In this handout, the term ‘comorbidity’ refers to the co-occurrence of one or more Alcohol and Other Drug (AOD) use disorders with one or more mental health conditions.

When using the term ‘mental health condition’, we are referring to both those who have a diagnosable disorder as well as those who display symptoms of disorders while not meeting criteria for a diagnosis of a disorder.

To be classified as having a mental health disorder, a person must meet a number of diagnostic criteria. There are, however, a large number of people who present to AOD treatment who display symptoms of disorders while not meeting criteria for a diagnosis of a disorder. For example, a person may exhibit depressed mood or anxiety without having a diagnosable depressive or anxiety disorder. Although these individuals may not meet full diagnostic criteria according to the classification systems, their symptoms may nonetheless impact significantly on their functioning and treatment outcomes. People who report symptoms of depression but do not meet diagnostic criteria may have reduced productivity, increased help-seeking, and an increased risk of attempted suicide. Therefore, rather than viewing mental health as merely the presence or absence of disorder, mental health conditions can be viewed as a continuum ranging from mild symptoms (e.g., mild depression) to severe disorders (e.g., schizophrenia or psychotic/suicidal depression).
WHY DOES COMORBIDITY OCCUR?

There are a number of possible explanations as to why comorbidity may occur (see Figure 2):

- The presence of a mental health condition may lead to an AOD use disorder, or vice versa (known as the direct causal hypothesis).
- There may be an indirect causal relationship.
- There may be factors that are common to both the AOD and mental health condition, increasing the likelihood that they will co-occur.

**DIRECT CAUSAL HYPOTHESIS**

The AOD use disorder may be a consequence of the mental health condition.

In some cases where there is comorbidity, the AOD use disorder occurs as a consequence of repeated AOD use to relieve or cope with mental health symptoms. This is often described as the ‘self-medication hypothesis’, in that substances are used in an attempt to medicate mental health symptoms. In these circumstances, mental health conditions may become more apparent after the AOD use has ceased.

The mental health condition may be a consequence of AOD use.

Alternatively, AOD intoxication and withdrawal can induce a variety of mental health symptoms and disorders, such as depression, bipolar, anxiety, obsessive-compulsive, and psychotic disorders. In the majority of cases, these effects subside and eventually disappear with abstinence. For some, however, symptoms may continue even after they have stopped drinking or using drugs. Regardless of whether the comorbid disorder is classified as independent or substance-induced, it may be associated with poorer treatment outcomes.
INDIRECT CAUSAL RELATIONSHIP
An indirect causal relationship is said to exist if one condition has an effect upon an intermediary factor that, in turn, increases the likelihood of developing the second condition. For example, research has shown that the presence of early onset AOD use reduces the likelihood of completing high school, entering tertiary education, and completing tertiary education. This poor level of education may lead to later life difficulties (e.g., unemployment) that may lead to other problems, such as depression. Similarly, the reverse is possible, whereby a depressive disorder may lead to difficulties in completing study and work commitments, which may in turn lead to difficulties finding employment, increasing the risk of AOD misuse.

COMMON FACTORS
The co-occurrence of two conditions may also come about due to the presence of shared biological, psychological, social, or environmental risk factors. That is, the factors that increase the risk of one condition may also increase the risk for another. For example, both AOD and mental health conditions have been associated with lower socioeconomic status, cognitive impairment, the presence of conduct disorder in childhood and antisocial personality disorder (ASPD). It is also possible that a genetic vulnerability to one disorder may increase the risk of developing another disorder.

SUMMARY
Establishing the order of onset of conditions can be useful in understanding the relationship between conditions. It is important to note, however, that once comorbid conditions have been established it is most likely that the relationship between them is one of mutual influence rather than there being a clear causal pathway (see Figure 3). Regardless of how the comorbidity came about, both conditions may serve to maintain or exacerbate the other.

Figure 3: Example of a relationship of mutual influence between AOD use and mental health conditions
10 categories of disorder that are most commonly seen among people with AOD use disorders:

- Attention-deficit/hyperactivity disorder (ADHD).
- Schizophrenia spectrum and other psychotic disorders.
- Bipolar disorders.
- Depressive disorders.
- Anxiety disorders.
- Obsessive-compulsive disorder (OCD).
- Trauma-related disorders.
- Feeding and eating disorders (ED).
- Personality disorders.
- Substance-induced disorders.

For the purposes of this training unit of the above the following will be summarised:

**ADHD**

The fundamental feature of ADHD is an ongoing pattern of inattention and/or impulsivity-hyperactivity, which interferes with functioning. Many people experience periods of excitability or zealousness, which can sometimes be described as ‘hyperactive’. Similarly, many people experience periods of distraction and have difficulty concentrating. ADHD is distinct from relatively short periods of over-excitability or distraction in that it involves severe and persistent symptoms that are present in more than one setting (e.g., home and work).

ADHD is characterised by a persistent and debilitating pattern of inattention and/or hyperactivity-impulsivity where at least five inattention or hyperactivity-impulsivity symptoms are present. Symptoms need to have been experienced for at least six months, and several need to have been present prior to age 12.

**ANXIETY**

People with anxiety disorders often experience intense feelings of fear and anxiety. Fear is an emotional response that refers to real or perceived imminent threat, and anxiety is the anticipation of future threat. Although fear and anxiety overlap, they are associated with differing autonomic responses. Fear is associated with a flight or fight response, thoughts of immediate danger, and escape. Anxiety is more commonly associated with muscle tension, hyper vigilance in preparation for danger, and avoidance. Feelings of panic are also common among people with anxiety disorders.

Panic attacks are not a specific disorder, but rather a symptom that is common amongst many of the anxiety disorders.

**DEPRESSIVE DISORDERS**

The predominant feature of depressive disorders is the presence of sad, empty, or irritable mood, accompanied by physical and cognitive changes that significantly impair an individual’s ability to function. Differences between the depressive disorders depend largely on duration, timing, or origin.

Depressive disorders are distinct from feeling unhappy or sad (which is commonly referred to as ‘depression’) in that they involve more severe and persistent symptoms. Depressive disorders are often long-lasting, recurring illnesses. Individuals with depressive disorders feel depressed, sad, hopeless, discouraged, or ‘down in the dumps’ almost all the time. They also experience other symptoms including sleep disturbances (including difficulty getting to sleep, frequent waking during the night, being unable to wake in the morning, or sleeping too much); loss of interest in daily activities; a lack of energy, tiredness and fatigue; restlessness, irritability, or anger; difficulty concentrating, remembering, and making decisions; feelings of guilt or worthlessness; appetite changes (either decreased or increased appetite); loss of sex drive; and thoughts of death or suicide.
SCHIZOPHRENIA SPECTRUM & OTHER PSYCHOTIC DISORDERS

People experiencing schizophrenia spectrum or other psychotic disorders lose touch with reality. Their ability to make sense of both the world around them and their internal world of feelings, thoughts, and perceptions is severely altered. The most prominent symptoms are delusions, hallucinations, disorganised speech, grossly disorganised or abnormal behaviour, and negative symptoms.

Individuals with AOD use disorders may display symptoms of psychosis that are due to either intoxication or withdrawal from substances. However, if the person experiences psychotic episodes even when they are not intoxicated or withdrawing, it is possible that they may have a psychotic disorder. These are severely disabling mental health disorders. Psychotic symptoms may also present in people with major depressive disorder or bipolar I disorder, or from a medical condition.

Predominant symptoms associated with Schizophrenia spectrum & other psychotic disorders

- Delusions
- Hallucinations
- Disorganised speech
- Grossly disorganised or abnormal behaviour

Negative Symptoms: Negative symptoms account for much of the morbidity associated with schizophrenia, but are less prominent in other psychotic disorders.

These include:

- Diminished emotional expression (i.e., reductions intensity of emotional expressiveness).
- Avolition (i.e., a lack of interest in initiating or continuing with activities).
- Alogia (i.e., restricted fluency and productivity of thought and speech).
- Anhedonia (i.e., restricted ability to experience pleasure from positive stimuli).
- Asociality (i.e., a lack of interest in social interactions).

PERSONALITY DISORDERS

Personality traits refer to a person’s individual patterns of thinking, feeling, and behaving. These patterns of thinking and behaving usually begin in childhood and continue through to adulthood. Our personality traits make us who we are – they are what make each of us unique. However, personality traits can be a problem when they cause problems with relationships, education or employment, and sometimes with the law. If patterns of thinking, feeling, or behaving are creating lots of problems in many areas of a person’s life, he/ she may have a personality disorder.

There is a wide range of personality disorders. All of them involve pervasive patterns of thinking and behaving, which means that the patterns exist in every area of a person’s life (i.e., work, study, home, leisure, and so on). The most significant feature of personality disorders is their negative effect on personal relationships. A person with an untreated personality disorder often has difficulty forming long-term, meaningful, and rewarding relationships with others. Individuals with a personality disorder are generally not upset by their own thoughts and behaviours, but may become distressed by the consequences of their behaviours.

AOD use disorders may cause fluctuating symptoms that mimic the symptoms of personality disorders (e.g., impulsivity, dysphoria, aggressiveness and self-destructiveness, relationship problems, work dysfunction, engaging in illegal activity, and dysregulated emotions and behaviour) making it difficult to determine whether a person has a personality disorder.

Based on their similarities, personality disorders are grouped into three clusters: Cluster A, Cluster B and Cluster C.

Cluster B: Individuals with these personality disorders tend to be dramatic, emotional, and erratic. Generally they experience significant impairment and they are of considerable concern to health care providers. Of all the personality disorders, people with Cluster B disorders are the ones that most commonly present to services. Cluster B includes antisocial, borderline, histrionic, and narcissistic personality disorders.
DIFFERENTIATING SUBSTANCE-INDUCED DISORDERS

MANAGING & TREATING COMORBIDITY

When there is an absence of research on specific co-morbid disorders, it is generally recommended that best practice is to use the most effective treatments for each disorder.

Motivational enhancement, Cognitive Behaviour Therapy based strategies, relaxation and grounding techniques can be useful in managing AOD use as well as mental health conditions.

Both psychological and pharmacological interventions have been found to have some benefit in the treatment of many co-morbidities. Successful management and treatment of comorbid conditions is always underpinned by a thorough and ongoing assessment.

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