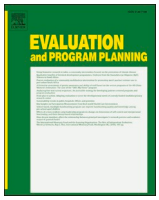
Evaluation and Program Planning 111 (2025) 102578

Contents lists available at ScienceDirect

Evaluation and Program Planning

journal homepage: www.elsevier.com/locate/evalprogplan



A mixed methods evaluation of an alcohol and other drug psychoeducation program for clients with complex support needs

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ARTICLE INFO

Keywords:
Psychoeducation
Substance use
Mixed methods evaluation
Complex-need
Feasibility
Acceptability

ABSTRACT

Background: Clients with co-occurring and complex needs represent an important segment of the alcohol and other drug (AOD) treatment population. Retaining and engaging individuals in AOD treatment is challenging, and this pursuit is further impeded when clients present with complex support needs. This study sought to establish the feasibility and acceptability of a newly developed psychoeducation program for this clientele, attending a non-residential treatment service in New South Wales.

Methods: The study employed a mixed methods approach. The team analysed aggregated non identifiable routinely collected data, including alcohol and other drug use, psychological distress and quality of life metrics pre and post intervention. Qualitative semi-structured interviews were also conducted with consenting clients and clinicians to complement quantitative data.

Results: Twenty-five eligible clients consented to have their data used for this study and nine consented to participate in an interview. Results show a significant decrease in psychological distress among clients at exit compared to baseline, however no significant change in quality-of-life scores or substance use was quantitatively observed. Some clients self-reported a reduction in substance use and most appreciated the flexibility of the one-on-one service offering.

Conclusions: Our findings show that the psychoeducational program delivered to clients with complex support needs at Rendu House is feasible and acceptable to both clients and clinicians, and that the use of routinely collected data to measure treatment outcomes is viable within this setting. Our findings also demonstrate the value of qualitative inquiry in situating narratives of recovery among clients with complex needs where improvements may be incremental.

1. Background

Australians continue to experience alcohol and other drug (AOD) related harms, such as AOD-related deaths and hospitalisations, with a reported 12.1 million admissions in 2022–23, an increase of 4.6 % from the previous year (Gao & Ogeil, 2018; Bonomo et al., 2019; Australian Institute of Health & Welfare.). As a result, supporting individuals, families, and communities to reduce their risk of harm remains a national priority (Department of Health, 2017). This support is often through AOD treatment providers, with 131,500 individuals receiving treatment in 2022–23, although numbers fluctuate (Alcohol & other drug treatment services Overview, 2024). Despite ongoing investments in AOD treatment programs, there are barriers associated with engaging people long term, particularly among individuals with complex support needs, such as those with reduced cognitive functioning, co-occurring mental and physical illnesses and limited psychosocial supports (Rubenis et al., 2023; Osborne & Kelly, 2023). Further contributing to poor treatment retention is long term underfunding in the AOD sector which contributes to high staff turnover and burnout among workers (Skinner & Roche, 2021). AOD treatment programs can take many forms, including but not limited to counselling, withdrawal management, case management and rehabilitation (Australian Institute of Health & Welfare, 2023). Among the suite of treatments available is psychoeducation which has potential to enhance participation and

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https://doi.org/10.1016/j.evalprogplan.2025.102578
Received 14 October 2024; Received in revised form 3 February 2025; Accepted 3 March 2025
Available online 5 March 2025

retention/engagement as it offers a structured, theoretical approach to inform individuals of their physical and psychological symptom profile, and by extension, their optimal intervention to encourage capacity building (Magill et al., 2021). Psychoeducation combines both educational and therapeutic techniques to promote patient empowerment in managing varied aspects of a disease/condition or behavioural concern (Magill et al., 2021). Patient empowerment is central to psychoeducation, whereby the process engenders client agency, expertise, motivation and self-efficacy (Magill et al., 2021). Interactive psychoeducation is highly tailored to address the needs of clients, including their learning styles and level of cognitive functioning (Magill et al., 2021). A recent systematic review of psychoeducation has highlighted that it is effective at addressing symptoms relating to a range of physical and psychological disorders, such as cancer, anxiety disorder and post-traumatic disorder (PTSD). The authors especially noted its positive impacts on promoting consumption control and healthy practices, and reducing social stigma and prejudice biases, among participants experiencing mental and physical health issues (Lemes & Ondere Neto, 2017). In the AOD treatment setting, psychoeducation appears to have benefits including research indicating improved relapse rates, social functioning, perceived wellness, and stress in a small comparison study (Kargin & Hicdurmaz, 2020). Psychoeducation has also been shown to normalise experiences associated with co-occurring conditions, thereby promoting help-seeking pathways for AOD clients (Mefodeva et al., 2023). However, the feasibility and acceptability of delivering this structured psychoeducation in an AOD treatment setting and its impact on a range of AOD treatment outcomes is largely unknown.

Specifically, this evaluation aims to:

1) Identify the feasibility of delivering the program (psychoeducation modules) at the service (including number of Participants eligible for the program, Participant demographics and module participation); and the views of Participants and Clinicians about the feasibility of using the selected outcome measures.
2) Examine the acceptability of the program to Participants, Clinicians and program managers at the service.
3) Evaluate psychological distress, quality of life and AOD use (last 30 days) outcomes for Participants using the selected outcomes from the program logic (Fig. 1).

The model of care and program logic outlines the standardised components of the program and process and outcome measures associated with components, which included client retention, Goal-Based Outcomes (Law & Jacob, 2015), and changes to AOD use (Lintzeris et al., 2020), psychological distress (Ronald, 1996) and quality of life (Rocha et al., 2012).

2. Methods

A mixed methods design was chosen.

2.1. Setting

St Vincent de Paul Society New South Wales (SVDP) is funded by South Western Sydney Primary Health Network (SWSPHN) to provide a non-residential rehabilitation service at Rendu House (hereafter, the service) for individuals aged 18 years and above experiencing problematic AOD use and/or dependence. The service offers programs including group work, individual case management, before and after care and access to clinical support via nursing staff. In 2023, the service introduced and implemented a 10-module one-on-one psychoeducation program for clients with complex AOD support needs, which was created by an external consultancy agency, and worked with researchers at the National Drug and Alcohol Research Centre (NDARC), University of New South Wales (UNSW), to evaluate its acceptability, feasibility and impact. To support program delivery and the evaluation, a model of care and program logic for delivering the psychoeducation modules to clients with complex needs including expected outcomes was co-designed by the service, program designers and researchers [Fig. 1]. Eligible clients (hereafter, Participants) worked with trained clinicians (hereafter, Clinicians) to complete the mandatory module one, which involved identifying individualised therapeutic goals and selecting at least two additional modules to complete, via tele-health or face to face.

2.2. Quantitative approach exploring feasibility and impact

To examine feasibility of delivering the program we explored the number of clients eligible to receive the psychoeducation modules versus business-as-usual care (program eligibility). Aggregated

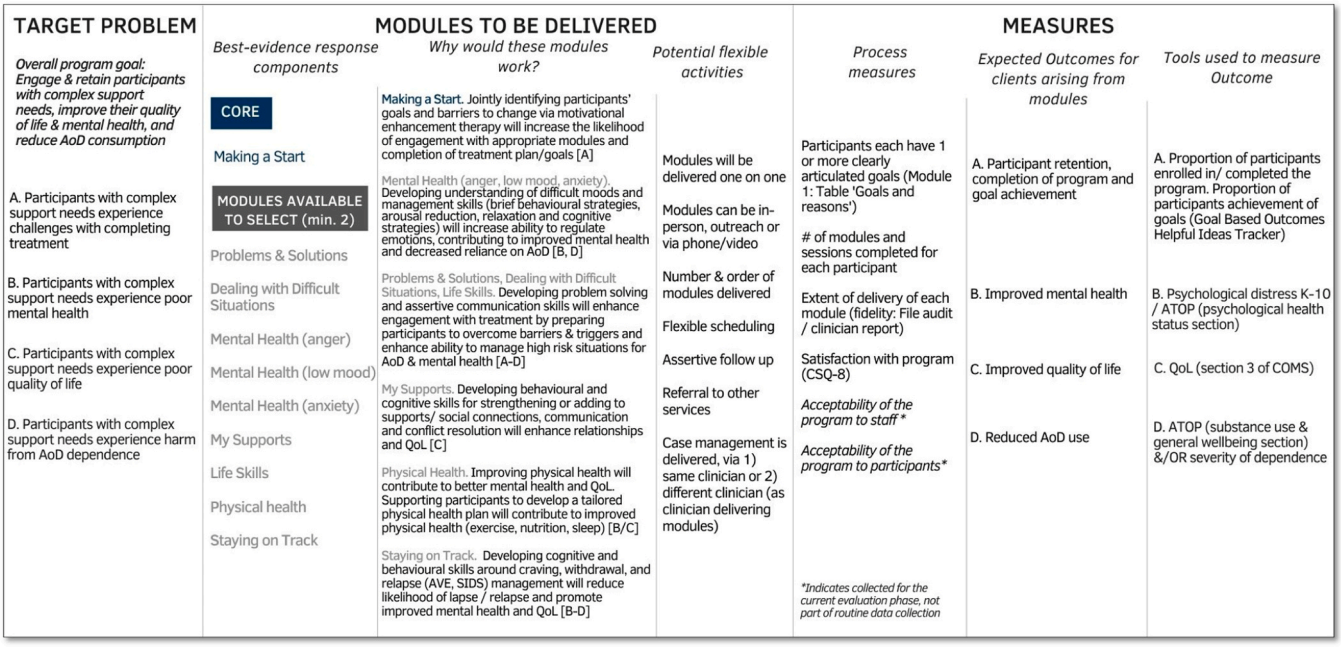

Fig. 1. Model of care and program logic outlining the psychoeducation modules for participants with complex support needs at Rendu House.

routinely collected data from all eligible clients who attended the service between January 2023 and February 2024 were analysed by WY (who specialises in quantitative data collection and analysis). These data included demographic information, module participation, program completion information and treatment outcome data.

To explore outcomes, standardised measures of AOD use, psychological distress, and quality of life were collected for each consenting Participant at a minimum of two timepoints (baseline/intake and after program completion, which was defined as 3 or more modules) and provided to the researchers. Routine outcome data included AOD use (Australian Treatment Outcomes Profile; ATOP) (Lintzeris et al., 2020), psychological distress (Kessler Psychological Distress Scale; K10) (Ronald, 1996), and quality of life metrics (WHOQOL-BREF) (Rocha et al., 2012). To examine changes in psychological distress and quality of life, we conducted paired two-sample t-tests for means of K10 and WHOQOL-BREF scores at intake and program completion with an alpha level of 0.05. Due to some substances having very low numbers of clients who reported using, we were unable to compare ATOP scores between intake and program completion, though days of AOD use has been reported descriptively.

2.3. Qualitative approach exploring views around feasibility and acceptability

A qualitative study explored views around feasibility and acceptability. Participants were asked whether they experienced changes in their AOD use behaviours, mental health, and quality of life; what made it easy and difficult to complete the program; and whether they had any suggestions for improvements. Clinicians were asked about their experiences implementing the program and the model of care. Interviews were conducted by ED (who specialises in qualitative data collection and analysis) at the service, virtually, or by phone, depending on Participants' preference. Interviews lasted between 30 and 60 minutes and were digitally recorded, transcribed and deductively analysed (8) using *QSR NVivo 12* software. Identifying data were omitted from transcripts and key themes related to feasibility and acceptability were developed.

2.4. Recruitment

New clients at the service with complex support needs and who were willing to receive the modules were purposively recruited. Clinicians assessed complexity as a score of seven or above using the New South Wales Health Complexity Rating Scale (Deacon et al., 2016), which assesses symptom severity and functional impairment including AOD use, physical health, mental health, cognitive function, and socio-economic status (which considers level of social networks and support, housing, financial stability, contact with the justice system, and whether clients had children in their care). If a Client's complexity score was below the eligibility threshold (i.e. a complexity rating less than 7), Clinicians could also recruit clients to the program based on their judgement if they assessed Clients to be complex. Those who were not screened as complex support received business-as-usual care.

Clients of the program who were potentially interested in taking part in the evaluation then contacted the research team, who provided an information sheet prior to completing written or verbal consent. Clients were given time to ask questions about the purpose of the research and how their data (including interview data and routinely collected data) would be used and stored. Clients had the option to take part in one or both data collection methods, with more clients consenting to the analysis of routine data collection, and a smaller subset of the same population consenting to also participate in interviews. Instances where clients were unable to give informed consent due to significant cognitive impairment or did not want to take part in the study, they were still able to receive the psychoeducation program and were not included in the evaluation.

Clinicians involved in facilitating the program were recruited purposefully, providing informed consent to participate in the qualitative component of the study.

2.5. Ethics

Ethics approval was granted by the University of New South Wales Human Research Ethics Committee (HC220331).

3. Results

3.1. Program eligibility

Between January 2023 and February 2024, 62 people (15 %) were referred to the psychoeducation program. Of those referred to the program, 21 (34 %) were assessed as having a NSW Health Complexity Rating score above 7 and the remaining 41 (66 %) were referred based on clinician judgement. Twenty-five eligible clients consented to have their routinely collected data used for the evaluation.

3.2. Participant characteristics at intake

Participant ages ranged from 22 to 63 years with a mean age of 40 years (standard deviation [SD] = 11.3). Over two-in-five Participants (44 %) identified as a cisgender or transgender woman, and around one-in-three Participants (32 %) identified as Aboriginal and/or Torres Strait Islander. Three-in-five Participants (60 %) indicated that their primary income source was JobSeeker or the Disability Support Pension. Across the sample, the median NSW Health Complexity Rating score at intake was 6 (interquartile range [IQR] = 4–8).

3.3. Program (psychoeducation modules) participation

Of the 25 consenting Participants, sixteen (64 %) completed the program, seven (28 %) disengaged (completed fewer than three modules) and another two were enrolled in the program however did not complete it before the end of the evaluation period. The most common reasons for exiting the program was disengagement, other health needs taking priority, or because the Participants' primary needs had been met. Of the 23 Participants who had exited the program (i.e., completed or disengaged), the median duration in the program was 62 days (IQR = 49–93) and the median number of psychoeducation modules completed was 3 (IQR = 1–4). Of the ten psychoeducation modules, the module with the highest completion was "Making a Start", followed by "Dealing with difficult situations" (Table 1).

Table 1
Percentage of clients completing each psychoeducation module during the study timeline, collected by clinicians.

Module	% participants completed
Module 1: Making a start	85
Module 2: Problems and solutions	< 20 *
Module 3: Dealing with difficult situations	50
Module 4: Looking after your mental health (anger)	< 20 *
Module 5: Looking after your mental health (low mood)	< 20 *
Module 6: Looking after your mental health (anxiety)	23
Module 7: My supports	23
Module 8: Life needs & life skills	0
Module 9: Looking after your physical health	< 20 *
Module 10: Staying on track	46

Note. * = percentage presented as a range as n ≤ 5 to protect Participant confidentiality.

3.4. Participant and Clinician views about the feasibility of delivering the program (psychoeducation modules)

Thirteen one-on-one, semi-structured interviews were conducted with Participants' (n = 9) and Clinicians (n = 4). Quotes are denoted by: Participants (P) and Clinicians (C).

3.4.1. Delivering the program limited clinicians' capacity to deliver business-as-usual activities

Staff expressed concern around the capacity for the service to deliver the program sustainably without additional clinicians and/or a restructure of roles. Steps such as these would free up more time for back fill and to redirect existing duties to other staff, including clinical supervision/debrief and case management. The following staff member reported how facilitating the program limited their capacity to manage competing priorities:

> "It's very difficult because we've only got one staff member running the groups within the complex support needs program space…trying to keep up, from modules running on a daily basis, administrative duties, check ins and other additional items as per her contract and to support her team as well. It was quite a lot." C#2

3.4.2. Completing outcome measures could be difficult for some clients

Participants relayed that while answering questions about AOD use and mental health were fairly 'routine' during AOD treatment ("*I've done a million K10s*"), the frequency in which they were required to complete them could be disheartening. Outcome measures relating to psychological distress (K10) appeared to be particularly difficult for some Participants: *"It was hard, but I got through"* (P#3).

> "It's not outside the box and it's not anything I'm not used to but being asked if I'm constantly feeling hopeless every couple of weeks, reminds me of the fact that there's issues that need to be ironed out with me. I've got a big black shadow that I need to work out and bringing it up…it's just a bit terrible." (P#1)

Some Participants described a process of 'conditioning', a shift in how they responded to questions about their AOD use/mental health, and that over time they were able to open up more freely about their feelings. As illustrated by the following quote, for some Participants the longer they were in treatment and asked these questions, the more detail about their AOD use they were willing to share with Clinicians:

> "Nowadays talking about the substance abuse, it's not so bad, but years ago I probably wouldn't have done it (ATOP). Yeah, I would have just said, 'Yes I take ICE' and that would have been it." (P#4)

Clinicians also noticed that the technical language used in outcome measures impacted upon clients' ability to complete these surveys/tools:

> "They (clients) may not understand the question. And I notice sometimes that they answer the first one (baseline) in a totally different way to the second one (follow-up) they complete. Sometimes their primary drug use then changes. So, they answer that in a different way and then you don't get a follow up on the first primary drug. Sometimes they don't have an understanding of what the question is actually asking them." (C#1)

3.4.3. Module content was sometimes difficult to complete or retain

Participants had several competing issues to manage, such as court attendance, meeting court orders and urgent health needs; and reported that these demands sometimes took priority over them completing activities planned during the modules. Some Participants relayed that because of prolonged AOD use they had difficulties with memory which impacted upon treatment engagement. Others reported challenges in retaining information, explaining that remembering tasks they intended to complete from the modules and reflecting on their progress towards goals they had selected as part of the program was difficult.

> "It's [memory is] a barrier [to completing the modules] because I've got organic brain damage, where there's parts of the brain that's dead. So yeah, my memory has suffered. I'll forget. When she [clinician] rings me up the next week and says, 'we talked about this last week and we're doing this today', I don't know." (P#6)

Clinicians reported adapting the module materials because they perceived that some sections were too lengthy and technical for clients to complete, particularly those with low literacy levels or acquired brain injuries.

> "I think with the modules itself…we had to tweak a few things. What I found challenging was that it had the facilitators guide, the tables and the worksheets all combined…It's already using terminology such as relapse and lapse, and a lot of clients don't know what the difference is. Some of our clients have acquired brain injuries or cognitive impairments… some of the information that you introduced them to in week one, you have to reinforce again… so that does take time. Sometimes I'm spending 75 minutes with that client, which is a lot for their attention span, it can get quite overwhelming for them." (C#1)

3.5. The acceptability of the program

3.5.1. Modules were flexible and tailored to need which increased client engagement

Participants and Clinicians relayed that the program could be individualised and adapted to suit unique needs and circumstances and that this latitude regarding what modules were completed and how they were completed, appeared to improve client engagement. One Participant relayed that this flexibility and tailoring led to his decision to stay with the service, reflecting *"it is the first treatment program I've ever completed"*. The following Participant relayed that focusing on content about anxiety and coping strategies for mental illness were key in managing her cannabis use, which was her primary concern:

> "I had a great experience…taught me how to manage my anxiety. To be honest, that was the module I needed the most help on, because my anxiety was really bad. I couldn't even leave the house." (P#7)

Participants highly valued the one-on-one program delivery format, which was considered a unique service offering within the AOD treatment sector. This format removed barriers for some Participants who had negative experiences participating in group counselling or accessibility barriers which were exacerbated by their level of cognitive functioning:

> "I've never had that sort of support before. I tried doing the AAs and what not, but I couldn't talk in a group, it was easier one on one… I've got autism and a learning disability…so it was a lot easier" (P#4)

Additionally, some Participants explained that group-based treatment could expose them to unhelpful networks, which were barriers to overcoming their AOD use issues:

> "I'm better on the phone, that whole hour they're committed to you. If it was in a group and everyone's telling this and that, it'd probably just get me more where to go get on it again." (P#6)

Participants appreciated the option to self-pace through the content, with no time constraints on module completion, because this helped them to build rapport with the clinician, allowed room for crisis management and attending to demanding priorities that took precedence, including court attendance and other health appointments. For example, opportunities to adjust schedules and reduce frequency of appointments for the following Participant enabled her to continue to attend:

"I'd been overwhelmed with so many negative test results… my blood pressure was up, you know. I was having quite a few appointments at the time and I had been coming here each week right and (clinician) said, 'Do you want to change how often, the frequency of attending? Maybe every fortnight or whatever would work for you and if after a fortnight or whenever, if ever you decide that you want to change it back we can go back to a week'. It was all about me and what works for me, so we went to the fortnight, and it did make a difference." (P#9)

Clinicians also recognised that the program format increased accessibility for Participants with complex support needs, and reflected that the program was a different service offering, increasing engagement:

"It's working for them, the program gives them structure, but it's still tailored and gives them that flexibility… it really gives you that flexibility to cater to their needs" (C#1)

A manager also reported that the structure of the new program enabled clinicians to tailor their approach for each individual client, which as demonstrated by the following quote, appeared to increase engagement.

"I think it gives you that flexibility to cater (for client needs) verses with (business-as-usual) program it's a little bit more structured in the ways you have to deliver certain things and I think that's where some of the clients struggle just to turn up." (C#3)

3.5.2. Skill of clinicians and a person-centred approach was highly valued by Participants

Many Participants reported the professionalism of Clinicians, noting that this was an important aspect as to why the modules were accessible and worked for them. Some Participants explained they had previously disengaged with services after being *"put through the ringer with counsellors"* and had a long history of disappointing experiences with AOD service providers, leading to many recognising the expertise and skill of the Clinicians in delivering the modules:

"It's important to draw a distinction between the personal experience of the person who's delivered the program and the content, and I want to draw a line between that…I think it's an important point going forward with this (program) is the ability (of the clinician)." (P#1)

Participants appreciated the authenticity, the empathy and person-centred approach used by Clinicians and reflected positively on this consistency in treatment, having one Clinician deliver the modules: *"She was like a friend, instead of a drug and alcohol support worker…made it more relaxing and easier for me."* Participants commented that Clinicians had the skill to make them feel comfortable, and adjusted their treatment styles for different needs:

"She talked me through things easily. I could always understand what she was going on about. I can't really understand like really technical things, so she would always break things down for me and make it so I could understand things easier." (P#7)

Participants also appreciated their Clinicians' ability and willingness to adjust their counselling and case management styles to support diverse needs, with some Participants preferencing pictorial and visual learning styles.

"She adapted to my learning style very quickly. I've got a lot of respect for her." (P#9)

One Manager reflected that for clients with cognitive impairments, this process was incredibly empowering:

"They're (clients) are like, 'what do you mean? You're going to work with me even though I don't know how to read? I don't know how to write?'…that's the sort of feedback I've been getting and that's been really, really amazing." (C#3)

3.6. Participant outcomes

Of the 25 consenting Participants, nineteen (76 %) completed outcome measures on intake and exit (either upon program completion or disengagement) (refer Table 2 for mean and standard deviation). Psychological distress scores were significantly lower at the exit interview compared to baseline ($p = 0.02$; i.e., average psychological distress decreased) and quality of life scores had no significant change between baseline and exit ($p = 0.10$). The median number of substances used was one (interquartile range = 0–2) at baseline and exit, with no significant changes in days of use across any substance types.

3.7. Participant perspectives on outcomes achieved

Participants described that they built new skills to manage their AOD use, including understanding triggers for use, practicing strategies to curb psychological distress prior to taking substances, and implementing unique positive coping strategies to support mental and physical health: *"I'm back in control and battling the demon that causes my drug use"*. As a result, Participants were able to implement these strategies to reduce substance use:

"I used to be able to not have a shower or do anything without having a cone first. I used to be in the shower and have my cone packed ready to smoke before I brushed my teeth. It was my routine. It's like now I can just do it." (P#7)

Participants also developed relapse prevention strategies, with some relaying their abilities to confidently say 'no' when offered substances in social situations. This was particularly important for those with cognitive impairments and whose substance use was heavily influenced by others.

"Recently, someone kept asking me if I wanted some ice and I kept saying no. Eight times in one night, he came to my front door." (P#4)

Participants also described increasing their help seeking skills when AOD use became a temptation, relaying they were now able to reach out to family, friends or service providers when they were in *"high risk situations"* for AOD use. Others reflected they had built supportive social networks and had begun using these when they felt distressed:

Table 2
Outcome measures at baseline and upon exiting the program.

Measure	Baseline Mean (SD)	Exit Mean (SD)
K10 score	30 (8.3)*	25 (12.4)*
QoL score	27 (6.1)	30 (6.3)
ATOP days of substance use		
Alcohol	6 (10.1)	7 (10.2)
Cannabis	8 (12.1)	7 (12)
Amphetamines	2 (6.1)	0 (1.0)
Benzodiazepines	2 (6.5)	2 (7.0)
Heroin	0 (0.4)	1 (2.8)
Other Opioids	0 (0)	0 (0)
Cocaine	0 (0)	0 (0)
Other Substances	0 (0)	0 (0)
Injected Substances	0 (0)	0 (0)

Note. SD = standard deviation. K10 = Kessler Psychological Distress Scale. Higher K10 scores indicate greater psychological distress. QoL = Quality of Life, measured using the World Health Organisation EUROHIS-QOL 8-item scale. Higher QoL scores indicate greater quality of life. ATOP = Australian Treatment Outcomes Profile. * Significantly different between baseline and exit at $p < .05$.

> "If I get worried or something, I'll just give someone a call and talk about it. If I get stressed or if I'm feeling anxious, worried, sad or scared, I'll just call someone. My sisters… I'll talk to them." (P#5)

Participants also learnt how to delay their AOD use, allowing time to implement more positive coping strategies, which meant they were able to attend their appointments and function better during the day:

> "Generally, I'm a 9 am (marijuana) starter but over the last 5–6 weeks that's been delayed. My alcohol and marijuana has reduced. I'm starting to feel a bit better." (P#8)

Others reported reducing their AOD use, which had a flow on effect to adherence to other health appointments and medication schedules, which enhanced management of co-occurring conditions: *"I'm marrying a couple of things together"*. Some relayed episodes of successful withdrawal management which functioned to reduce overall consumption: *"We worked out things that I could do to help me not be so angry when I wake up in the morning with no cones."* (P#3)

4. Discussion

Clients with complex support needs represent an important segment of the Australian AOD treatment population, and our findings demonstrate that the newly introduced psychoeducation offering shows promise in supporting this group. Our findings raise three important implications to guide AOD service providers and evaluators seeking to implement complex needs programs.

Firstly, the positive impact from the one-on-one service offerings for Participants, who had previously disengaged from group-based treatment, and the ability to tailor and deliver/participate flexibly appeared to genuinely uphold person-centred practices and principles. While peer to peer social support has been recognised as an important feature in AOD treatment (Johnson et al., 2018) and group-based models shown to increase retention and streamline workflow for workers (Sander et al., 2020), these approaches may be less suitable for the complex needs of some clients. Indeed, research shows that for clients with complex and co-occurring conditions, traditional service models do not provide adequately individualised approaches, particularly for those experiencing significant cognitive impairment, disability, psychosis, crisis and for those who may lack social integration skills (Priester et al., 2016). Qualitative studies with clients accessing AOD treatment have also illustrated that group-based therapy may trigger associations with 'people, places and things' which impede engagement and progress (Laudet, 2003). These are important considerations for service providers to ensure the provision of both group and individual treatment options for clients with diverse needs and preferences. Participants described a unique program offering which they had not experienced prior, which included tailored content, flexible activities and one-on-one delivery with the same clinician. Particularly valued was the agency afforded to clients to choose their own modules to complete and to self-identify their own treatment goals, outcome metrics which were then built into the evaluation of the program. Embedding clients' individualised goals into treatment outcomes is increasingly encouraged in the AOD treatment sector (Stirling et al., 2023).

Second, this study highlights the importance of adequately resourcing new programs for complex support clients, to ensure that clinicians have time and training to appropriately tailor the program, while maintaining business-as-usual activities. The task of protecting AOD Clinicians' welfare and the existing strains on the Australian AOD sector is well understood (Skinner & Roche, 2021), with the realities of burnout resulting in high staff turnover, low job satisfaction and poor quality of life potentially impacting upon client engagement and creating conditions for suboptimal AOD treatment (Skinner & Roche, 2021; Landrum et al., 2012). The AOD sector is also characterised by additional challenges, including the requirement to support clients with increasingly complex and co-occurring conditions, and within this context, the necessity to perform additional duties outside of traditional AOD roles (which has been shown to impact upon staff retention) (McEntee et al., 2021). Implementing the psychoeducational modules increased the workload of clinicians, and reallocating human resources to back fill ongoing case management for clients was needed. Offering clinical supervision to staff implementing additional programs was highlighted by Clinicians in this evaluation as essential to ensure adequate human resources to maintain core programs and to faithfully provide for all clients (regardless of their level of 'complexity').

Thirdly, these findings highlight the challenges of pre-defining outcomes for complex support clients accessing AOD treatment, and the difficulties with accurately tracking progress using standardised tools. Although with very small numbers, our findings demonstrate improvements to psychological distress among Participants (as determined by the K10), whereas improvements to quality of life or reduced AOD use were not seen by the EUROHIS-QOL and ATOP. We would argue the qualitative methods used in this evaluation enabled the documentation of progress of Participants; these achievements were not captured via standardised assessment tools. Researchers and clinicians have provided commentary and applied a critical lens on the shortfalls and the cautionary tales when applying outcome monitoring in this setting (Savic & Fomiatti, 2016). For example, tools such as the ATOP have been discussed as lacking 'quantity of substance use' measures, which could inadvertently promote abstinence as the most desirable outcome, which may fail to capture a client's progress in reducing the amount of substance use (i.e. their frequency of substance use) (Savic & Fomiatti, 2016). This is an important consideration when services are operating within a harm reduction framework and supporting clients with complex and co-occurring needs. Additionally, research has demonstrated the value of qualitative inquiry in situating narratives of recovery, allowing for an exploration of the social contexts and broader life narratives which may help or hinder recovery from AOD problems (Mellor et al., 2021). The co-production of outcome monitoring tools with service users and clinicians may also identify relevant outcomes and promote the inclusion of questions which are clear and interpretable for clients with complex needs (Neale et al., 2016).

4.1. Strengths and limitations

Complex and co-occurring needs among AOD treatment populations is common, and this evaluation contributes to the literature reporting on feasible and acceptable approaches to engage with and provide treatment to this population group. The lack of statistically significant improvement for quality of life may be due to the small sample size taking part in this evaluation. Additionally, while quality of life was selected for use in this evaluation using the program logic, it is a broad concept and relates to many factors, therefore it is possible that other measures are more appropriate to expect participant changes in this program. The extent to which results would apply to clients with lower levels of complexity is unclear. Further, additional data on participant characteristics, a larger sample size and longitudinal data on participant outcomes would add further credence as to whether the psychoeducational modules is effective and fit-for-purpose. We acknowledge potential bias in sampling, given that not all clients who received the psychoeducation program consented to having their routine data analysed, with a proportion of clients disengaging from treatment prior to completion. We recommend further evaluations of the program include a review of the outcome measures with clients and clinicians to ensure they are appropriate for use. We recommend this also includes the perspectives of those with and those working in disability.

5. Conclusion

Our findings show that the psychoeducational program delivered to clients with complex support needs is feasible and acceptable to clients and clinicians, and that the use of the outcomes measures identified in

our program logic to measure treatment outcomes is viable within this setting.

Funding

This work was supported by the South Western Sydney Primary Health Network.

CRediT authorship contribution statement

Deans Emily: Writing – original draft, Methodology, Formal analysis, Data curation. **Yuen Wing See:** Writing – original draft, Methodology, Formal analysis. **Economidis George:** Writing – review & editing. **Shakeshaft Anthony:** Writing – review & editing, Supervision, Funding acquisition, Conceptualization. **Farnbach Sara:** Writing – original draft, Supervision, Funding acquisition, Conceptualization.

Declaration of Competing Interest

The authors have no competing interests to declare.

Acknowledgements

We acknowledge the contributions of staff and clinicians involved in the delivery of the psychoeducation modules at Rendu House.

Ethics approval and consent to participate

This project received ethics approval from the University of New South Wales Human Research Ethics Committee (HC220331) and all clients and clinicians provided informed consent prior to data collection.

Consent for publication

Participants and clinicians provided consent for publication.

Data availability

The de-identified datasets generated and or analysed during the current study are not publicly available to protect privacy of clients and clinicians but are available from the corresponding author on reasonable request.

References

Gao, C. X., & Ogeil, R. P. (2018). Impact of alcohol and illicit drug use on the burden of disease and injury in Australia: Australian Burden of Disease Study 2011 AUSTRALIAN INSTITUTE OF HEALTH AND WELFARE Canberra: Australian Institute of Health and Welfare, 2018 ISBN: 978 1 76 054 316 7. *Drug and Alcohol Review, 37*, 819–820. https://doi.org/10.1111/dar.12850

Bonomo, Y., Norman, A., Biondo, S., Bruno, R., Daglish, M., Dawe, S., et al. (2019). The Australian drug harms ranking study. *Journal of Psychopharmacology, 33*, 759–768. https://doi.org/10.1177/0269881119841569

Australian Institute of Health & Welfare. Alcohol, tobacco and other drugs in Australia n. d. ⟨https://www.aihw.gov.au/reports/alcohol/alcohol-tobacco-other-drugs-australia/contents/impacts/social-impacts#riskybehaviours⟩.

Department of Health. National Drug Strategy 2017 - 2026 2017.

Alcohol & other drug treatment services Overview. Aust Inst Health Welf 2024. ⟨https://www.aihw.gov.au/reports-data/health-welfare-services/alcohol-other-drug-treatment-services/overview⟩ (Accessed July 1, 2024).

Rubenis, A. J., Barnett, A. I., & Arunogiri, S. (2023). Keeping clients connected: Exploring Australian alcohol and other drug clinicians' perspectives on barriers and facilitators to treatment attendance. *Addiction Research*, 1–9. https://doi.org/10.1080/16066359.2023.2227092

Osborne, B., & Kelly, P. J. (2023). Substance use disorders, physical health and recovery capital: Examining the experiences of clients and the alcohol and other drug workforce. *Drug and Alcohol Review, 42*, 1410–1421. https://doi.org/10.1111/dar.13689

Skinner, N., & Roche, A. M. (2021). 'Very demanding. Extremely rewarding': Exploring the co-occurrence of burnout and engagement in alcohol and other drug workers. *Drug and Alcohol Review, 40*, 989–997. https://doi.org/10.1111/dar.13250

Australian Institute of Health & Welfare. Alcohol and Other Drug Treatment Services. 2023.

Magill, M., Martino, S., & Wampold, B. (2021). The principles and practices of psychoeducation with alcohol or other drug use disorders: A review and brief guide. –108442 *Journal of Substance Abuse Treatment, 126*, Article 108442. https://doi.org/10.1016/j.jsat.2021.108442.

Lemes, C. B., & Ondere Neto, J. (2017). Applying psychoeducation in health. *Temas em Psicologia, 25*, 17–28. https://doi.org/10.9788/TP2017.1-02

Kargin, M., & Hicdurmaz, D. (2020). Psychoeducation program for substance use disorder: Effect on relapse rate, social functioning, perceived wellness, and coping. *Journal of Psychosocial Nursing and Mental Health Services, 58*, 39–47. https://doi.org/10.3928/02793695-20200624-03

Mefodeva, V., Carlyle, M., Walter, Z., & Hides, L. (2023). Client and staff perceptions of the integration of trauma informed care and specialist posttraumatic stress disorder treatment in residential treatment facilities for substance use: A qualitative study. *Drug and Alcohol Review, 42*, 181–192. https://doi.org/10.1111/dar.13535

Law, Duncan, & Jacob, Jenna (2015). *Goals and goal based outcomes (GBOs)*. London: CAMHS Press.

Lintzeris, N., Mammen, K., Holmes, J., Deacon, R., Mills, L., Black, E., et al. Australian Treatment Outcomes Profile (ATOP) Manual 1: Using the ATOP with Individual clients 2020.

Ronald, Kessler (1996). *Kessler's 10 psychological distress scale*. Boston, MA: Harvard Medical School.

Rocha, N. S. da, Power, M. J., Bushnell, D. M., & Fleck, M. P. (2012). The EUROHIS-QOL 8-Item Index: Comparative Psychometric Properties to Its Parent WHOQOL-BREF. *Value Health, 15*, 449–457. https://doi.org/10.1016/j.jval.2011.11.035

Deacon R., Mammen K., Holmes J., Bruno R., Dunlop A., Jackson A., et al. The Clinical Outcome and Quality Indicator (COQI) Framework project: Assessing validity and inter-rater reliability of the Client Complexity Rating Scale 2016.

Johnson, B. R., Pagano, M. E., Lee, M. T., & Post, S. G. (2018). Alone on the Inside: The Impact of Social Isolation and Helping Others on AOD Use and Criminal Activity. *Youth & Society, 50*, 529–550. https://doi.org/10.1177/0044118X15617400

Sander, K., Wilson, H., Kelly, J., & Bligh, A. (2020). Examination of a Group Entry Model into Alcohol and other Drug (AOD) treatment: improvements in attendance, retention, and clinical capacity. *Substance abuse, 41*, 19–23. https://doi.org/10.1080/08897077.2019.1635064

Priester, M. A., Browne, T., Iachini, A., Clone, S., DeHart, D., & Seay, K. D. (2016). Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: an integrative literature review. *Journal of Substance Abuse Treatment, 61*, 47–59. https://doi.org/10.1016/j.jsat.2015.09.006

Laudet, A. B. (2003). Attitudes and beliefs about 12-step groups among addiction treatment clients and clinicians: Toward identifying obstacles to participation. *Substance Use & Misuse, 38*, 2017–2047. https://doi.org/10.1081/JA-120025124

Stirling, R., Nathan, S., & Ritter, A. (2023). Prioritizing measures to assess performance of drug treatment services: A Delphi process with funders, treatment providers and service-users. *Addiction, 118*, 119–127. https://doi.org/10.1111/add.16038

Landrum, B., Knight, D. K., & Flynn, P. M. (2012). The impact of organizational stress and burnout on client engagement. *Journal of Substance Abuse Treatment, 42*, 222–230. https://doi.org/10.1016/j.jsat.2011.10.011

McEntee, A., Roche, A. M., Kostadinov, V., Hodge, S., & Chapman, J. (2021). Predictors of turnover intention in the non-government alcohol and other drug sector. *Drugs: Education, Prevention and Policy, 28*, 181–189. https://doi.org/10.1080/09687637.2020.1759508

Savic, M., & Fomiatti, R. (2016). Producing "progress" through the implementation of outcome monitoring in alcohol and other drug treatment. *Contemporary Drug Problems, 43*, 169–187. https://doi.org/10.1177/0091450916641979

Mellor, R., Lancaster, K., & Ritter, A. (2021). Recovery from alcohol problems in the absence of treatment: A qualitative narrative analysis. *Addiction, 116*, 1413–1423. https://doi.org/10.1111/add.15288

Neale, J., Vitoratou, S., Finch, E., Lennon, P., Mitcheson, L., Panebianco, D., et al. (2016). Development and validation of 'sure': A patient reported outcome measure (prom) for recovery from drug and alcohol dependence. *Drug and Alcohol Dependence, 165*, 159–167. https://doi.org/10.1016/j.drugalcdep.2016.06.006

Dr Emily Deans is an early career researcher (PhD 2018) with strong research capability in inclusion health. She has expertise in working with young people and emerging adults experiencing significant vulnerabilities, including mental illness, substance use problems, gambling problems and those in contact with the justice system. She has led several projects which seek to understand consumer perspectives, to support the design and implementation of health programs, and to identify the structural systems which serve to weaken an individual's capacity to stay well. This is where her passion lies. Since 2018 she has built and led a research portfolio at Youth Solutions, an alcohol and other drug (AOD) harm reduction organisation working with young people aged 12–25 years in south-western Sydney (SWS). As the sole researcher in this organisation, she established the Research Advisory Group (including Dr Conroy and Prof Ravulo as founding members), developed the research strategy, secured Cat 3 funding to support completion of six research projects as lead investigator, and was lead author on five research outputs arising from these projects (including four peer reviewed publications and one industry report). She has an adjunct position with the Translational Health Research Institute where she contributes to Higher Degree Research supervision and teaching. She also works part-time with the National Drug and Alcohol Research Centre supporting non-profit agencies with outcomes-based monitoring and feasibility studies. Dr Deans has contributed significantly to building research capacity in non-profit alcohol and other drug services, working with the Network of Alcohol and Other Drugs Agencies (NADA), to understand the barriers and enablers of conducting research in these settings. Additionally, Dr Deans has recently volunteered her expertise to mentor Community First Step, to design and build a

sustainable research program within this setting. Dr Deans is a highly translational researcher. Her research exploring the AOD needs of young people in SWS informed the design and implementation of substance use health literacy programs at Youth Solutions and resulted in two first author publications (https://doi.org/10.1186/s12889-022–12953-z: DOI:10.1002/hpja.393); the latter was the top cited article in Health Promot J Australia 2021–22. Further, her PhD research on the structural and environmental determinants of gambling behaviour (DOI: 10.1186/s12954-017–0131-8: DOI: 10.1186/s12889-016–2849-8) informed public health policy at the height of online betting company tactics in Australia (The Age, 2016).