



# Guiding Principles for Managing Co-occurring Alcohol/Other Drug and Mental Health Conditions: a Scoping Review

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## Abstract

This scoping review aimed to synthesise the published literature on guiding principles for managing co-occurring alcohol/other drug (AOD) and mental health conditions in AOD treatment settings. Systematic search of key electronic databases (January 1, 2010, to February 17, 2021) produced 4583 articles, and independent title/abstract and full text screening left 43 articles for inclusion. Fifteen guiding principles were identified, most commonly: build a strong therapeutic relationship ( $n=24$  articles), provide holistic care ( $n=12$ ), involve peer support ( $n=7$ ), ensure continuity of care ( $n=6$ ), support the professional development and competence of workers ( $n=6$ ), and provide trauma-informed care ( $n=5$ ). Remaining principles were identified in  $<5$  articles. Limited empirical literature examined the impact of guiding principles on patient- and treatment-related outcomes. This review provides the first comprehensive synthesis of the international literature to derive guiding principles for managing co-occurring AOD and mental health conditions in AOD treatment. Further empirical research is needed to determine the effectiveness of principles at improving outcomes.

**Keywords** Alcohol and other drug use · Mental health · Scoping review · Guiding principles · Treatment

Co-occurring alcohol/other drug (AOD) and mental health conditions are highly common (47–100%) (Kingston et al., 2017) and represent a significant challenge in the AOD treatment setting. Among people presenting for treatment, these co-occurring conditions often result in more complex and severe clinical profiles (Lozano et al., 2017; Mills et al., 2018; Teesson et al., 2015) and can complicate the course of treatment as they interact in ways which may trigger,

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## Key Points

- Review identified fifteen guiding principle-related themes.
- Only six papers empirically examined the impact of guiding principles on treatment outcomes.
- This review is the first comprehensive synthesis of the international published literature on guiding principles for managing mental health comorbidities in AOD treatment.

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exacerbate, or maintain one another (Marel et al., 2016; National Institute for Health and Care Excellence, 2016; Substance Abuse & Mental Health Services Administration, 2020).

Managing co-occurring AOD and mental health conditions is also challenging for AOD workers as people experiencing these conditions can be harder to engage and retain in treatment (Krawczyk et al., 2017; Olfson et al., 2000). It is unsurprising then that there is some, albeit mixed, evidence that people with co-occurring AOD and mental health conditions experience poorer treatment outcomes than people without co-occurring conditions (Hersh et al., 2014; Wolitzky-Taylor et al., 2015). Given the high prevalence of mental health conditions among people seeking AOD treatment and the challenge they present to treatment providers, there has been increasing emphasis on the management of this comorbidity in clinical guidelines.

Clinical practice guidelines summarise evidence-based recommendations and are an important tool in improving workforce capacity, facilitating the delivery of evidence-based treatment, and enhancing client outcomes. A recent systematic review examining the effectiveness of evidence-based guidelines for patients with mental disorders found that guideline-adherent treatment resulted in greater improvements and quicker time to remission for patients, compared to treatment as usual (Setkowski et al., 2021). Moreover, there was also a correlation between patient well-being and provider adherence to guideline recommendations, highlighting the important role of provider behaviour at improving patient outcomes in mental health (Setkowski et al., 2021). As a crucial first step in the development of up-to-date clinical practice guidelines for managing co-occurring AOD and mental health conditions, namely the next edition of the Australian *National Comorbidity Guidelines* (Marel et al., 2016), there is a need to synthesise the published literature to inform an evidence-based core set of guiding principles for frontline AOD workers.

To this end, we undertook a scoping review of the published literature on guiding principles for managing co-occurring AOD and mental health conditions in AOD treatment settings. Guiding principles encompass both values and strategies which set a standard for behaviour and decision-making within an organisation or workplace, in this case workers and providers managing people with co-occurring mental health conditions within AOD treatment services. These principles are “guiding” insofar as they are not prescriptive, rather they are broadly generalisable recommendations which can be flexibly applied within different alcohol/other drug treatment services (e.g. outpatient, rehabilitation) and help to provide a framework for how people approach working with clients with co-occurring mental health conditions. Specific aims for this review were to synthesise published knowledge on (1) the key guiding principles for managing co-occurring AOD and mental health conditions in AOD treatment settings and (2) the potential linkages between the key guiding principles and (i) symptom-related outcomes (e.g. AOD use, mental health symptoms) or (ii) other outcomes relevant to treatment (including but not limited to satisfaction with care, treatment engagement). Both quantitative and qualitative literature were included to provide a broader, more comprehensive account of key guiding principles, by incorporating both findings of efficacy and effectiveness with clients’ and treatment providers’ experiences and perspectives.

## Methods

### Study Design

We undertook a scoping review as there are no known previous reviews on this topic, and due to the expected heterogeneity of the available evidence (Peters et al., 2015). Accordingly, as a scoping review, an assessment of the quality of articles was not within the scope of the

current review. Guided by Arksey and O'Malley's (2005) framework, we developed a systematic search strategy protocol based on the PI(E)COS framework and reported according to the PRISMA framework (Liberati et al., 2009; Tricco et al., 2018). To ensure findings were relevant to contemporary clinical practice, literature sources were restricted to publications from 2010 onwards.

## Search Strategy

Articles were identified through searches of key electronic databases in medicine, psychology, and public health (MEDLINE, EMBASE, PsycINFO, and Scopus). The review team also conducted manual forwards and backwards snowballing searches, which involved screening articles which cited the final included articles (via Google Scholar) and screening articles included in the reference lists of the included studies. This process helped ensure a comprehensive assessment of the literature. Search results were limited to studies published in English, comprising human participants, between January 1, 2010, and February 17, 2021.

Initial keyword search strategies were guided by recent systematic reviews exploring the treatment of co-occurring AOD and mental health conditions (Fisher et al., 2021; Kingston et al., 2017; Mental Health and Drug and Alcohol Office, 2015), and relevant clinical practice guidelines (Marel et al., 2016; National Institute for Health and Care Excellence, 2011, 2016; Substance Abuse & Mental Health Services Administration, 2020). These strategies were then refined in discussions with the review team and a specialist academic librarian, a senior clinical psychologist with expertise in the treatment of co-occurring conditions, and a person with lived experience of co-occurring AOD and mental health conditions. Including a lived experience perspective was important to ensuring that the "guiding principles"-related keywords and phrases also captured the views and experiences of people receiving treatment, which were expected to be covered in the qualitative literature especially.

The final search strategies included a combination of free-text terms and subject headings, which were adapted to each database. Adjacency terms were also used to increase the flexibility and coverage of searches. Various search terms were used incorporating key conceptual domains (see Box 1 for an example search query used for MEDLINE):

- 1) Alcohol and other drug-related terms (see lines 1 to 4 in Box 1)
- 2) Mental health-related terms (see lines 5 to 7 in Box 1)
- 3) Comorbidity or co-occurring condition-related terms (see lines 8 to 10 in Box 1)
- 4) Guiding principle-related terms (see lines 11 to 13 in Box 1)

### Box 1 MEDLINE search strategy example

1. alcoholism/
2. exp Substance-Related Disorders/
3. ((abuse\* or misuse\* or dependenc\* or addict\* or disorder\* or problem\* or hazard\* or harm\* or risk\*) adj4 (substance or sud or drug\* or alcohol\* or amphetamine\* or cannabis or marijuana or cocaine or inhalant\* or hallucinogen\* or phencyclidine or heroin or morphine or opioid\* or stimulant\* or tobacco or sedative\* or hypnotic or anxiolytic\*)).tw
4. 1 or 2 or 3
5. exp Mental Disorders/

6. (depress\* or dysthymi\* or mental disorder\* or mental illness\* or psychological disorder\* or psychological illness\* or psychiatric disorder\* psychiatric illness\* or psychopatholog\* or mood disorder\* or affective disorder\* or bipolar\* or cychlothymi\* or mania or manic or hypomania or anxiety disorder\* or gad or panic disorder\* or agoraphobi\* or phobi\* or obsessive-compulsive disorder or ocd or body dysmorphic disorder or bdd or hoarding disorder or trichotillomania or hair-pulling disorder or excoriation disorder or skin-picking disorder or post traumatic stress disorder or ptsd or trauma or acute stress disorder or adjustment disorder or psychotic or psychosis or schizo\* or delusional disorder or dissociative disorder or conversion disorder or depersonali?ation disorder or dereali?ation disorder or psychosomati\* or somati\* or somatoform or eating disorder\* or feeding disorder\* or anorexi\* or bulimi\* or oppositional or defiant\* or conduct disorder\* or pyromania or kleptomania or disruptive disorder or impulse control disorder or personality disorder\* or attention deficit hyperactivity disorder or adhd or attention deficit disorder).tw
7. 5 or 6
8. exp Comorbidity/ or diagnosis, dual (psychiatry)/
9. (comorbid\* or "dual diagnos\*" or co-occur\* or co-exist\* or concurrent).tw
10. 8 or 9
11. Practice Guideline/
12. (guideline\* or "practice guide\*" or "guiding principle\*" or "care principle\*" or "principles of care" or "best practice" or "practice guideline\*" or "treatment model\*" or "care model\*" or "model of care" or "pathway of care" or "care pathway" or "therapeutic model\*" or "treatment approach\*" or "care approach\*" or "therapeutic approach\*" or "therapeutic alliance" or "therapeutic relationship" or "professional development" or "access to care" or "no wrong door" or holistic or client-cent?red\* or person-cent?red\* or client engagement or recovery-oriented or "recovery oriented" or trauma-informed or individuali?ed or "individually tailored" or collaborative or non-judgemental or non-judgmental or confrontational or "shared decision-making" or rapport-building or "rapport building" or "peer-work\*").tw
13. 11 or 12
14. 4 and 7 and 10 and 13
15. limit 14 to (humans and english language and yr= "2010 -Current")

## Data Screening

Selection procedures were based on PRISMA guidelines (Liberati et al., 2009). All data screening was completed using Covidence ([www.covidence.org](http://www.covidence.org)). After removing duplicates, two reviewers independently screened titles and abstracts for potential inclusion using the specified eligibility criteria (see Table 1). The two reviewers met after screening a random selection of 100 articles to ensure that reviewers were interpreting the eligibility criteria in the same way. When reviewing the titles/abstracts of articles, those articles identified as potentially eligible by at least one reviewer (i.e. 'yes' or 'maybe' include) were automatically included for full-text screening. Full-text screening was conducted by the lead reviewer. This liberal approach to article inclusion at the title/abstract screening stage was done given the at times, limited, and inadequate information provided in the article's abstract to determine inclusion, especially with regard to if the article addressed guiding principles and processes. Throughout the data screening process, discrepancies were resolved in discussion with other members of the review team; for example, when the lead reviewer was unsure about the eligibility of an article based on full-text review.

**Table 1** Eligibility criteria

PI(E)COS themes	Included	Excluded
Patient/population/problem	<ul style="list-style-type: none"> <li>-Young people and adults who have been/are being treated for AOD use (either a diagnosed disorder or subthreshold symptoms) as well as (i.e. co-occurring) mental health conditions (either a diagnosed disorder or subthreshold symptoms)</li> <li>-People who work with the above population (i.e. AOD workers)</li> </ul>	<ul style="list-style-type: none"> <li>-Infant and children (11 years and under)</li> <li>-People with another primary health condition (e.g. cancer, HIV, chronic pain, diabetes)</li> </ul>
Exposure/intervention	<ul style="list-style-type: none"> <li>-Guiding principles or essential elements/frameworks/approaches/professional attitudes and processes related to providing/receiving treatment, including but not limited to:                             <ul style="list-style-type: none"> <li>-Holistic care</li> <li>-Client-centred or person-centred care</li> <li>-Recovery-oriented approaches</li> <li>-Continuity of care</li> <li>-Collaborative care</li> <li>-Shared decision-making</li> <li>-Screening and ongoing monitoring</li> <li>-Non-judgemental, non-confrontational attitudes</li> </ul> </li> <li>-Studies with and without a control group</li> </ul>	<ul style="list-style-type: none"> <li>-Guiding principles that do NOT refer to AOD use and/or mental health related issues</li> <li>-Focus is on an intervention/treatment modality (e.g. CBT, motivational interviewing) rather than principles guiding treatment/management</li> </ul>
Comparison/control group	<ul style="list-style-type: none"> <li>-Studies that do not measure/report on outcomes</li> <li>-Client outcomes relevant to AOD treatment; may be associated with treatment effectiveness (e.g. improvements in AOD use, MH symptoms), treatment retention and engagement, client satisfaction with care, quality of life, functioning etc</li> </ul>	<ul style="list-style-type: none"> <li>-Only includes outcomes that do NOT relate to the client and/or treatment/therapeutic process (e.g. policy, system/service-level outcomes)</li> </ul>
Outcomes	<ul style="list-style-type: none"> <li>-AOD treatment or dual AOD/mental health treatment services</li> <li>-High-income, developed countries with settings similar to those in Australia (e.g. USA, UK, Canada)</li> <li>-Countries with settings relevant to Australia (e.g. rural and remote, include Indigenous/First Nation cultures)</li> </ul>	<ul style="list-style-type: none"> <li>-Mental health treatment services</li> <li>-Non-treatment settings (e.g. vocational, occupational, school-based, University)</li> </ul>
Setting/s	<ul style="list-style-type: none"> <li>-Systematic reviews and meta-analyses published 2010–2021</li> <li>-Other literature reviews published 2010–2021</li> <li>-Relevant empirical research studies published 2010–2021 including:                             <ul style="list-style-type: none"> <li>-RCTs/ non-RCTs</li> <li>-Quasi-experimental (e.g. uncontrolled trials; pre/post-test designs)</li> <li>-Observational studies (e.g. cross-sectional surveys, cohort, case–control)</li> <li>-Quantitative and qualitative (incl. qualitative only) mixed-design studies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>-None</li> </ul>
Study types	<ul style="list-style-type: none"> <li>-All others not meeting inclusion criteria</li> </ul>	<ul style="list-style-type: none"> <li>-None</li> </ul>

## Data Extraction

Study level data from the final included articles were extracted by one reviewer and verified by the lead reviewer. Disagreements were resolved through consensus with the broader review team. Data extracted included study design and methodology, participant setting and sample, guiding principle-based recommendations, intervention and control details, and relevant outcome data. The data extraction proforma was initially piloted using 5 articles (~ 10% total included) to ensure common understanding and use.

## Data Synthesis

Findings from the included articles were categorised according to common scope and overall themes. Categories were then labelled as guiding principles by AF and SEDR using inductive (data-driven) and deductive (literature-driven) approaches, and refined through discussions with the other review team members. All symptom-related (e.g. AOD use, mental health symptoms) and other outcomes (e.g. satisfaction with care and treatment engagement) are synthesised descriptively and presented after the main guiding principle recommendations.

## Results

Database searches returned 4583 articles. After removing duplicates, 2709 articles were title/abstract screened for eligibility, resulting in 106 articles for full-text screening (see PRISMA flowchart in Fig. 1). Full-text screening left 36 eligible articles. Forward and backward reference searches of eligible articles generated an additional seven articles for inclusion, resulting in a total of 43 articles.

## Study Characteristics

Table 2 outlines the study characteristics, including study design and methodology, participant setting and sample, the main elements of the guiding principle described, intervention and control details, and results.

## Key Guiding Principles

Fifteen guiding principles were identified in the thematic analysis, which are described below along with the number of articles presenting findings related to each principle.

### Build a Strong Therapeutic Relationship ( $n = 24$ )

When working with clients with co-occurring AOD and mental health conditions, there was evidence from several articles of instances when AOD workers developed strong therapeutic alliances. A strong alliance encompassed interactions that were welcoming, genuine, optimistic, and respectful (Haskell et al., 2016; Kendall et al., 2011; Lubman et al., 2011; McCallum et al., 2016; Motta-Ochoa et al., 2017; Pettersen et al., 2014; Staiger et al., 2011). In one cross-sectional survey study of healthcare providers working in comorbidity

services ( $n = 250$ ), approximately 70% indicated that the therapeutic alliance was the most important element to consider for improving clients' prognosis (Roncero et al., 2016). Several qualitative studies presented similar findings, with clients valuing the quality of therapeutic relationships in achieving recovery, and preferring empathetic providers who view them as whole people (Haskell et al., 2016; McCallum et al., 2016; Motta-Ochoa et al., 2017; Stott & Priest, 2018; Topor et al., 2019). To strengthen the therapeutic relationship, three literature reviews and two qualitative studies among clients and providers of comorbidity services noted the need to flexibly balance validating and challenging the client (Donald et al., 2019; Kendall et al., 2011; Lubman et al., 2011), and ensuring that contact is consistent and continues throughout the referral process (Hoxmark & Wynn, 2010; Staiger et al., 2011).

Building a strong therapeutic relationship was also highlighted in several studies of specific populations, involving young people, those identifying as female, LGBTIQ+, Aboriginal Australian and Torres Strait Islander people, and those involved in the justice system (Abraham et al., 2017; Crockford & Addington, 2017; Hawke et al., 2019; Hulvershorn et al., 2015; Lee et al., 2014; Ness et al., 2014, 2017; Penn et al., 2013; Silverstein et al., 2021; Tilbury, 2017; Tompkins & Neale, 2018).

Within specific populations, one scoping review and several qualitative studies of AOD treatment providers and clients reported that a relationship which is welcoming, optimistic, authentic, and respectful of clients' autonomy can encourage motivation and adherence to treatment among client groups who may distrust healthcare providers, such as young people, women, and those involved in the justice system (Hawke et al., 2019; Ness et al., 2017; Tilbury, 2017; Tompkins & Neale, 2018). Non-judgemental and accepting attitudes were also described as essential for providers to ensure that often-stigmatised groups (i.e. LGBTIQ+ clients or those with psychotic symptoms) develop treatment goals that are consistent with individual needs (Crockford & Addington, 2017; Penn et al., 2013). Additionally, one qualitative study and a scoping review noted that clients appreciated when providers incorporated elements valued by their communities, such as being flexible and friendly when caring for Aboriginal Australian women (Lee et al., 2014) or using language familiar to young people (Hawke et al., 2019).

### **Provide Holistic Care ( $n = 12$ )**

In four qualitative studies, people with co-occurring conditions spoke about the importance of AOD workers considering their AOD use alongside co-occurring mental health conditions and other medical, family, and social needs (Haskell et al., 2016; McCallum et al., 2016; Motta-Ochoa et al., 2017; Staiger et al., 2011). Across these studies, clients expressed a preference for treatment that is tailored to their broader needs and provides opportunities to practise skills for personal development (e.g. skills for obtaining work or housing, or developing social connections) (Haskell et al., 2016; McCallum et al., 2016; Motta-Ochoa et al., 2017; Staiger et al., 2011).

Findings from studies involving specific populations also supported the use of holistic care approaches when caring for people who are young, from culturally or linguistically diverse backgrounds (CALD), LGBTIQ+, or experiencing homelessness (Foster et al., 2010; Kour et al., 2020; Kozloff et al., 2013; Ness et al., 2014, 2017; Penn et al., 2013; Posselt et al., 2017; Silverstein et al., 2021). In these studies, holistic care included multiple components, such as providing support for everyday challenges (e.g. building skills to manage finances or clean a household), basic needs (e.g. finding housing or food), or

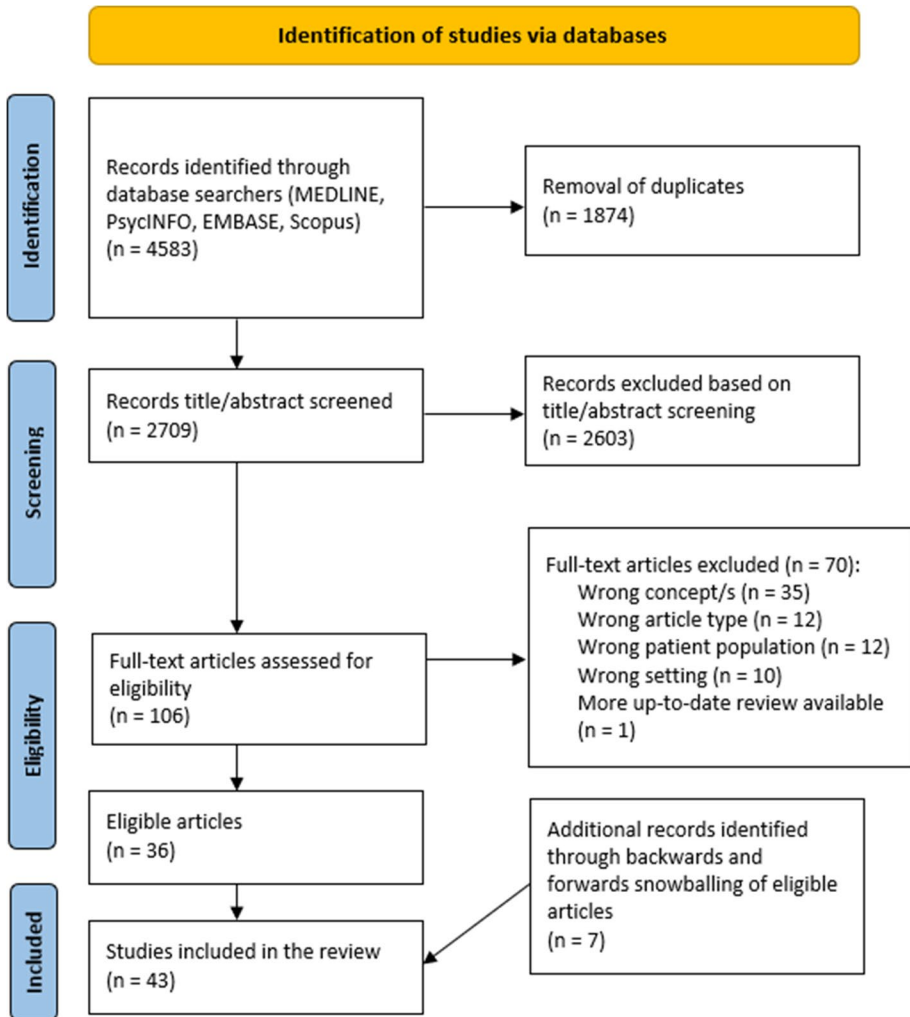


Fig. 1 PRISMA flow diagram

other issues which are important to the client (e.g. discussing sexual or gender identity). In particular one mixed-methods study conducted among providers and refugee youth from a comorbidity service, participants felt that holistic care was essential to treatment engagement and the development of strong relationships with providers (Posselt et al., 2017).

### Involve Peer Support (n = 7)

In two qualitative studies, clients with co-occurring AOD mental health conditions reported that peer support encouraged them to feel part of a community and provided opportunities to learn from others with lived experience (Haskell et al., 2016; Stott & Priest, 2018). ‘Involving peer support’ was also valued in the treatment of clients involved in the justice



**Table 2** Tabulated summary of included guiding principle study findings

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Abraham et al. (2017), USA <b>Women</b>	Cross-sectional qualitative focus-groups	<p><i>N</i> = 19, Female veterans from Afghanistan and Iraq-based operations, reporting PTSD or depression symptoms and unhealthy alcohol use  <b>Age:</b> <i>M</i> = 53.81 (<i>SD</i> = 11.90), range = 32–70  <b>Gender:</b> 100% female  <b>Setting:</b> Primary care services in a metropolitan area  <b>Main AOD eligibility:</b> Screened positive (<math>\geq 3</math>) for unhealthy drinking on AUDIT-C in the last year during a Veterans Administrations primary care visit  <b>Main MH eligibility:</b> Screened positive for depression on PHQ-9 (<math>\geq 10</math>) and/or probable PTSD on the Primary Care PTSD Screen (respond “yes” to at least one of the three items)</p>	<p><b>1) Build a strong therapeutic relationship</b>  <b>9) Encourage patient autonomy and shared decision-making</b></p>	<p>Participants were presented with guidelines for alcohol consumption to educate about unhealthy drinking, received education about SDM, and were presented with two-session telephone-delivered SDM intervention and option grid tools</p>	<p>Therapeutic relationship                      Women wanted trusting relationships with their providers, stating a preference for the provider to introduce themselves in person rather than on the phone, continue the relationship throughout care, and be familiar with female Veterans and their concerns                      Autonomy and shared Decision-making                      Women wanted interventions that helped them take an active role in treatment and provided education so that their choices are informed. They wanted care that could accommodate their varying lifestyles</p>
Arunogiri and Lubman (2015), Australia	Summary of guidelines	N/A	<b>15) Do no harm*</b>	N/A	<p>Do no harm                      Clinicians should consider benefits and risks (patient and community-wide) of use of pharmacological treatment, including potential interactions between substances, overuse, dependence, or misuse</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Brekke et al., 2018a, 2018b, Norway	Cross-sectional semi-structured qualitative interviews	<p><i>N</i> = 8, People with experience of co-occurring substance use and mental health problems which impact their everyday life</p> <p><b>Age:</b> Range = 26–75 years</p> <p><b>Gender:</b> 4/8 (50%) female</p> <p><b>Setting:</b> From community mental health and addiction services in metropolitan and rural areas</p> <p><b>Main AOD eligibility:</b> Self-identified</p> <p><b>Main MH eligibility:</b> Self-identified</p>	<b>7) Provide recovery-oriented care</b>	N/A	<p>Recovery-oriented care</p> <p>Clients spoke about elements of care that supported their recovery: They believed that an optimistic, non-authoritarian, professional, flexible, and empathetic approach was essential for staff. They thought long-term commitment and contact in treatment and after discharge supported recovery. Clients also viewed it as helpful when staff were honest as this allowed clients to understand the severity of their situation and their need for change. Clients appreciated when staff encouraged them to participate in activities and helped with their everyday life challenges</p>
Brekke et al., (2018a, 2018b), Norway	Longitudinal qualitative focus-groups (3 conducted over 2 years)	<p><i>N</i> = 18–24 (6–8 people per focus-group), Staff from a mental health and addiction service (including support workers, nurses, social workers, and psychologists)</p> <p><b>Age:</b> Not reported</p> <p><b>Gender:</b> Not reported</p> <p><b>Setting:</b> Community mental health and addiction service in metropolitan and rural areas</p>	<b>7) Provide recovery-oriented care</b>	N/A	<p>Recovery-oriented care</p> <p>Staff described their experiences with recovery-oriented practice: They believed care should provide support but also empower clients by building autonomy (e.g. balancing reaching out to clients with letting clients feel responsible if they do not attend treatment). Staff thought a non-judgemental attitude was essential to care and that acting professional and optimistic lead to trust and honesty in the therapeutic relationship</p>
Crockford and Addington (2017), Canada <b>People with psychotic symptoms</b>	Narrative literature review	Various	<b>1) Build a strong therapeutic relationship</b>	N/A	<p>Therapeutic relationship</p> <p>Guidelines, systematic reviews, and meta-analyses recommend that AOD workers build a strong trusting, respectful, optimistic, and non-judgemental therapeutic relationship from the start of treatment, continuing throughout care. Additionally, they should ensure confidentiality and privacy maintained when having discussions</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Dass-Brailsford and Myrick (2010), USA	Narrative literature review	Various	<b>6) Provide trauma-informed care</b>	N/A	Trauma Informed Care Trauma treatment approaches are recommended when caring for people with co-occurring conditions. It is recommended that AOD workers first establish the client's safety and develop a trusting therapeutic relationship before inquiring about clients' trauma histories. Workers can then introduce the topic of trauma, and have these discussions over time according to clients' preferences
Davis et al. (2017), USA	Cross-sectional quantitative and qualitative survey	N = 751, Counsellors working in addiction treatment services Age: Most 45–65 years (58%) Gender: 495/751 (66%) female Setting: Outpatient MH and substance use services, residential services, correctional centres, public hospitals, and private mental health, mostly in metropolitan areas	<b>11) Create collaborative treatment goals</b>	N/A	Treatment goals Some counsellors (71%) reported considering clients' treatment history and personal context when assessing whether non-abstinence was an acceptable treatment goal, including (i) client's substance use history (45%); (ii) treatment-related aspects (26%; motivation, treatment goals), (iii) comorbid psychiatric diagnoses (26%), and (iv) social and family environment (18%)
de Ruysscher et al. (2017), Belgium <sup>b</sup>	Systematic review of qualitative research	N = 16, Qualitative research articles exploring the meaning of recovery from the perspective of people with mental health and AOD use comorbidity Age: Not reported Gender: Most samples predominantly male (25 – 100%, 3/16 did not report) Setting: From USA, Australia, UK, Canada, Sweden Main AOD eligibility: Not reported Main MH eligibility: Not reported	<b>7) Provide recovery-oriented care</b>	N/A	Recovery-oriented care Clients valued care which is holistic and individualised, based on collaboration of about their needs, treatment goals and support networks. Recovery-oriented care should also incorporate continuity of care and discharge plans. This approach allows clients to build personal and supportive peer relationships – elements which clients appreciated because they provide a sense of belonging

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
DiClemente et al. (2016), USA	Narrative literature review	Various	<p><b>7) Provide recovery-oriented care</b></p> <p><b>12) Screen throughout care</b></p>	N/A	<p>Recovery-oriented systems of care should focus on needs of the client rather than on disorders. Providers should screen appropriately and work collaboratively with clients to reach shared goals using clients' strengths. Additionally, providing effective referrals to services is essential and should be tailored to consumers' readiness to change, motivations and values</p> <p>Screening</p> <p>Recovery-oriented systems of care require integrated screening at different timepoints. Screening is an important step for consumer engagement, and can facilitate collaborative decision-making taking into account clients' motivations and values</p>
Donald et al. (2019), Australia <sup>a</sup>	Narrative literature review	Various	<b>1) Build a strong therapeutic relationship</b>	N/A	<p>Therapeutic relationship</p> <p>When working with clients with bipolar disorder, clinicians should build a strong therapeutic alliance from the start of care when clients may find treatment challenging. A strong working alliance can help clinicians work collaboratively with clients to create shared treatment goals. When collaborating with clients, clinicians should also balance validation with change-oriented talk</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Eagle et al. (2019), Australia <sup>c</sup> <b>People involved in the justice system</b>	Narrative literature review	Various	<b>4) Ensure continuity of care</b> <b>8) Tailor treatment plans</b>	N/A	<p>Continuity of care</p> <p>Models of care should also provide comprehensive support (e.g. basic needs, housing, employment, aftercare), and ensure staff support clients throughout their care</p> <p>Treatment plans</p> <p>Models of care used in AOD use treatment services for people with co-occurring mental health conditions, involved in the justice system should incorporate an individualised approach focusing on patients' needs, respecting their choice, and considering their stage of change and consider contextual factors (e.g. setting, environment) in the treatment approach</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Eddie et al. (2019), USA	Systematic review	<p><i>N</i> = 24. Research articles evaluating peer recovery support in the treatment of people with co-occurring mental health and AOD use conditions</p> <p><b>Age:</b> Not reported</p> <p><b>Gender:</b> Most samples predominantly male (on average 62.7% males and 37.3% females)</p> <p><b>Setting:</b> Inpatient services, outpatient services, and permanent supportive housing</p> <p><b>Main AOD eligibility:</b> Not reported</p> <p><b>Main MH eligibility:</b> Not reported</p>	<p>3) <b>Involve peer support</b></p>	N/A	<p>Peer Support</p> <p><b>Symptom-related outcomes:</b> People with co-occurring mental health and AOD use conditions participating in peer-driven programs (e.g. 12-step meetings) have reported greater improvements in psychiatric symptoms, but not alcohol use, compared to those not involved in the peer program. When peer support programs are incorporated into usual care, people living with co-occurring conditions have demonstrated greater reductions in AOD use compared to those in usual care only</p> <p><b>Other outcomes:</b> People with co-occurring conditions participating in peer-driven programs (e.g. 12-step meetings) have demonstrated increased treatment attendance and lower rates of homelessness compared to those not involved in the peer program. Usual care which incorporates peer support programs has led to greater treatment attendance and treatment service use for people living with co-occurring conditions compared to those in usual care only</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Fisher et al. (2021), Australia <sup>d</sup>	Systematic review	<p><i>N</i> = 10. Research articles exploring the experiences and perceptions of people with mental health and AOD use comorbidity on shared decision-making (SDM) and the effects of exposure to SDM interventions</p> <p><b>Age:</b> Mean age of samples = 40.0–53.8 years</p> <p><b>Gender:</b> Most samples predominantly male (62–100%)</p> <p><b>Setting:</b> Specialist inpatient clinics, community outpatient services, and residential/community services, most based in the USA or Central Western Europe</p> <p><b>Main AOD eligibility:</b> Diagnosed with AOD use disorder (8/10 articles), identified as having syndromal AOD misuse symptoms using validated screening measures (2/10)</p> <p><b>Main MH eligibility:</b> Diagnosed with mental health disorder (4/10 articles), identified as having syndromal mental health symptoms using validated screening measures (6/10)</p>	<p>9) <b>Encourage patient autonomy and shared decision-making</b></p>	N/A	<p>Patient autonomy and shared decision-making</p> <p>Most patients preferred SDM over standard care and wanted to take an active and informed role in decision-making. Patients endorsed SDM interventions but noted some barriers</p> <p><b>Symptom-related outcomes:</b> Participants exposed to SDM intervention compared to control demonstrated superior outcomes for mental health symptoms. However, there were mixed findings for AOD use and abstinence; some studies demonstrate improvements for these outcomes whilst others demonstrate no effect (addiction severity, QoL, drinking frequency, self-reported alcohol-related problems, abstinence) or negative effects (fewer days abstinent)</p> <p><b>Other outcomes:</b> Exposure to SDM interventions was associated with (i) increased patient involvement (patient and clinician-reported), (ii) more patient-centred/individualised approaches to care, (iii) greater congruence between patients and clinicians in decisions, goals, and perceptions of helping alliance, and (iv) increased patient recall/knowledge of treatment goals (post-decision). SDM interventions had no effect on patients' perceptions of therapeutic alliance or patient satisfaction</p>

Table 2 (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Foster et al. (2010), USA <b>People experiencing homelessness</b>	Qualitative analysis of documents (e.g. grants, reports, meeting and conference notes) produced by 11 housing and supportive services	N=11, Housing and supportive services programs developed by the National Technical Assistance Centre on Homelessness	<b>2) Provide holistic care</b> <b>3) Involve peer support</b> <b>6) Provide trauma-informed care</b>	N/A	<b>Holistic care</b> Similar to current practices of the housing and support service, providers should focus on stabilising clients at start of care by providing support for basic needs and taking a reliable history. Providers should then encourage clients using motivational techniques to seek treatment <b>Peer support</b> <b>Other outcomes:</b> Some programs provide peer support which providers believed helped engage clients in a non-threatening way, and support treatment engagement <b>Trauma-informed care</b> Some programs have implemented trauma-informed care and find it useful for helping clients manage symptoms and engage in therapeutic services to develop trusting relationships



**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Haskell et al. (2016) Canada	Cross-sectional, qualitative structured interviews	<p><i>N</i> = 73. Clients of comorbidity services; <i>N</i> = 42. Family members of clients</p> <p><b>Age:</b> Most ≥ 50 years (Client = 38.9%; Family = 48.6%)</p> <p><b>Gender:</b> 37/73 (50.7%) female clients, 34/41 (82.9%) female family members</p> <p><b>Setting:</b> Comorbidity services in metropolitan and rural communities</p> <p><b>Main AOD eligibility:</b> Self-identified, and have sought help in past 5 years</p> <p><b>Main MH eligibility:</b> Self-identified, and have sought help in past 5 years</p>	<p>1) <b>Build a strong therapeutic relationship</b></p> <p>2) <b>Provide holistic care</b></p> <p>3) <b>Involve peer support</b></p>	N/A	<p><b>Therapeutic relationship</b></p> <p>Clients appreciated opportunities to talk about their co-occurring conditions and having clinicians listen to them respectfully. They valued providers who are welcoming, caring, non-judgemental, and helpful</p> <p><b>Holistic care</b></p> <p>Clients appreciated services that recognised and addressed connections between co-occurring conditions. Participant suggested care needs to be coordinated, holistic, and flexible to meet individual needs and to provide timely support. Consistent outreach and check-ups were viewed by family members as more effective in getting clients to engage in treatment rather than mandating treatment</p> <p><b>Peer support</b></p> <p>Clients spoke positively about experiences where they were able to discuss issues and learn from peers or counsellors with co-occurring conditions. Some appreciated programs with diverse recreation, learning activities, and opportunities to socialise</p>
Hawke et al. (2019), Canada <sup>a</sup> <b>Youth</b>	Scoping review	<p><i>N</i> = 28. Research articles describing or evaluating youth-friendly mental health and AOD use services</p> <p><b>Age:</b> Not reported</p> <p><b>Gender:</b> Not reported</p> <p><b>Setting:</b> Mental health and substance use services in Canada, USA, UK, Australia, New Zealand, and Sweden</p> <p><b>Main AOD eligibility:</b> Not reported</p> <p><b>Main MH eligibility:</b> Not reported</p>	<p>1) <b>Build a strong therapeutic relationship</b></p> <p>6) <b>Provide trauma-informed care</b></p>	N/A	<p><b>Therapeutic relationship</b></p> <p>Research articles suggested providers should be welcoming and provide casual check-ins with young people to encourage them to return to services. Most articles listed non-judgemental, curious, respectful, genuine, honest, and 'cool' attitudes as vital for service providers. Providers were recommended to have knowledge of youth slang, be flexible in their care, and build trust and understanding</p> <p><b>Trauma-informed care</b></p> <p>Providers were recommended to use a trauma-informed approach, recognising the histories of their clients</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Hoxmark and Wynn (2010), Norway	Cross-sectional, qualitative focus groups	N=5, Staff members of a therapeutic community (TC) or a dual-diagnosis (DD) service Age: Not reported Gender: 3/5 (60%) female Setting: Therapeutic community or dual-diagnosis treatment services	<b>1) Build a strong therapeutic relationship</b>	N/A	Therapeutic relationship Providers in both services valued building good relationships with clients, formed through consistent and supportive contact, and understanding. TC staff also believed peers and the wider service community could form other important connections for clients <b>Other outcomes:</b> Good relationships were thought to help by encouraging client engagement and providing space to talk about difficult topics (TC staffs' opinion) or by providing new positive relational experiences (DD staffs' opinion)
Hulvershorn et al. (2015), USA <b>Youth</b>	Critical review	Various	<b>1) Build a strong therapeutic relationship</b>	N/A	Therapeutic relationship Published literature suggests that AOD workers should encourage client motivation and support their concerns and needs when caring for adolescents with co-occurring AOD use and internalising disorders
Johnson et al. (2015) USA <b>People involved in the justice system</b>	Cross-sectional semi-structured qualitative interviews	N= 14, Healthcare providers working with re-entering women with co-occurring mental health and AOD use conditions Age: Not reported Gender: 11/14 (78.6%) female Setting: Prison and aftercare systems	<b>3) Involve peer support</b> <b>4) Ensure continuity of care</b>	N/A	Peer support <b>Other outcomes:</b> Providers also spoke about the importance of mentor support and peer support in enabling women to feel heard and welcomed into a community, and helping them engage and adhere to treatment Continuity of care Providers recommend providing strong continuity of care through the re-entry period by (i) maintaining contact with the same provider before and after release; (ii) providing support 24–72 h after release; (iii) addressing lapses before they escalate; (iv) offering long-term support

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Kelly et al. (2012), USA	Narrative literature review	Various	<b>8) Tailor treatment plans</b>	N/A	<p>Treatment plans</p> <p>Research articles characterising and assessing comorbidity treatment recommend the use of different components (e.g. psychotherapy, pharmacology) to support treatment of AOD use and mental health together. AOD workers should plan care collaboratively to build patient trust and treatment engagement. Motivational interviewing may be useful to encourage engagement in a non-judgemental way that supports patient autonomy</p>
Kendall et al. (2011), UK	Summary of guidelines	Various	<p><b>1) Build a strong therapeutic relationship</b></p> <p><b>5) Support the professional development and competence of workers</b></p> <p><b>8) Tailor treatment plans</b></p>	N/A	<p>Therapeutic relationship</p> <p>National Institute for Health and Clinical Excellence guidelines for management of AOD use and co-occurring psychosis recommend AOD workers to (i) build a respectful, trusting, non-judgemental, and optimistic relationship, and (ii) use a flexible and motivational treatment approach</p> <p>Professional development and competence</p> <p>It is also important to ensure AOD workers have competence to care for clients (particularly for those from diverse cultural and ethnic backgrounds). Workers should be able to recognise signs and symptoms of psychosis, complete a risk and needs assessment, and know how and when to refer</p> <p>Treatment plans</p> <p>AOD workers should tailor treatment plans to the person and consider patients' social and treatment context and their readiness for change</p>

Table 2 (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Kozloff et al. (2013), Canada <b>People experiencing homelessness</b>	Cross-sectional qualitative focus-groups	<i>N</i> = 23, Young adults attending treatment services for homeless youth, with experience of co-occurring AOD use and mental health conditions <b>Age:</b> <i>M</i> = 22.2 years ( <i>SD</i> = 2.1) <b>Gender:</b> 20/23 (87%) male <b>Setting:</b> Community mental health and AOD use homelessness services in a metropolitan city <b>Main AOD eligibility:</b> Identified by mental health workers and psychiatrists <b>Main MH eligibility:</b> Identified by mental health workers and psychiatrists	<b>2) Provide holistic care</b> <b>3) Involve peer support</b>	N/A	<b>Holistic care</b> Young people felt it was important for providers to consider their level of motivation and readiness for change. Participants preferred services that tailored care to their needs and provided support for basic needs, especially when support is flexible (e.g. provide care for those without ID) and timely <b>Peer support</b> Young people described peer support, recreational activities and vocational services as useful to encourage them to engage in treatment and abstain from AOD use
Kour et al. (2020), Norway <b>Culturally and linguistically diverse</b>	Cross-sectional semi-structured qualitative interviews	<i>N</i> = 10, Clients with immigrant backgrounds and lived experience of mental health and AOD use disorders, involved in comorbidity treatment <b>Age:</b> Range = 25–53 years <b>Gender:</b> 100% male <b>Setting:</b> Recruited from AOD treatment services in metropolitan areas and via snowballing <b>Main AOD eligibility:</b> Diagnosed with AOD use disorders, experienced treatment in a comorbidity service <b>Main MH eligibility:</b> Diagnosed with co-occurring mental health disorders, experienced treatment in a comorbidity service	<b>2) Provide holistic care</b> <b>4) Ensure continuity of care</b> <b>5) Support the professional development and competence of workers</b>	N/A	<b>Holistic care</b> Participants believed it was important to be valued, seen as a person, and welcomed—these helped create open and healthy relationship with providers. Participants valued care that acknowledged their multi-cultural backgrounds <b>Continuity of care</b> Participants also valued aftercare, which helped them from feeling lost and relapsing (particularly for those who could not seek help from cultural communities because of stigma) <b>Professional development</b> Providers who were more multi-culturally competent helped immigrant clients feel more satisfied with treatment. Participants recommended that providers should learn more about different cultures

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Lee et al. (2014), Australia Australian Aboriginal and Torres Strait Islander Peoples	Cross-sectional semi-structured qualitative interviews	<p><i>N</i> = 21, Aboriginal women attending community health services with lived experience of mental health and AOD use conditions, <i>N</i> = 12, Family members of female clients, <i>N</i> = 11, Aboriginal health workers from community health services</p> <p><b>Age:</b> Most 20–34 years (50%), not reported for family members or health workers</p> <p><b>Gender:</b> 100% female clients, not reported for family members or health workers</p> <p><b>Setting:</b> Community health services in metropolitan and rural areas</p> <p><b>Main AOD eligibility:</b> Diagnosed with AOD use condition</p> <p><b>Main MH eligibility:</b> Diagnosed with mental health condition</p>	<p><b>1) Build a strong therapeutic relationship</b></p> <p><b>5) Support the professional development and competence of workers</b></p> <p><b>10) Develop trust with the client's community</b></p>	N/A	<p><b>Therapeutic Relationship</b> Client's preferred care which was non-judgmental, friendly and flexible with treatment. Clients often valued Aboriginal services because they were found to be more welcoming (at home)</p> <p><b>Professional development</b> Clients, family members, and healthcare providers recommended that services should provide staff with professional development opportunities</p> <p><b>Develop trust with community</b> Clients, family members and healthcare providers also encouraged services to promote their care and capability in the community</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Liu et al. (2016), Australia	Participatory action research (involving surveys, interviews, and community consultations)	<i>N</i> = 20. Staff from local mental health and AOD treatment services completed a survey, <i>N</i> = 49. Support service workers caring for youth and adults with comorbidity completed a second survey, <i>N</i> = 33. Aboriginal consumer advocates, Aboriginal and non-Aboriginal workers in mental health and AOD treatment services participated in focus-groups, <i>N</i> = 30. Refugee youth and providers of comorbidity-focused refugee youth services were interviewed Age: Not reported Gender: Not reported Setting: Metropolitan in-reach services Main AOD eligibility: Not reported Main MH eligibility: Not reported	<b>10) Develop trust with the client's community</b> <b>13) Use a 'no wrong door' approach,</b>	N/A	Develop trust with community Ensure consumers, families, and the wider community trust comorbidity services to promote client access and engagement with reliable and competent services (particularly for Aboriginal, CALD, and refugee consumers) No wrong door Comorbidity care should be coordinated, assessed and streamlined so that consumers are assessed and treated appropriately regardless of treatment service, which ensures appropriate treatment and prevents unnecessary referrals
Lubman et al. (2011), Australia	Narrative literature review	Various	<b>1) Build a strong therapeutic relationship</b>	N/A	Therapeutic relationship When caring for clients with co-occurring AOD use and borderline personality disorder, providers should build a strong therapeutic relationship, by acting with empathy, openness, respect, and authenticity. Providers should maintain professional boundaries, and balance validating and change-oriented discussions <b>Other outcomes:</b> A positive therapeutic relationship may allow clients to modify their maladaptive relational patterns and to learn how to form healthy relationships

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
McCallum et al. (2015), Australia <sup>a</sup>	Systematic review	<p>N=18, Research articles exploring continuity of care in the treatment of people with mental health and AOD use conditions (total sample N=199,442)</p> <p><b>Age:</b> Overall mean =41.5 years (<i>SD</i>=5.6)</p> <p><b>Gender:</b> Most samples predominantly male (51–98%)</p> <p><b>Setting:</b> Inpatient and outpatient hospital setting, community-based services, inpatient residential services, based in the Netherlands, Canada, USA, and Spain</p> <p><b>Main AOD eligibility:</b> Not reported</p> <p><b>Main MH eligibility:</b> Not reported</p>	<p><b>4) Ensure continuity of care</b></p>	N/A	<p><b>Continuity of Care</b> Continuity of care in services has been defined as (i) successful transfer of patients from intensive treatment to less-intensive treatment; (ii) the ability for care to adapt to patients' needs; (iii) continuity of the patient-provider relationship in the transfer of patient care; (iv) continuity across services requiring collaboration in care and appropriate referrals; (v) regular and sufficient care</p> <p><b>Symptom-related:</b> Increased continuity of care is associated with better generic and disease-specific quality of life. However, one study found no association between improved continuity of care and AOD abstinence</p> <p><b>Other outcomes:</b> Increased continuity of care correlated with (i) increased patient commitment to treatment; (ii) improved service satisfaction; (iii) improved community functioning and engagement in continuing; and (iv) reduced violent behaviour</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
McCallum et al. (2016), Australia	Cross-sectional semi-structured qualitative interviews	<p><math>N=34</math>, Patients receiving treatment for AUD, some of the sample had co-occurring severe mental health symptoms (<math>N=15</math>)</p> <p><b>Age:</b> <math>M=44.25</math> (<math>SD=10.92</math>)</p> <p><b>Gender:</b> 22/34 (65%) male</p> <p><b>Setting:</b> Inpatient services and outpatient community services</p> <p><b>Main AOD eligibility:</b> Met DSM-5 criteria for AUD, admitted to AUD treatment, have alcohol use as main substance of concern</p> <p><b>Main MH eligibility:</b> Score in 'extremely severe' range for on DASS-21</p>	<p>1) <b>Build a strong therapeutic relationship</b></p> <p>2) <b>Provide holistic care</b></p> <p>4) <b>Ensure continuity of care</b></p> <p>9) <b>Encourage patient autonomy and shared decision-making</b></p>	N/A	<p><b>Therapeutic relationship</b> Patients wanted to work with empathetic, understanding, trust-worthy, respectful, and qualified staff. Patients believed therapeutic relationships were strengthened when they continued over time</p> <p><b>Other outcomes:</b> Staff who were perceived as non-judgemental by patients helped reduce their feelings of shame</p> <p><b>Holistic care</b> <b>Other outcomes:</b> Patients were satisfied with care when it focused on their addiction while supporting their other needs (a holistic approach). Patients valued: (i) learning skills to support their personal growth and (ii) connecting to their spirituality</p> <p><b>Continuity of care</b> Patients wanted staff who were dependable and reliable (by limiting staff changes and appointment cancellations). They believed it is important for comorbidity treatment services to be co-ordinated, to prevent difficulties accessing treatment</p> <p><b>Other outcomes:</b> Continuity of care greatly influences whether patients feel their needs have been met and treatment satisfaction</p> <p><b>Patient autonomy and shared decision-making</b> Patients valued being involved in decisions about their treatment. Respecting patient autonomy encouraged patients' independence and satisfied their unique treatment needs</p>



**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Merkes et al. (2010), Australia	Cross-sectional quantitative and qualitative survey	Substance use ( $N=12$ ) and comorbidity treatment ( $N=5$ ) services following 'best practice', identified by key stakeholders as achieving 'good outcomes' for clients with comorbidity. Surveys were completed by 1–2 staff at each service <b>Age:</b> Not reported <b>Gender:</b> Not reported <b>Setting:</b> Residential, non-residential services, and community-based outpatient services, in rural and metropolitan areas	<p>4) <b>Ensure continuity of care</b></p> <p>5) <b>Support the professional development and competence of workers</b></p>	N/A	<p>Continuity of care</p> <p>Elements of 'good practice' found in the Australian comorbidity treatment services were (i) a range of links to support services to provide specialised, co-ordinated and continuous care for patients; (ii) discharge planning policies, procedures and plans; and (iii) integrated and parallel treatment tailored to patients' needs</p> <p>Professional development and competence</p> <p>Most staff had completed/were completing the qualifications required for role. All services trained staff to identify co-occurring conditions and provided supervision. Most trained staff in referral procedures and required staff to undertake continuing professional development</p>
Motta-Ochoa et al. (2017), Canada	Longitudinal semi-structured qualitative interviews (at baseline and one year follow-up)	<p><math>N=43</math>. People with AOD use problems and co-occurring mental health conditions (<math>N=28</math> interviewed at follow-up)</p> <p><b>Age:</b> <math>M=39.7</math> years (range: 18–66)</p> <p><b>Sex:</b> 23/43 (53.5%) female</p> <p><b>Setting:</b> Hospitals, community services, and criminal courts in metropolitan and rural areas</p> <p><b>Main AOD eligibility:</b> Identified by healthcare providers</p> <p><b>Main MH eligibility:</b> Diagnosed with MH condition in last 5 years, consulted a psychiatrist in last 5 years, current use of at least one psychiatric drug</p>	<p>1) <b>Build a strong therapeutic relationship</b></p> <p>2) <b>Provide holistic care</b></p>	N/A	<p>Therapeutic relationship</p> <p>Participants had positive experiences with empathetic and respectful providers. Patients with multiple diagnoses especially appreciated when providers were non-judgemental and could see them as whole people</p> <p><b>Other outcomes:</b> Patients felt the therapeutic relationship impacted their satisfaction with care, and motivation to seek help for their AOD use. Patients who trusted their providers found it positively impacted their experience, in terms of their help-seeking, treatment engagement and recovery process</p> <p>Holistic care</p> <p>Participants believed care which is tailored to their needs positively impacts their treatment engagement. Some thought that addiction programs which incorporated psychological support helped them manage their problems and strengthened their commitment to recovery</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Ness et al. (2014), Norway <b>Youth</b>	Qualitative focus-groups	N=10, Mental health and social work practitioners working in mental health, AOD use, and family services with at least 2 years of experience working with young adults with co-occurring conditions <b>Age:</b> Not reported <b>Gender:</b> Not reported <b>Setting:</b> Community mental health, AOD use and family services	<b>1) Build a strong therapeutic relationship</b> <b>2) Provide holistic care</b>	N/A	<b>Therapeutic relationship</b> Practitioners spoke about the importance of establishing a good relationship, being flexible to the client's readiness for change, and being committed to relationships with clients to check up on them <b>Holistic care</b> Practitioners also recommend that clinicians should provide support through everyday life challenges and within healthcare systems, be patient when collaborating with youth and family members, especially when dilemmas arise, know other services to facilitate health-care connections
Ness et al. (2017), Norway <b>Youth</b>	Cross-sectional semi-structured qualitative interviews	N=7, Young adults with at least 2 years' experience in mental health and AOD use treatment <b>Age:</b> Range=20–30 years <b>Gender:</b> 5/7 (71.4%) male <b>Setting:</b> Community mental health, AOD use and family services <b>Main AOD eligibility:</b> Identified by practitioner as having at least 2 years' experience in mental health and AOD use treatment <b>Main MH eligibility:</b> Identified by practitioner as having at least 2 years' experience in mental health and AOD use treatment	<b>1) Build a strong therapeutic relationship</b> <b>2) Provide holistic care</b>	N/A	<b>Therapeutic relationship</b> Participants preferred non-judgemental and non-paternalistic providers who took them seriously and collaborated respectfully. They also preferred providers who were flexible, receptive, and provided timely access to support. Good relationships with providers helped clients collaborate on treatment plans and focus on goals and were built through trust, continuity in care, and sense that providers knew clients personally <b>Holistic care</b> Help with everyday challenges (e.g. finance, cleaning, etc.) was also appreciated by participants

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Palm et al. (2013), USA <b>LGBTQ+ communities</b>	Cross-sectional qualitative focus-groups	<p><i>N</i> = 10, People experiencing co-occurring mental health and AOD use conditions and identifying as LGBTQ                      Age: Range = 22–51                      Gender: 5/10 (50%) female                      Setting: Community mental health and AOD use treatment services                      Main AOD eligibility: Identified by counsellor                      Main MH eligibility: Identified by counsellor</p>	<p>1) <b>Build a strong therapeutic relationship</b>                      2) <b>Provide holistic care</b>                      5) <b>Support the professional development and competence of workers</b>                      10) <b>Develop trust with the client's community</b></p>	N/A	<p>Therapeutic relationship                      Feeling accepted when coming out in treatment allowed participants to integrate their sexuality with treatment goals, and discuss identity with family and friends. Providers' attitudes are an important influence on participants' treatment experiences                      Holistic care                      Most participants wanted more holistic treatment, including topics of sexuality. Some noted that providers were becoming more culturally competent of LGBTQ care                      Professional development                      Participants suggested including more training for LGBTQ competence among healthcare providers                      Develop trust with community                      Suggestions also included creating LGBTQ-safe treatment environments through awareness and support for LGBTQ communities, LGBTQ-TIQ signage, and LGBTQ-specific questions in intake</p>
Pettersen et al. (2014), Norway	Cross-sectional semi-structured qualitative interviews	<p><i>N</i> = 11, Clients in assertive community treatment (ACT) with co-occurring severe mental illness and problematic substance use                      Age: <i>M</i> = 39 years (range 27–63 years)                      Sex: 9/11 (81.8%) male                      Setting: Community outreach service in urban and suburban areas                      Main AOD eligibility: Identified by ACT staff                      Main MH eligibility: Identified by ACT staff</p>	<p>1) <b>Build a strong therapeutic relationship</b></p>	N/A	<p>Therapeutic relationship                      Participants appreciated when providers were caring, as this approach helped build trust                      They felt strong relationships were supported through sustained personal contact. Participants appreciated a 'sense of being pursued', respectful treatment, and being seen as an individual</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Possett et al. (2017), Australia <b>Culturally and linguistically diverse</b>	Mixed-methods research (incorporating semi-structured qualitative interviews and a quantitative online survey)	<p><math>N=15</math>, Refugee youth attending mental health and AOD use treatment services were interviewed</p> <p><math>N=15</math>, Providers working in mental health and AOD use treatment services were interviewed</p> <p><math>N=56</math>, Management staff working in mental health and AOD use treatment services completed the online survey</p> <p><b>Age:</b> Refugee youth: <math>M=17.7</math> years (range = 12–25 years), Providers and management staff: Not reported</p> <p><b>Gender:</b> Refugee youth: 9/15 (60%) female, Providers and management staff: Not reported</p> <p><b>Setting:</b> Mental health and substance use services</p> <p><b>Main AOD eligibility:</b> Identified by healthcare providers as having lived experience</p> <p><b>Main MH eligibility:</b> Identified by healthcare providers as having lived experience</p>	<p><b>2) Provide holistic care</b></p> <p><b>5) Support the professional development and competence of workers</b></p>	N/A	<p>Holistic care</p> <p>Providers and refugee youth spoke about the importance of holistic care, which supported patients' needs rather than just clinical needs. This approach was believed to encourage engagement and continuity of care, and create a more trusting therapeutic relationship</p> <p>Professional development</p> <p>Providers and refugee youth advocated for more staff training to teach them how to work effectively with clients from refugee backgrounds</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Richardson et al. (2018), New Zealand	Pre/post study	<p><math>N=123</math>. Clients with alcohol dependence and depression in outpatient treatment services, <math>N=18</math>. Therapists working in the outpatient treatment services</p> <p><b>Age:</b> Clients: <math>M=43.8</math> years (<math>SD=8.83</math>, range = 21–64) Therapists: <math>M=48</math> years (range = 34–61)</p> <p><b>Gender:</b> 72/123 (58.5%) female clients, 10/18 (55.6%) female therapists</p> <p><b>Setting:</b> Outpatient comorbidity treatment services</p> <p><b>Main AOD eligibility:</b> Met DSM-IV criteria for alcohol dependence, have alcohol use as main substance of concern</p> <p><b>Main MH eligibility:</b> Met DSM-IV criteria for depression, and presented with moderate to severe (<math>\geq 20</math>) score on Montgomery Asberg Depression Rating Scale</p>	<p>1) <b>Build a strong therapeutic relationship</b></p>	<p>Participants received pharmacotherapy and clinical case management for 12 weeks. Treatment outcomes were measured at baseline (3 weeks) and end of treatment (12 weeks). Client and therapist-rated therapeutic alliance was measured at baseline (3 weeks)</p>	<p>Therapeutic relationship</p> <p><b>Treatment-related outcomes:</b> Alcohol use: Therapist and client-rated alliance scores were not significantly correlated with any post-treatment drinking outcomes or with change in drinking outcomes from baseline to post-treatment. Higher therapist-rated task alliance (i.e. collaboration on therapeutic tasks) scores predicted a reduction drinks per drinking day but no other drinking outcomes, after controlling for early improvement symptoms. Client-rated motivation or self-efficacy did not moderate the relationship between therapist-rated alliance and drinking outcomes</p> <p><b>Depression:</b> Therapist-rated alliance scores were significantly correlated with change in depression symptoms from baseline to post-treatment. The correlation remained after controlling for early change in symptoms</p> <p><b>Other outcomes:</b> There were no significant relationships between therapist-rated alliance and medication adherence, or number of sessions attended</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Roncero et al. (2016), Spain	Cross-sectional quantitative survey	<p><i>N</i> = 250, Healthcare professionals working in comorbidity services</p> <p><b>Age:</b> Most &gt; 45 years (60%)</p> <p><b>Gender:</b> 135/250 (54%) female</p> <p><b>Setting:</b> Inpatient psychiatric and addiction units, and outpatient centres</p>	<p>1) <b>Build a strong therapeutic relationship</b></p> <p>1.4) <b>Involve families</b></p>	N/A	<p>Therapeutic relationship</p> <p>More than half of healthcare providers (69.2%) thought the therapeutic alliance is the main aspect to consider to improve the prognosis of a patient with comorbid conditions</p> <p>Involve families</p> <p>Half of HCPs (52.4%) thought family support is an important aspect to improving the prognosis of a patient with comorbid conditions. Providers also rated 'inadequate family support' and 'patient/family request' as part of the top six reasons for selecting a specific treatment</p> <p><b>Other outcomes:</b> Patient and family psychoeducation was rated as the second most important nonpharmacological strategy to promoting treatment adherence</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Staiger et al. (2011), Australia	Cross-sectional semi-structured qualitative interviews	<p><i>N</i> = 44, People with co-occurring depression or anxiety and AOD use disorders</p> <p><b>Age:</b> Women: <i>M</i> = 34.33 years (<i>SD</i> = 7.88), Men: <i>M</i> = 38.17 years (<i>SD</i> = 7.57)</p> <p><b>Gender:</b> 23/44 (52%) male</p> <p><b>Setting:</b> From MH and/or AOD use treatment services, community services, and emergency departments</p> <p><b>Main AOD eligibility:</b> Met DSM-IV criteria</p> <p><b>Main MH eligibility:</b> Met DSM-IV criteria</p>	<p>1) <b>Build a strong therapeutic relationship</b></p> <p>2) <b>Provide holistic care</b></p> <p>5) <b>Support the professional development and competence of workers</b></p>	N/A	<p><b>Therapeutic relationship</b></p> <p>Participants valued connecting with AOD workers as this built a relationship for recovery. Some believed that having staff follow-up during transitions between services would be helpful. Participants who had positive experiences with providers viewed them as friendly, non-judgemental, respectful, and practical</p> <p><b>Other outcomes:</b> One participant felt her experience was improved by the relationships she built with ward-staff. Maintaining relationships and checking in with patients was perceived by participants to be important for retaining people in treatment</p> <p><b>Holistic care</b></p> <p>Participants wanted services to improve by supporting other needs beyond mental health and AOD use problems (e.g. developing social connections, developing skills for work, helping to get housing). One participant valued having a caseworker to coordinate care between service workers</p> <p><b>Professional development and competence</b></p> <p>One participant believed mental health and AOD use training of staff was useful because this enables treatment teams to have knowledge to help with medication and emotional needs</p>

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Silverstein et al. (2021), USA <b>Youth</b>	Interdisciplinary expert meeting	<i>N</i> = Not reported. Interdisciplinary experts, including young adults and clinical and research experts <b>Age:</b> Not reported <b>Gender:</b> Not reported <b>Setting:</b> N/A	<b>1) Build a strong therapeutic relationship</b> <b>2) Provide holistic care</b> <b>6) Provide trauma-informed care</b>	N/A	Therapeutic relationship Interdisciplinary experts recommended that healthcare providers should work with clients to promote engagement in treatment and modify their approaches based on changes in patients' needs and circumstances Holistic care These interdisciplinary experts agreed on the importance that services should integrate substance use and mental health care and should be flexible to individualise care based on young people's changing needs and circumstances Trauma-informed care They also recommended that trauma-informed approaches should be used in the care of young people
Stott and Priest (2018), UK	Cross-sectional unstructured qualitative interviews	<i>N</i> = 10. Clients attending substance misuse services, living with co-occurring mental health and alcohol misuse problems <b>Age:</b> Most 30 – 39 years (40%) <b>Gender:</b> 6/10 (60%) male <b>Setting:</b> Community-based substance misuse services, serving an urban area and the surrounding rural area <b>Main AOD eligibility:</b> Identified by AOD worker, alcohol was primary substance of misuse identified at assessment when entering the service <b>Main MH eligibility:</b> Identified by AOD worker	<b>1) Build a strong therapeutic relationship</b> <b>3) Involve peer support</b>	N/A	Therapeutic relationship Some participants described strong therapeutic relationships as vital to their recovery. One participant felt that rapport and professional skills were essential attributes of her provider as they helped her manage trauma symptoms Peer support Some participants believed peer support enabled them to identify with others and feel part of a community



**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Tilbury (2018), USA <b>People involved in the justice system</b>	Cross-sectional semi-structured qualitative interviews	N=8, Certified or licensed providers currently or previously working with female offenders, living with co-occurring conditions, in a forensic setting <b>Age:</b> Not reported <b>Gender:</b> 5/8 (62.5%) female <b>Setting:</b> Forensic inpatient setting in a metropolitan area	<b>1) Build a strong therapeutic relationship</b> <b>3) Involve peer support</b>	N/A	Therapeutic relationship <b>Other outcomes:</b> Providers felt it is important to use an authentic, empathetic, and optimistic approach to build trust and to tailor care with the client. Providers believed having a strong therapeutic alliance increases female offenders' motivation and their treatment adherence Peer support Providers spoke about the importance that female offender are supported on multiple levels, including within their correctional service community and peers. Providers believed that encouraging female offenders with hope increases their motivation with treatment
Tompkins and Neale (2018), UK <b>Women</b>	Cross-sectional semi-structured qualitative interviews	N= 19, Clients currently or previously participating in a women-only residential service within a substance abuse treatment organisation N= 18, Staff and stakeholders working in the women-only residential service <b>Age:</b> Clients: Range = 25–44 years, Staff and stakeholders: Not reported <b>Gender:</b> Clients: 100% female, Staff and stakeholders: Not reported <b>Setting:</b> Community-based and residential treatment service in metropolitan area <b>Main AOD eligibility:</b> Current or past participation in the women-only substance abuse treatment residential service <b>Main MH eligibility:</b> Self-reported experience of trauma	<b>1) Build a strong therapeutic relationship</b> <b>6) Provide trauma-informed care</b> <b>8) Tailor treatment plans</b>	N/A	Therapeutic relationship Staff believed trauma-informed care should be non-judgemental and should aim to understand the motivations of clients without giving up. Staff believed they should be flexible, consistent, caring, and authentic in their relationships Trauma-informed care Staff and clients spoke about their experiences with trauma-informed care, viewing it as a way to help clients engage positively with treatment and develop strong therapeutic relationships. These aspects were thought to help clients to better understand themselves and contemplate their behaviours and recovery Treatment plans Staff believed it was important that they work collaboratively to ensure clients' needs are understood so treatment is individualised

**Table 2** (continued)

Author, country, specific population (if applicable)	Study design and methodology	Sample and setting	Guiding principle described	Intervention and control (if app.)	Main results as related to guiding principles, treatment outcomes and other outcomes
Topor et al. (2019), Sweden	Cross-sectional qualitative interviews	N=40. Clients with co-occurring mental health and AOD use problems, N=15. Providers from 9 services, including residential and outpatient services <b>Age:</b> Clients: range = 26–62 years, Providers: range = 39–61 years <b>Gender:</b> Clients: 27/40 (67.5%) male, Providers: 11/15 (73.3%) female <b>Setting:</b> Social and psychiatric inpatient and outpatient services <b>Main AOD eligibility:</b> Identified by healthcare professional <b>Main MH eligibility:</b> Identified by healthcare professional	<b>1) Build a strong therapeutic relationship</b>	N/A	Therapeutic relationship. Clients spoke about the importance of a working alliance, in which they are heard and seen as equal, to support the recovery process. Some clients described how providers' trust and belief helped them believe in themselves. Flexibility in providers' care was also appreciated by clients as it created a more human connection

<sup>a</sup>Lubman et al. (2011) cited (not within results)<sup>b</sup>Staiger et al. (2011) cited (within results)<sup>c</sup>Kelly et al. (2012); Merkes et al. (2010) cited (within results)<sup>d</sup>Abraham et al. (2017) cited (within results)<sup>e</sup>Kozloff et al. (2013) cited (not within results)<sup>f</sup>Staiger et al. (2011) cited (not within results)

system or experiencing homelessness, with both providers and clients describing that it helped to welcome clients and encourage them through treatment (Foster et al., 2010; Johnson et al., 2015; Kozloff et al., 2013; Tilbury, 2017).

### **Ensure Continuity of Care ( $n = 6$ )**

Findings from three studies using different methodologies all corroborated the importance for AOD workers to use continuity of care practices when working with people with co-occurring mental health conditions. These studies included a systematic review, a cross-sectional survey, and one qualitative study (McCallum et al., 2015, 2016; Merkes et al., 2010). Continuity of care ensured staff were dependable (i.e. limiting changes of staff and appointment cancellations within clients' treatment), had appropriate discharge policies and procedures, and co-ordinated with a range of support services. In qualitative interviews, clients with co-occurring conditions felt these practices were important to overcome barriers to accessing treatment (McCallum et al., 2016).

Continuity of care was also identified as useful for clients involved in the justice system, to support them from intake through to discharge, and in particular transition into the community (Eagle et al., 2019; Johnson et al., 2015). In the justice context, healthcare providers expressed support for continuity of care practices that (i) maintain contact with the same provider before and after release; (ii) provide support 24–72 h after release; (iii) address lapses before they escalate; and (iv) offer long-term support (Johnson et al., 2015). Post-discharge support was also valued by CALD clients, as aftercare was considered a means of relapse prevention, particularly for those who had experienced stigma-related help-seeking difficulties with their communities (Kour et al., 2020).

### **Support the Professional Development and Competence of Workers ( $n = 6$ )**

A review of guidelines recommended that AOD workers have the requisite knowledge and skills to identify mental health conditions which commonly co-occur with AOD use, and appropriately manage and refer clients when needed (Kendall et al., 2011). In a survey of Australian comorbidity treatment services following 'best practice' (i.e. identified through a consultation with key stakeholders as services which achieve 'good outcomes' for clients with comorbidity), all staff were trained in identifying co-occurring conditions and most in referral procedures (Merkes et al., 2010). Additionally, staff education and training were perceived as an important by clients from CALD, Australian Aboriginal and Torres Strait Islander, or LGBTIQ+ communities (Kour et al., 2020; Lee et al., 2014; Penn et al., 2013; Posselt et al., 2017). For example, in qualitative interviews of CALD clients, participants reported greater treatment satisfaction when they perceived providers as more multi-culturally competent (Kour et al., 2020).

### **Provide Trauma-Informed Care ( $n = 5$ )**

Trauma-informed care is based on knowledge and understanding of how trauma affects people's lives and the delivery of effective care. Support for the use of trauma-informed care came from two qualitative studies, an interdisciplinary expert meeting, and a scoping review; this approach was reported as helping clients who are more vulnerable to trauma (i.e. female clients, young adults, and those experiencing homelessness) to manage their symptoms and to engage better in treatment (Foster et al., 2010; Hawke et al., 2019; Silverstein et al., 2021; Tompkins & Neale, 2018). One narrative literature review

highlighted the importance of AOD workers establishing a safe place for their clients from the beginning of care, so as to provide them the opportunity to discuss their experiences of trauma should they wish to (Dass-Brailsford & Myrick, 2010). This same review argued that AOD workers introduce the topic of trauma and that discussing clients' trauma take place over time, as clients sometimes prefer disclosing memories in fragments (Dass-Brailsford & Myrick, 2010).

### **Provide Recovery-Oriented Care ( $n = 4$ )**

Using a recovery-oriented approach to care, which is defined as supporting clients' strengths to achieve their own recovery, was supported by two reviews and two qualitative studies for the treatment of people with co-occurring conditions (Brekke et al., 2018a, 2018b; Brekke et al., 2018a, 2018b; De Ruyscher et al., 2017; DiClemente et al., 2016). In the qualitative interviews, clients reported wanting AOD workers to support their autonomy in decision-making and goal setting (Brekke et al., 2018a, 2018b). To better align care with clients' personal recovery goals, findings from the two reviews and two qualitative studies suggested that AOD workers focus on the clients' needs and not their clinical disorder when deciding on treatment (Brekke et al., 2018a, 2018b; Brekke et al., 2018a, 2018b; De Ruyscher et al., 2017; DiClemente et al., 2016). Specifically, review findings noted that recovery-oriented care may be facilitated when AOD workers help clients build peer support relationships and provide discharge support (De Ruyscher et al., 2017).

### **Tailor Treatment Plans ( $n = 4$ )**

Findings from two reviews discussed the importance for AOD workers to plan care collaboratively with the client, tailoring treatment to clients' contexts and readiness for change (Kelly et al., 2011; Kendall et al., 2011). Specifically, one review supported the use of motivational interview techniques for AOD workers to better engage clients in their treatment planning, which may in turn build trust in the therapeutic relationship and promote treatment engagement (Kelly et al., 2011). For justice-involved clients specifically, a review of effective care models in correctional settings provided evidence that collaborating on treatment plans can support clients' basic needs, preferences, and readiness for change (Eagle et al., 2019). In qualitative interviews, clients and staff from women-only AOD treatment services also spoke about the importance of working collaboratively to ensure clients' needs are understood for treatment to be tailored (Tompkins & Neale, 2018).

### **Encourage Patient Autonomy and Shared Decision-Making ( $n = 3$ )**

Findings from one systematic review and one qualitative study of people with co-occurring AOD and mental health conditions gave support for AOD workers to incorporate patient autonomy and shared decision-making approaches in treatment decisions. Most people with co-occurring conditions reported wanting to take an active and informed role in decision-making and valued being involved in treatment decisions (Fisher et al., 2021; McCallum et al., 2016). Moreover, both clients and providers endorsed shared decision-making interventions as acceptable and feasible to use in practice (Fisher et al., 2021). In qualitative focus groups, female veterans spoke about the importance of AOD staff working collaboratively with clients so as to allow them to voice their needs (Abraham et al., 2017).

### **Develop Trust with the Client's Community ( $n=3$ )**

Participants in one participatory action research study reported that AOD treatment services should proactively develop a trusting relationship not only with clients, but also with their families, and the broader community (Liu et al., 2016). Establishing trust reportedly helped to encourage more community engagement with reputable and competent services (Liu et al., 2016). It was also viewed as important in qualitative interviews and focus groups of people from Aboriginal Australian or Torres Strait Islander and LGBTIQ+ communities (Lee et al., 2014; Penn et al., 2013). Specifically, Aboriginal Australian healthcare workers and women with co-occurring conditions reported that AOD treatment services should build awareness of services within their communities (Lee et al., 2014) while people identifying as LGBTIQ+ spoke about the need for treatment services to signal their inclusiveness through specific signage and intake questions (Penn et al., 2013).

### **Create Collaborative Treatment Goals ( $n=1$ )**

A large survey of AOD counsellors working in comorbidity services ( $n=751$ ) found that many (71%) considered both clients' treatment history and individual context when assessing whether non-abstinence was an appropriate treatment goal for clients (Davis et al., 2017). When developing treatment goals, these AOD counsellors reported considering clients' AOD use history, treatment-related aspects (i.e. client motivation and treatment goals), co-occurring psychiatric diagnoses, and their social and family environment (Davis et al., 2017).

### **Screen Throughout Care ( $n=1$ )**

Review findings supported screening as an important first-step to engaging clients, and one to be conducted throughout clients' management (DiClemente et al., 2016). This review also supported the use of screening and assessment results to inform collaborative decisions regarding referrals, which involve the client and consider their readiness to change, motivations, and values (DiClemente et al., 2016).

### **Use a 'No Wrong Door' Approach ( $n=1$ )**

Findings from one participatory action research study involving surveys, focus groups, and interviews supported the use of co-ordinated, connected, and streamlined care practices for staff working with clients with mental health comorbidity in AOD treatment services (Liu et al., 2016). According to participants, these practices were necessary to ensure clients access appropriate assessment and treatment without unnecessary referrals (Liu et al., 2016). Participants were a diverse mix including staff from local mental health and AOD treatment services, support service workers caring for youth and adults with comorbidity, Aboriginal consumer advocates, Aboriginal and non-Aboriginal workers in mental health and AOD treatment services, and refugee youth and providers of comorbidity-focused refugee youth services.

### **Involve Families ( $n=1$ )**

In a survey of comorbidity treatment providers ( $n=250$ ), approximately half reported that family and carer support was important to improving client prognosis (Roncero et al.,

2016). Providers also reported considering clients' family context when deciding on treatment, rating this among the top six reasons for selecting a specific treatment (Roncero et al., 2016).

### **'Do No Harm' ( $n = 1$ )**

One summary of clinical guidelines discussed the importance for AOD workers to consider the potential harms of treatment options for the client and the community (Arunogiri & Lubman, 2015). These considerations were thought to be especially relevant to the risks of pharmacotherapy use in people with co-occurring AOD and mental health conditions, including interactions between substances, overuse, and the potential for dependence and misuse (Arunogiri & Lubman, 2015).

### **Guiding Principles and Symptom-Related Outcomes**

Three systematic reviews and one pre-post study of interventions examined the potential linkages between four guiding principles and symptom-related outcomes.

#### **AOD Use and Mental Health Symptoms**

Firstly, interventions designed to promote guiding principles 'involve peer support' and 'encourage patient autonomy and shared decision-making' were associated with symptom-related improvements. One systematic review found that peer referrals to peer-support programs (e.g. 12-step), or peer-programs integrated into usual care led to greater improvements in participants' psychiatric symptoms and reductions in AOD use compared to usual care from baseline to 6 and 12-month follow-up (Eddie et al., 2019). Additionally, another systematic review found that interventions designed to increase shared decision-making led to greater improvements in mental health symptoms from baseline to 3 and 12-months follow-up compared to usual care (Fisher et al., 2021). However, this review reported mixed results regarding AOD use and abstinence; some studies reported null effects from shared decision-making interventions on addiction severity, AOD use frequency and AOD abstinence at 3-month follow-up, while other studies reported negative effects on AOD abstinence at 3 and 12-month follow-up (Fisher et al., 2021).

Furthermore, one systematic review provided evidence that 'ensuring continuity of care' may improve symptom-related outcomes. Here, greater patient and observer-rated continuity of care in treatment was associated with greater quality of life and general functioning, but not psychiatric symptom severity, at 17-month follow-up (McCallum et al., 2015). 'Building a strong therapeutic relationship' may also be linked to improved mental health symptoms, with one pre-post study demonstrating that therapist-rated therapeutic alliance scores were significantly correlated with change in client's depression symptoms, but not alcohol use outcomes, from baseline to 12 weeks at post-treatment (Richardson et al., 2018).

## Guiding Principles and Other Outcomes

Potential linkages between six of the guiding principles and other outcomes were examined in seven qualitative studies, three systematic reviews, one pre-post study, and one cross-sectional quantitative survey.

### Treatment Engagement

One systematic review provided preliminary evidence that ‘involving peer support’ may improve treatment attendance, such that peer referrals to peer-support (e.g. 12-step) or peer-programs integrated into usual care led to greater treatment attendance and service use at 6 months after treatment entry to 1-year follow-up compared to usual care (Eddie et al., 2019). ‘Involving peer support’ was also reported as useful to improving treatment adherence and engagement in qualitative studies of clients involved in the justice system or experiencing homelessness, (Foster et al., 2010; Johnson et al., 2015; Kozloff et al., 2013; Tilbury, 2017). Evidence from another systematic review also showed that ‘ensuring continuity of care’ may influence treatment engagement, such that greater continuity of care (operationalised as number of client visits, number of months engaged in treatment, number of providers, and staff-reported practices of continuity of care) positively correlated with clients’ commitment to treatment and engagement in continuing care, as rated by providers 4 months after treatment entry and at 6-month follow-up (McCallum et al., 2015). ‘Encouraging patient autonomy and shared decision-making’ was also found to support treatment engagement in another systematic review, as more participants who received shared decision-making interventions received alcohol-related care and obtained medication supplies compared to usual primary care at 3- and 12-month follow-up (Fisher et al., 2021). Qualitative perspectives from patients and providers in this review indicated that interventions designed to ‘encourage patient autonomy and shared decision-making’ were perceived to facilitate clients’ active involvement in consultations and decision-making (Fisher et al., 2021).

‘Involving families’ in care was also seen to improve clients’ commitment to treatment, with comorbidity service providers rating patient and family psychoeducation as the second most important strategy for treatment engagement (Roncero et al., 2016). Additionally, in qualitative interviews, people with co-occurring symptoms described experiencing ‘holistic care’, in the form of individualised treatment to support both addiction and psychological challenges, as a positive influence on their treatment engagement and commitment to recovery (Motta-Ochoa et al., 2017). In contrast, ‘building a strong therapeutic relationship’ does not appear to impact treatment engagement and attendance, with one pre-post study showing no relationship between clinician-rated therapeutic alliance and medication adherence or the number of treatment sessions attended (Richardson et al., 2018). Despite this, in qualitative focus-groups, AOD workers reported that trusting therapeutic relationships may encourage treatment engagement by providing clients with opportunities to discuss difficult experiences and learn how to form new positive relationships (Hoxmark & Wynn, 2010).

### Satisfaction with Care

In qualitative research, ‘build a strong therapeutic relationship’, ‘provide holistic care’, and ‘ensure continuity of care’ were all linked to greater client satisfaction with care

(McCallum et al., 2016; Motta-Ochoa et al., 2017). In terms of therapeutic relationships, clients in qualitative interviews reported feeling more satisfied with staff who they perceived as non-judgemental and empathetic as this helped to reduce clients' feelings of shame (McCallum et al., 2016). Additionally, one systematic review found support for 'ensuring continuity of care' in treatment, such that greater patient and observer-rated continuity of care were associated with increased service satisfaction for patients at 17-month follow-up (McCallum et al., 2015). By contrast, another systematic review reported that interventions to 'encourage patient autonomy and shared decision-making' with case managers did not lead to greater care satisfaction among clients compared to usual care (timepoint not reported). In explaining this lack of association, the authors noted that it may be attributable to high clients' satisfaction ratings pre-intervention, resulting in a ceiling effect (Fisher et al., 2021).

### **Therapeutic Alliance**

In one systematic review, an intervention to 'encourage patient autonomy and shared decision-making' with clinicians showed no effect on client-rated therapeutic alliance compared to control both midway and at the end of treatment; however, participants' alliance ratings were high before receiving the shared decision-making interventions (Fisher et al., 2021). Despite this, shared decision-making interventions were found to increase the client–clinician agreement on treatment goals (at 6 and 12 weeks into treatment) and were viewed by clinicians in focus groups to facilitate agreements on treatment decisions with clients, which is an important aspect of the therapeutic alliance (Fisher et al., 2021).

## **Discussion**

This review is the first to synthesise the international published literature on guiding principles for working with people with co-occurring AOD and mental health conditions in AOD treatment settings. Key findings are discussed below, which can inform evidence-based guidance for AOD workers to optimally support people with co-occurring AOD and mental health conditions to engage with and benefit from treatment.

### **Alignment of These Guiding Principles with Contemporary Clinical Guidelines**

The fifteen guiding principles identified in this review align closely with current international guidelines for the management of co-occurring AOD and mental health conditions (National Institute for Health and Care Excellence, 2016; Network of Alcohol & Drug Agencies, 2021; NSW Department of Health, 2009; Rush, 2011; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005). For example, international guidelines commonly stress the importance for all clients to receive care regardless of where they present (i.e. 'use a 'no wrong door' approach'), and emphasise that providers should screen for common mental health conditions to ensure they are identified and treated ('screen throughout care') (National Institute for Health and Care Excellence, 2016; Network of Alcohol & Drug Agencies, 2021; NSW Department of Health, 2009; Rush, 2011; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005). International guidelines also



encourage individualised treatment ('tailor treatment plans') to address the concerns and needs that matter to the client ('provide holistic care') by collaborating with clients to identify recovery goals ('create collaborative treatment goals') (National Institute for Health and Care Excellence, 2016; Network of Alcohol & Drug Agencies, 2021; NSW Department of Health, 2009; Rush, 2011; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005). Moreover, many guidelines recommend that treatment focus on empowering the client to recognise their own strengths to achieve recovery ('provide recovery-oriented care'), which may include involving their family ('involve family') or collaboration and streamlined referrals to external services ('ensure continuity of care') (National Institute for Health and Care Excellence, 2016; Network of Alcohol & Drug Agencies, 2021; NSW Department of Health, 2009; Rush, 2011; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005). International guidelines also encourage providers to develop trusting relationships so that their clients can voice concerns without fear of stigma ('build a strong therapeutic relationship') and which acknowledge the impact of trauma on clients' lives ('provide trauma-informed care') (Bloom et al., 2003; National Institute for Health and Care Excellence, 2016; Network of Alcohol & Drug Agencies, 2021; NSW Department of Health, 2009; Rush, 2011; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005). Finally, these guidelines highlight the importance of ensuring staff have the competence to provide appropriate care and are supported to develop their skills ('support the professional development and competence of workers') (Bloom et al., 2003; National Institute for Health and Care Excellence, 2016; Network of Alcohol & Drug Agencies, 2021; NSW Department of Health, 2009; Rush, 2011; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005).

It is important to note that while the fifteen guiding principles aligned with national and international clinical management guidelines for comorbidity, this is not to say that these principles are not applicable to or beneficial for the management of clients with either a standalone mental health or AOD use condition. This said, some of the guiding principles identified in the current review such as 'no wrong door', 'provide trauma informed care', and 'support the professional development and competence of workers' might be taken as especially pertinent to managing clients with AOD and mental health comorbidities. This is because, compared to clients with a standalone condition, clients with comorbidities are disproportionately affected by the siloed nature of treatment and service provision ((Lee & Allsop, 2020) and report especially high rates of exposure to trauma (~80%, (Dore et al., 2012), while the workforce expresses unmet training needs to address AOD and mental health comorbidities (Marel et al., 2021).

### **Use of These Guiding Principles to Expand Contemporary Clinical Guidelines**

Some guiding principles identified in this review are less salient within contemporary international guidelines and may inform future revisions. These principles included 'develop trust with the client's community' and 'encourage patient autonomy and shared decision-making'. While guidelines highlight the importance of collaborating with clients on treatment decisions, they do not describe strategies AOD workers may use such as shared decision-making and/or decision-support tools (National Institute for Health and Care Excellence, 2016; NSW Department of Health, 2009; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005). Secondly,

while guidelines emphasise learning about non-dominant cultural beliefs and practices to work effectively with CALD clients, they do not concentrate on building trust with the communities more broadly (National Institute for Health and Care Excellence, 2016; NSW Department of Health, 2009; Rush, 2011; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005). By providing overlaps with and areas for expanding on contemporary guidelines, the guiding principles identified in this review are a sound basis for informing the practice of AOD workers to meet the needs of people with co-occurring AOD and mental health conditions.

It is noteworthy also that the guiding principles identified in this scoping review appeared to be interrelated, such that various principles of care and their interrelationships were discussed in each study. For example, ‘building a strong therapeutic relationship’ and ‘providing holistic care’ were seen as essential concurrent practices which were highly valued by young adults with co-occurring AOD and mental health conditions in a qualitative interview study (Ness et al., 2017). Moreover, some guiding principles were shown to impact on other principles directly or indirectly. For example, ensuring that AOD workers are ‘supported in their professional development and competence’ was highlighted as critical to their having the skills necessary to appropriately ‘tailor treatment plans’ and ‘build a strong therapeutic relationship’ with clients (Kendall et al., 2011). In this way, using a systems-based approach which focuses on using multiple strategies in combination with one another, rather than a single principle of care undertaken in isolation, is likely to benefit the clinical practice of AOD workers.

Similarly, many of the guiding principles identified in this scoping review reflected the need to care for clients’ general health, which includes but is not limited to their AOD use or mental health. Given the increasing international prevalence of multimorbidity (the presence of two or more chronic health conditions (Britt et al., 2008; King et al., 2018; Pefoyo et al., 2015; van den Akker et al., 2019)), AOD services may need to broaden their treatment scope to include a multimorbidity focus. The guiding principles identified in this scoping review therefore underscore the need for AOD services to shift towards providing comorbidity and multimorbidity-informed treatment, working in conjunction with other community and specialist health services. For instance, comprehensive ‘screening throughout care’ can help identify physical health comorbidities, which in turn, can provide motivation for clients to engage in treatment for those who are concerned about medical complications (McDonough et al., 2021). ‘Providing holistic care’, likewise, encourages AOD workers to address the individual needs of clients, including their experiences of multimorbidity.

## **Influence of Guiding Principles on Outcomes**

In contrast to the substantial body of literature *describing* principles of care which are perceived as being important for the management of co-occurring AOD and mental health conditions, this review identified scant empirical literature operationalising and evaluating the potential impact of principles on outcomes. Of the fifteen guiding principles identified in this review, only six were evaluated for their impacts on symptom-related outcomes (e.g. mental health symptoms, AOD abstinence) and other outcomes (e.g. treatment engagement, satisfaction with care). As such, it remains unclear whether and the extent to which specific guiding principles are likely to benefit the care of clients with co-occurring AOD and mental health conditions. Also unclear is whether these guiding principles may be appropriate for use in different contexts or specific populations.

It is somewhat surprising therefore that despite the limited empirical evidence available, the guiding principles identified in this review are widely endorsed both in the published literature and in clinical international guidelines (National Institute for Health and Care Excellence, 2016; Network of Alcohol & Drug Agencies, 2021; NSW Department of Health, 2009; Rush, 2011; Substance Abuse & Mental Health Services Administration, 2020; Todd, 2010; Ziedonis et al., 2005). Furthermore, evidence supporting the use of guiding principles for improving comorbidity management was derived from range of study designs, which were mostly qualitative and precluded any firm conclusions. Indeed, ‘involve peer support’ and ‘encourage patient autonomy and shared decision-making’ emerged as the only principles supported by interventional research. The present scoping review did not include an assessment of the quality of the evidence; however, more high-quality research is needed to evaluate the effectiveness of interventions which incorporate these guiding principles at improving AOD use and mental health, and engagement and satisfaction with care.

## Limitations

The current findings should be interpreted considering some limitations. Firstly, the heterogeneity of evidence sources precludes definitive conclusions about the benefits associated with each of the guiding principles. Secondly, most of the identified research was qualitative in nature and based on client perspectives in AOD treatment. Without corroborating evidence from larger-scale quantitative studies, it is hard to know whether these guiding principles are representative of clients in treatment for co-occurring AOD and mental health conditions, and/or to clients who do not engage with treatment or drop out prematurely. Thirdly, to be included in the review, it was not a requirement that articles included clients with diagnosed comorbid disorders. This is because clients are often assessed and treated for their ‘primary’ disorder, while even subclinical/subthreshold mental health symptoms or AOD use can negatively impact on the client’s presentation, prognosis, or treatment response (Marel et al., 2016). However, this means that the reviewed findings relate to clients with both threshold and subthreshold level co-occurring conditions and need to be considered as such. Furthermore, as is typical for scoping reviews, this review did not include a quality of evidence assessment and therefore findings have not considered the quality of the evidence on which they are based. Finally, searches were limited to articles published in English and therefore it is possible that relevant articles published in languages other than English were excluded.

## Conclusion

This systematic scoping review provides the first-known comprehensive synthesis of the published literature on guiding principles for managing co-occurring AOD and mental health conditions in AOD treatment settings. Given that this client group is highly common within AOD treatment settings and has specific and unique needs, it is important that AOD workers are equipped with the appropriate knowledge and guidance. This review identified fifteen guiding principles, which are consistent with international guidelines for the management of comorbidity. These guiding principles were endorsed by both client and provider perspectives; however, only six were examined for their impact on outcomes. Therefore, much scope remains in building the empirical evidence base on the effectiveness of

these principles at improving relevant client outcomes such as AOD use, mental health symptoms, treatment engagement, and satisfaction with care.

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## Declarations

**Conflict of Interest** The authors declare no competing interests.

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