE PRESENTING AT DRUG AND ALCOHOL SERVICES

Assessment for comorbid mental disorders and symptoms should form part of standard assessment procedures (see **Chapter 4**).

It is essential that assessment of common problems such as anxiety and depression are routine practice in alcohol treatments settings.

It is important to keep in mind that one purpose of assessment is to identify the issues that need attention. Particularly with complex and chronic problems, it is important to engage the person as they may have had multiple partially successful interactions with health services with the possibility of stigma and demoralisation. Assessment should also be focused on identifying the most pressing needs for the person including those that have the most immediate impact on their survival and quality of life. In this way, risk for suicide while intoxicated is a more immediate priority in assessment than differential diagnosis of major depressive disorder; risk for domestic violence more important than assessment of post-traumatic stress disorder; risk for tiredness and reduced motivation more important than assessing a sleep disorder; and impulsive risk taking more immediate than attention-deficit hyperactivity disorder. It is often necessary to begin treatment for potential comorbid concerns before a differential diagnosis can be established. Longer term care is benefited from broader awareness of the underlying conditions but collecting evidence for these should not interfere with engaging the person nor resolving immediate priorities. A period of abstinence (traditionally 4-6 weeks) is the most widely used way to make a differential diagnosis, recognising that abstinence may be difficult for some to achieve and treatment is often required before abstinence can be achieved.

WHEN SHOULD ASSESSMENT OCCUR?

Assessment of comorbid mental disorders should occur a) for all at first contact, b) when triggered by positive responses to screening, c) when the client requests it, d) when the client has or is likely to drop out from treatment, e) when progress is not as expected, or f) when there is an unexpected or abrupt change in the client's condition.

A first step in assessment of comorbid mental disorders is consideration of their severity. Milder symptoms of anxiety and depression may not need separate attention, but more severe forms may change the focus and setting of treatment. The Kessler 10 Symptom Scale otherwise known as the K10 is a widely used measure of psychological distress that appears suitable to screen for wide a variety of mental disorders (see **Appendix**). A briefer 6 item version, the K6, appears to have similar screening properties and may be preferred for brevity. It also may be repeated to monitor progress and as an outcome measure in people with anxiety and depressive disorders.

Differential diagnosis may take time and should not be a barrier to starting treatment focused on symptoms. As above a period of abstinence (conventionally 4-6 weeks), or significantly reduced drinking, is a key method. In addition, taking a careful history may reveal that comorbid mental disorders began before drinking. For example, antidepressant treatment for depressive disorder is more effective when that disorder began before the onset of drinking or when

the depression persists beyond abstinence compared to depression that only occurs within "active alcohol use disorder". It may also be useful to pay attention to the symptoms present – low mood, agitation, insomnia and arousal may be explained as the effect of drinking or as a separate anxiety or depressive disorder, while phobic avoidance, flashbacks, thought disorder are more likely to indicate separate mental disorders. Where there is confidence that a separate mental disorder is present, or there are disturbing impairing symptoms, optimal intervention should be made available without delay.

Following a positive screen on the K10 or K6 a more detailed assessment for specific mental disorders may be required. We found little evidence to recommend for or against any of the typically available options such as referral for a psychiatric opinion, the use of structured or semi structured diagnostic interviews, further questionnaires to assess specific disorder, and/or a clinical interview. In the absence of definitive evidence, clinical consensus is that any of these methods for more comprehensive assessment is acceptable if they can be achieved in a timely, co-ordinated, compassionate and engaging way.

Where there is more time available or the likelihood of comorbidity is higher, specific screening questionnaires for common comorbidities are likely to provide additional information as part of a comprehensive assessment. Standardised questionnaires with validation for screening against gold standard clinical interview in comorbid samples are the Adult Attention deficit hyperactivity disorder (ADHD) Self-Report Scale for ADHD (level C evidence), The Psychosis Screener (also with level C evidence). The Trauma Screening Questionnaire (TSQ) and Primary care PTSD screen (PC-PTSD) (D), Short Sleep Index for insomnia (D), The Eating Disorder Examination – Questionnaire EDEQ for eating disorder (D), and the Iowa Personality Disorder Screen (IPDS-SR, 11items) and the Standardized Assessment of Personality-Abbreviated Scale (SAPAS-SR, 8 items) for personality disorders (D) may be used.

Formal routine monitoring of progress with feedback to clinicians and consumers may be a useful in identifying those who are not progressing as expected (Crits-Christoph et al., 2012; Lambert, 2010) and additional benefits may result from standardised assessment of the barriers to progress (such as motivation and therapeutic alliance see **Chapter 9**).

Assessment of comorbid mental disorders should be conducted regularly as the clinical picture can change with improvements in alcohol use. People with comorbid mood and alcohol use disorder should be regularly assessed and monitored for risk of suicide according to established guidelines (see **Appendix 6a**).

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.4	The K10 or K6 are recommended for screening for comorbid mental disorders in people presenting for alcohol use disorders.	A

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.5	Differential diagnosis of comorbid disorders should take place after resolution of withdrawal, which may account for some anxiety and depressive symptoms.	B
21.6	To identify specific mental disorders the Adult ADHD Self-Report Scale (ASRS) is recommended to screen for Attention Deficit Hyperactivity Disorder as is The Psychosis Screener as a screen for psychotic disorders as part of a comprehensive assessment.	C
21.7	The Trauma Screening Questionnaire (TSQ) and/or the Primary Care PTSD Screen (PC-PTSD) are recommended to screen for PTSD, Short Sleep Index for insomnia, Eating Disorder Examination –Questionnaire (EDEQ) for eating disorders, and the Iowa Personality Disorder Screen (IPDS-SR) and/or the Standardized Assessment of Personality-Abbreviated (SAPAS-SR) for personality disorders, as part of a comprehensive assessment.	D
21.8	Routine standardised assessment of alcohol use and symptoms of comorbid disorders may alert clinicians to clients who are not progressing as expected to identify and manage barriers to progress.	GPP

PEOPLE PRESENTING TO MENTAL HEALTH SERVICES

Alcohol use and the problems it can lead to are sufficiently common that the alcohol use of all people who come in contact with mental health services should be assessed. The Alcohol Use Disorders Identification Test (AUDIT) (see **Chapter 4**) appears to be a suitable screening tool for identifying hazardous or harmful alcohol consumption and alcohol dependence among people presenting for mental health services.

A non-judgemental attitude to alcohol use is a crucial for the assessment and management of alcohol use disorders in mental health services. If AUDIT scores are in the hazardous or harmful range psychoeducation and practical advice to reduce drinking may be sufficient. If significant harms from drinking are revealed or the person has indications of dependence it is more likely that the alcohol problem is unlikely to improve by focusing solely on their mental disorders and specific treatment is recommended. As above differential diagnosis is possibly only useful for long term management and is unlikely to be the top clinical priority. Alcohol use should not be dismissed as an acceptable way to cope with a mental disorder. The recommendations for the psychological and pharmacological management of alcohol use disorders throughout in this document should be implemented. There is mixed evidence for the use of brief interventions for alcohol use in those with other mental disorders. Thus, it may be reasonable to employ brief

interventions for alcohol if there is adequate monitoring and follow-up so that intervention can be stepped up if treatment goals are not achieved.

Alcohol use is associated with increased risk for suicide. Intoxication is likely to increase the changeability of suicide risk and present an increased acute risk. Withdrawal and early abstinence may also be a period of increased risk as distress and symptoms that may indicate a mental disorder may increase. People with comorbid mood and alcohol use disorder should be regularly assessed and monitored for risk of suicide according to established guidelines (see Appendix 6a).

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.9	AUDIT in full or briefer versions (AUDIT-C) is recommended to help identify AUD in those attending mental health services as part of a comprehensive assessment.	A
21.10	Brief intervention including motivational interviewing is recommended for people with mental disorders and hazardous or harmful alcohol use who are presenting for mental health care with adequate monitoring and follow-up to step up intervention if reduced drinking is not achieved.	D

TREATMENT

As a general principle co-occurring mental and alcohol use disorders should be managed in parallel or in an integrated fashion with evidence-based treatments provided for both problems. Users of these guidelines should consult clinical practice guidelines for specific mental disorders, and in the absence of guidance or evidence to the contrary, apply those recommendations to the care of those with comorbid conditions. Care should be taken to coordinate treatments, so they are complementary rather than contradictory.

THE SETTING AND ORGANISATION OF CARE

As comorbidity is the norm rather than the exception in people seeking help for alcohol use disorders, services should plan for and anticipate comorbidity. Experiences of trauma are very common in people attending alcohol and other drug services and it is good practice to consider trauma informed care in designing spaces, policies and procedures so as not to unnecessarily trigger traumatic memories. Creating a safe space with sufficient privacy, free of violent or sexual material on TV screens or in magazines (eg in waiting areas), and sufficient staffing to monitor the behaviour of others who may be perceived as intrusive or harassing are some key features of trauma informed care.

Alcohol use disorders can be chronic and impact on client motivation and this is even more pronounced in people who also have comorbid mental disorders thus it is a good practice point to consider that care be organised to provide integrated, co-ordinated, engaging care with minimal administrative barriers. Consensus guidelines for the management of multimorbidity and the comorbidity guidelines lead to the following recommendations.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.11	Trauma informed care can help the design of spaces, policies, and procedures to avoid unnecessarily triggering those with experiences of trauma.	GPP
21.12	Offer care that is tailored to the person's personal goals and priorities.	GPP
21.13	Consider reducing interventions that have a high burden on the individual in case adherence may be compromised.	GPP
21.14	Develop and agree upon an individualised management plan with clear responsibilities for coordination of care.	GPP

E-HEALTH & E-THERAPY INTERVENTIONS

Providing care face to face is the most common way for alcohol treatment to proceed. Since the last edition of these guidelines ehealth and in-particular providing psychological interventions over the internet has become a more viable option. Such e-therapies can be effective and may improve access to care. These interventions provide information, describe the procedures of psychological therapies and provide individualised support in a variety of ways. They are not simply the switching of face to face contact with that provided by telephone or teleconferencing.

While e-therapies for common mental disorders are available (such as MindSpot, (**https://mindspot.org.au/**), this way up (**https://thiswayup.org.au/**), Beacon (**https://beacon.anu.edu.au/**) eMHprac (**https://www.emhprac.org.au**), HeadtoHealth (**https://headtohealth.gov.au/**)) those specific to comorbid substance use and mental disorders are more difficult to access because they are often the subject of research trials without any mechanism for widespread dissemination. E-therapies are not a solution to workforce shortages. For drug and alcohol services without the staffing to provide intervention for comorbidity onsite e-therapies may provide a useful addition to treatment plans. However, care should be taken to coordinate the intervention so as to monitor progress, ensure continuity of care, and maximize engagement.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.15	e-therapy may provide timely and economical access to evidence based therapies for comorbid mental disorders as part of a broader treatment plan where progress is monitored, and engagement and continuity of care are maintained.	GPP

OVERALL COMMENTS ON PSYCHOSOCIAL INTERVENTIONS

As a general principle comorbid mental disorders should be treated according to the clinical practice guidelines for those specific disorders. Care should be coordinated and integrated, but little evidence supports use of specific packages that integrate the content of psychological interventions. There are notable exceptions (e.g. comorbid PTSD & alcohol) to this which are covered below.

Some considerations are:

- Where possible the same health professional should provide treatment for both alcohol use and comorbid disorders and if not;
- Any combination of specific techniques should be coordinated.

It may be that, among people who are severely alcohol dependent, a focus on comorbid mental disorders may divert attention from the crucial immediate task of reducing alcohol consumption early in treatment and hence interfere with longer term outcome. There is an alternative view that that engaging people with treatment for their comorbid disorder might be a way to get some initial gains, build momentum and rapport that then orients the person to be ready to work on the alcohol use disorder.

As a general rule when people are learning new ways to manage distress and emotions, they often experience greater distress and stronger emotions. Particularly when they are trying not to cope by drinking, it is likely that they will feel worse in the short term. Psychoeducation about the likely experiences of abstinence or reduced drinking is an important part of any intervention.

Specific psychological interventions that have strong empirical support for treating mental disorders uncomplicated by comorbidity are cognitive behavioural therapy, behaviour therapy, cognitive therapy, and interpersonal therapy. Other psychotherapies may be effective but there is generally insufficient evidence to recommend their use.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.16	Provide psychoeducation about the nature and prevalence of comorbid mental disorders in alcohol use disorders and the likelihood of improvement with abstinence or significant reductions in alcohol use.	GPP

OVERALL COMMENTS ON PHARMACOLOGICAL TREATMENT

Pharmacological treatments have proved effective in treating anxiety, depression and psychosis in co-occurring mental and alcohol use disorders. The overall approach recommended by Kranzler and Soyka (2018) is *"When psychiatric symptoms persist despite a substantial reduction or cessation in drinking, the optimal approach is to continue alcohol pharmacotherapy and add a specific psychiatric medication."* (p 817).

As earlier, the following guidance should be read in conjunction with clinical practice guides for specific comorbid mental disorders. What follows focuses on whether the medication 1) is superior to placebo in terms of its primary target 2) does not lead to worse alcohol outcomes, and 3) leads to improved overall outcomes such as quality of life.

Given the complexities of co- and multi-morbid presentations, guidance on polypharmacy (National Institute for Health and Care Excellence, 2017) and on "off label" prescribing (Royal Australian and New Zealand College of Psychiatrists, 2018) are important to consider. The potential for drug-drug interactions should be taken into account. The side effect profile of any medications prescribed should be considered for potentially exacerbating any comorbid conditions. Clinicians should also be alert to the possibility of poorer adherence to prescriptions and increased risk of overdose while intoxicated. As above the co-ordination of care between different health professionals is crucial.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.17	When symptoms of mental disorders persist despite a substantial reduction or cessation in drinking, the optimal approach is to continue alcohol pharmacotherapy and add a specific psychiatric medication.	GPP
21.18	People receiving pharmacotherapy for alcohol use disorders with comorbid mental disorders should be more closely monitored for exacerbation of their comorbid symptoms.	GPP

NEURODEVELOPMENTAL DISORDERS

Attention deficit hyperactivity disorder (ADHD) appears common in people attending alcohol treatment settings. One randomised controlled trial (RCT) supports the use of integrated cognitive behaviour therapy (CBT) for ADHD and alcohol use disorder over CBT for alcohol at least in the short term with no worse alcohol outcomes. CBT for ADHD is likely to include problem solving strategies, strategies for improved attention, and to reduce impulsivity and unhelpful thinking patterns.

The following summarises the recommendations for ADHD from the comorbidity guidelines. Pharmacotherapies for ADHD including psychostimulants (e.g., methylphenidate & dexamphetamine) and noradrenaline reuptake inhibitors (atomoxetine) have been shown to be beneficial in people with ADHD and comorbid substance use. Their effect is not as large for people with comorbidity compared to those only experiencing ADHD. It is recommended they be used in combination with psychotherapy because of greater effectiveness. A thorough medical assessment to rule out cardiovascular and other contraindications for psychostimulant prescribing is recommended. While psychostimulants are more effective than other pharmacotherapies it is necessary to carefully weigh their benefits against the potential risk for diversion and misuse and include risks of suboptimal treatment of ADHD.

The UK NICE Guidelines on ADHD (National Institute for Health and Care Excellence, 2019) recommend that titration of ADHD medication dose be slower and monitoring more frequent in those with "substance misuse".

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.19	Integrating CBT for ADHD and CBT for alcohol use disorder may lead to better ADHD outcomes than focusing on alcohol alone at least in the short term.	C
21.20	Psychostimulants (methylphenidate) and noradrenaline reuptake inhibitors (atomoxetine) have been shown to be beneficial in people with ADHD and comorbid substance use including alcohol.	B
21.21	Titration of ADHD medication dose should be slower and monitoring more frequent in those with "substance misuse".	GPP

SCHIZOPHRENIA SPECTRUM AND OTHER PSYCHOTIC DISORDERS

Atypical antipsychotics appear to be the first line of treatment of comorbid psychotic illness and substance use disorders.

For people with alcohol use disorders and schizophrenia, no compelling evidence supports one psychosocial treatment over another to reduce substance use or improve mental state. A Cochrane review of treatment programs for people with both severe mental disorder and substance misuse, including alcohol, suggests that the evidence is poor at best with very few studies available for analysis.

However, one trial demonstrated effectiveness of motivational interviewing in increasing abstinence from alcohol in this population.

Cognitive behavioural therapy also appears to be effective in treating those with comorbid psychoses. For example, integrating motivational interviewing, cognitive behavioural therapy and family intervention with routine psychiatric care has been shown to produce greater benefits for people with comorbid schizophrenia and substance use disorders than routine psychiatric care alone. Typical benefits have included better general functioning, a reduction in positive symptoms, and an increase in the percentage of days abstinent from alcohol or drugs.

Integrating the psychosocial treatment for the mental disorder with the psychosocial treatment for alcohol use disorder may be beneficial. Relapse prevention strategies should consider triggers for both alcohol use and mental disorders.

Specific motivational interviewing, contingency management and specialist dual diagnosis residential programs are reported as possibly effective in Marel et al (2016).

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.22	CBT including motivational interviewing appears to be beneficial for people with alcohol use disorder and schizophrenia.	C
21.23	Contingency Management appears to improve alcohol outcomes for people with alcohol use disorder and schizophrenia and may be added to other treatments for psychosis.	C
21.24	Longer term (12 month or more) specialist dual diagnosis residential program (if available) may be associated with increased abstinence and decreased risk of homelessness.	C

Pharmacotherapy should be offered as described in **Chapter 10**.

Limited evidence shows that among people with schizophrenia, two atypical antipsychotics (risperidone and clozapine) may reduce alcohol misuse, smoking, and possibly some other substance misuse.

Addition of psychosocial support to pharmacological treatment has been shown to be effective in treatment of comorbid psychosis and alcohol use disorders.

Clinicians should recognise the potential for poor medication adherence in people who drink heavily that are prescribed antipsychotic medications. There is the potential for excess sedation if alcohol is consumed that may influence safety of these medications in those with AUD.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.25	Disulfiram should not be first line pharmacotherapy for people experiencing psychotic and alcohol use disorders.	GPP
21.26	Clozapine appears to be more effective than other antipsychotics in reducing symptoms of psychosis in people with comorbid schizophrenia and alcohol use disorder without significant impact on drinking.	C

BIPOLAR AND RELATED DISORDERS

Pharmacological management of bipolar disorder with atypical antipsychotics (such as quetiapine, olanzapine, risperidone) or lithium has a strong evidence base.

Bipolar disorder and comorbid substance use disorder (including alcohol) may be assisted by integrated group therapy at least for substance use outcomes based on the work of one research group including two randomised controlled trials (RCTs).

A small number of poor quality trials (RCTs & open label trials) in people with comorbid bipolar and substance use disorders support the likely efficacy of atypical antipsychotics (such as quetiapine, olanzapine, risperidone) or lithium in reducing bipolar symptoms with no consistent evidence for an effect of substance use (including alcohol).

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.27	Integrative group therapy for comorbid bipolar and substance use disorder is likely to provide better substance use outcomes than intervention focused on substance use alone for people with this comorbidity.	B
21.28	Atypical antipsychotics (such as quetiapine, olanzapine, risperidone) appear to reduce symptoms of bipolar disorder in people with comorbid bipolar and substance use disorder but there is little evidence of benefit for substance use including alcohol.	C

DEPRESSIVE DISORDERS

The recommendations for the management of comorbid depressive disorder from *National Comorbidity Guidelines* are summarised here. First line management is to provide psychoeducation about depression in the context of alcohol use with information about how to manage symptoms. If symptoms persist, psychological interventions with a strong evidence base in the treatment of depressive disorders such as CBT, behavioural activation, cognitive therapy and interpersonal therapy can be applied. Internet delivered or e-therapy may be a convenient way to access these therapies provided progress is monitored, engagement is maintained, and care is coordinated. Then motivational interviewing and/or contingency management may be integrated to provide additional benefit. Some benefit for a disparate collection of integrated cognitive behavioural therapy programs for comorbid major depression and alcohol use disorders compared to a focus on alcohol alone was found in a recent meta-analysis. The specific cognitive behavioural therapy packages were described such as behavioural activation, cognitive therapy and interpersonal therapy. There is insufficient evidence to recommend so called third wave therapies such as acceptance and commitment therapy, mindfulness based stress reduction, and mindfulness based cognitive therapy, but these may be of use if there is insufficient response to the earlier approaches. Antidepressants are an alternative second line treatment for comorbid alcohol and depressive disorders.

Meta-analyses of randomised controlled trials indicate that antidepressant medication has a modest beneficial effect for comorbid depressive and substance-use disorders. They are not recommended as a stand-alone treatment. Concurrent treatment directly targeting the alcohol use disorder is also indicated. There is reasonably good evidence from a meta-analysis of RCTs that antidepressants are more effective for independent depression (that began before alcohol use disorder or persists through abstinence) than for depression that is experienced only while drinking or in withdrawal.

Antidepressants may help relieve depressive symptoms but have little effect on reducing alcohol consumption, unless accompanied and supported by psychosocial treatment for alcohol-use disorder.

SSRIs reduce depressive symptoms in comorbid major depression and alcohol use disorder; however, research results regarding their effectiveness in reducing alcohol consumption are conflicting. SSRIs should not be used as primary therapy to reduce alcohol consumption in comorbid depression. Tricyclic antidepressants should be used with caution in this population due to high risk of poor treatment adherence, abuse and overdose.

Antidepressants should not be the first line of treatment in patients with comorbid alcohol use disorders, unless there is high level of suicidal ideation, severe depressive symptoms or a history of pre-existing depressive illness. Clinicians should consider potential for poor treatment compliance among people with heavy alcohol use. Psychological treatment options should be used first, integrating approaches that are aimed at reducing alcohol consumption with those targeting depressive symptoms.

If naltrexone is used in people with depression additional monitoring may be needed to identify potential worsening in mood. Similarly, there is potential for a very rare exacerbation of mood in those taking disulfiram. Baclofen may be associated with an increase in depression.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.29	Evidence based psychosocial interventions for depression (CBT, cognitive therapy) can be integrated with motivational interviewing and/ or contingency management for depression.	C
21.30	Integrating psychosocial treatment for mood disorders with psychosocial treatment for alcohol- use disorder may be beneficial.	D
21.31	Antidepressants (sertraline, imipramine, desimparmine, & fluoxetine) are likely to reduce depression in those with comorbid depression that is independent of alcohol use with some small or inconsistent effects on alcohol use.	B
21.32	Antidepressants may provide limited benefit for symptoms of depression in those whose depression only occurs during active alcohol use disorder.	C
21.33	Antidepressants are not expected to benefit alcohol use and should not be prescribed to reduce alcohol use.	C
21.34	When considering the use of tricyclic antidepressants in patients with major depression continuing to misuse substances, the potential benefits should be balanced against the risk of suicide.	GPP

ANXIETY DISORDERS AND OBSESSIVE-COMPULSIVE AND RELATED DISORDERS

Anxiety disorders are common comorbidities in people with alcohol use disorder. At risk of repeating earlier advice, it is important to separate symptoms of anxiety that are the short- or long-term effects of alcohol use disorder from anxiety disorders that have their own maintaining processes and require their own treatment. Clinical trials for comorbid alcohol use and anxiety disorders support either a) the recommended interventions for both disorders or b) in rarer instances there is support for a combined or integrated intervention.

Some evidence shows that the specific techniques of cognitive behavioural therapy, such as exposure to feared situations, is well tolerated by people with substance use disorders, does not lead to relapse to drug use, and indeed contributes to reductions in anxiety.

Typical pharmacological treatments for anxiety disorders (agoraphobia, panic disorder, social anxiety disorder, & generalised anxiety disorder) also reduce anxiety when they co-occur with alcohol use disorders but typically have not impact on alcohol consumption.

Selective serotonin reuptake inhibitors (SSRIs) reduce symptoms of anxiety in patients with comorbid anxiety and alcohol use disorder. They are indicated for treatment of obsessive-compulsive disorder (OCD) and panic disorder in these patients. However, little good quality evidence supports their capacity to reduce alcohol intake in the longer-term in patients with comorbid anxiety disorders.

Benzodiazepines are effective anxiolytics and are used in treatment of acute alcohol withdrawal but should not be used beyond this indication. They are not recommended in treatment of comorbid anxiety due to high risk of dependence and a potential synergistic interaction with alcohol.

We found no clinical trials of pharmacotherapy for comorbid obsessive-compulsive and alcohol use disorder. Thus any recommendation is based upon evidence from people without comorbidity. SSRIs are recommended for the first line treatment of OCD alone or in combination with psychological therapies.

Combining pharmacological and psychosocial interventions may be beneficial, particularly when psychosocial interventions for alcohol use disorders are integrated with those for anxiety.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.35	Cognitive behavioural therapy, behaviour therapy, cognitive therapy, and interpersonal therapy should be considered for treatment of people with comorbid mental and alcohol use disorders because of their demonstrated effectiveness in non-comorbid cases.	B
21.36	SSRIs may reduce the symptoms of anxiety in people with comorbid anxiety and alcohol use disorder without impacting on alcohol use.	C
21.37	Benzodiazepines are not recommended for treatment of comorbid anxiety in people with alcohol-use disorders due to high risk of dependence and a potential synergistic interaction with alcohol.	GPP

TRAUMA- AND STRESSOR-RELATED DISORDERS

The majority of people presenting to drug and alcohol services are likely to have experienced some traumatic events in their lives. Many will have ongoing problems from those experiences. Combat exposure, physical and/or sexual assault, life-threatening accidents, and natural disasters place a person at risk of alcohol use and post-traumatic stress disorder. As an intervention to organise care - we could find no direct evidence about *trauma informed care* in drug and alcohol settings but evidence from other settings suggest that it is likely to be beneficial.

Recommendations for the management of comorbid trauma and post-traumatic stress disorder from the 2013 *Australian guidelines for the treatment of adults with acute stress disorder and posttraumatic stress disorder* (Australian Centre for Posttraumatic Mental Health (ACPMH), 2013), and the *National Comorbidity Guidelines* are summarised here and are supported by a high quality Cochrane review. There is clear evidence that intervention should be individual and not group based and that trauma focused approaches lead to better outcomes than those without a trauma focus. However as there are relatively few health professionals trained to provide trauma focused psychotherapies, there is a need for significant training and clinical supervision to provide and support workforce capacity.

Australian PTSD clinical practice guidelines recommend that pharmacotherapies be added to trauma focused CBT if there is not sufficient benefit from CBT alone (Australian Centre for Posttraumatic Mental Health (ACPMH), 2013).

A systematic review of 18 studies of benzodiazepines for PTSD found worse substance use outcomes with the use of benzodiazepines. From Marel et al's (2016) review the antidepressants sertraline, desipramine and paroxetine as well as naltrexone and disulfiram have been successfully trialled for comorbid PTSD and substance use disorders. There was insufficient evidence to make any recommendation about the use of the anticonvulsants topiramate and gabapentin for comorbid PTSD and alcohol use disorder.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.38	Individual integrated/concurrent trauma focused therapy (including prolonged exposure) is recommended for people with alcohol use disorder and comorbid PTSD.	B
21.39	In the context of PTSD and substance use disorders, the trauma-focussed component of PTSD treatment should not commence until the person has demonstrated a capacity to manage distress without recourse to substance use and to attend sessions without being drug or alcohol affected.	GPP
21.40	In the context of PTSD and substance use disorders, where the decision is made to treat substance use disorders first, clinicians should be aware that PTSD symptoms may worsen due to acute substance withdrawal or loss of substance use as a coping mechanism. Treatment should include information on PTSD and strategies to deal with PTSD symptoms as the person controls their substance use.	GPP

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.41	Benzodiazepines are not recommended for treatment of comorbid PTSD and alcohol-use disorders as they may lead to poorer substance use outcomes.	B
21.42	The antidepressants sertraline, desipramine and paroxetine as well as naltrexone and disulfiram may be beneficial for comorbid PTSD and substance use disorders.	B

FEEDING AND EATING DISORDERS

Feeding and eating disorders including anorexia nervosa, bulimia nervosa, and binge eating disorder frequently co-occur in people with alcohol use disorders. There is a dearth of direct evidence, so the optimal approach is to use the recommended interventions for the separate disorders.

SLEEP-WAKE DISORDERS

Sleep disturbance is common in people with alcohol use disorders and may resolve with abstinence or significant reductions in use. Symptomatic management may be required and if problems persist after 6 weeks to 3 months of abstinence or significantly reduced consumption, they may require more careful assessment and treatment. Evidence is limited to a small number of studies on insomnia. Psychological interventions (CBT for Insomnia CBT-I) appear to show a greater benefit over control compared to the pharmacotherapies that have been tested in improving sleep and are recommended as the first line of treatment.

Care should be taken that pharmacotherapy targeting alcohol use disorders such as naltrexone does not have the unintended consequence of worsening insomnia. Gabapentin, quetiapine, trazodone (not available in Australia) and other agents have been trialled in small studies with inconsistent results and further research is required. There is little evidence that treating sleep disorders pharmacologically improves alcohol related outcomes.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.43	Sleep hygiene and psychoeducation about sleep are recommended as the first line intervention for insomnia that lasts beyond withdrawal.	GPP
21.44	Behavioural interventions including CBT-I and progressive muscle relaxation are recommended as second line interventions for insomnia.	GPP

DISRUPTIVE, IMPULSE CONTROL, AND CONDUCT DISORDERS

Frustration, anger, and aggressive behaviour are common problems for people seeking help for an alcohol use disorder. These are often the effect of alcohol, related to the impact of an alcohol use disorder, or may even be a feature of a depressive disorder. It may be useful to consider diagnoses of disruptive, impulse control, and conduct disorders. However, there is little or no direct evidence upon which to base guidelines for comorbidity and the best evidence comes from literature on single disorders.

PERSONALITY DISORDERS

Antisocial and borderline personality disorder are common presentations to alcohol and drug services. Two systematic reviews have identified Dialectical Behaviour Therapy for Substance Abusers (sic DBT-S), Dual Focused Schema Therapy (DFST) and Dynamic Deconstructive Psychotherapy as effective in reducing symptoms of borderline personality disorder in people with substance use disorders. Because of the training needs and the complexity of delivering treatment Lee et al (2015) recommend DBT-S over the alternatives.

There is very little direct clinical trial evidence to inform choice of pharmacotherapy. One trial found that naltrexone and disulfiram had similar effects in people with a comorbid diagnosis of either anti-social personality disorder or borderline personality disorder compared to those with alcohol use disorder alone.

	RECOMMENDATION	GRADE OF RECOMMENDATION
21.45	Dialectical Behaviour Therapy (DBT-S) should be provided to people with comorbid borderline personality and alcohol use disorder.	B