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RESEARCH ARTICLE



Peer navigation: a pilot study to improve recovery capital for alcohol and other drug telephone helpline callers

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ABSTRACT

Background: People with alcohol and other drug (AOD) use problems face multiple barriers to care. Peer navigation may overcome known barriers to care. This pilot study explored the impact of peer navigation integrated into an AOD telephone helpline.

Methods: Helpline callers ($n=34$; 21 male, 12 female, 1 non-binary; mean age 41.3 years) were connected to a peer worker for 6 weekly phone sessions. Linear mixed models were performed to assess change in recovery capital, self-efficacy, and substance use post-intervention and 3-months follow-up. A descriptive approach was used to analyse qualitative data.

Results: Participants attended a mean of 4.2 sessions (range 0 to 8). Analyses showed significant improvements in recovery capital ($B=2.56$, $p<.001$) and self-efficacy ($B=0.18$, $p=.015$) at exit and follow-up respectively. Participants showed significant reductions in substance use at follow-up. Qualitative analysis indicated participants described unique benefits related to working with a peer, including help to access resources and support.

Conclusion: Peer navigation via an AOD helpline has potential to support callers to improve recovery-related outcomes. More research is needed to assess the efficacy of peer programs in helping overcome barriers to accessing care.

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Introduction


Alcohol and other drug (AOD) use is a leading cause of chronic disease, injury, and mortality, and a major contributor to the burden of disease globally (Degenhardt et al., 2018). However, many people with AOD use problems experience barriers to accessing the treatment, care, and support they need. Delays in access to care are substantial: for example, Chapman et al. determined that of the one-third of people with an alcohol use disorder who do make treatment contact, there is a median treatment delay of 18 years after the development of AOD use problems (Chapman et al., 2015). Barriers to accessing care such as low problem recognition (for example, related to a person's readiness for treatment, or perceptions of an AOD use problem), system issues (for example, treatment cost, waiting lists, and location), and stigma contribute to delays in access, resulting in poor health, fractured relationships, and social instability (Chapman et al., 2015; Cheetham et al., 2022; Cumming et al., 2016; Grigg et al., 2023).

One setting, AOD telephone helplines, can be a pathway to accessing care, whereby helpline callers can be referred to agencies for assessment and treatment. Helplines for people with AOD concerns provide immediate crisis support, counselling and brief interventions, as well as information and

access to referrals. They typically provide 24-hour, 7 days-per-week coverage, and are often seen as the first point of contact for people with AOD concerns and their family members. However, studies examining the effectiveness of AOD helplines in facilitating access to care or addressing personal and systemic barriers to care, are scarce (Gates & Albertella, 2016). Gates (2015) reviewed the literature on the effectiveness of AOD helplines in providing treatment and concluded the evidence was supportive, but most studies were descriptive. In a trial of two counselling models in the Swedish national alcohol helpline, comparing six-month alcohol-related outcomes, a significant decrease in alcohol use was observed in both groups (brief intervention vs usual care; Säfstén et al., 2019). Motivation to change was also measured, yet was high for participants at baseline, potentially indicating that by contacting the helpline, participants had high motivation to change their alcohol use (Säfstén et al., 2019). Past help-seeking was measured at baseline, however, no measures of changes in access to care or barriers were measured at follow-up.

Healthcare navigation is a promising approach to address barriers to care, and link people to the care and services they need, in a variety of settings (Carter et al., 2018; Peart et al., 2018). In health care, navigators can facilitate access to programs and services, identify and remove barriers, and

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importantly, establish a relationship with the person to inform and involve them in connecting to services (Peart et al., 2018). This relationship may also assist in enhancing a person's feelings of hope, empowerment, and acceptance, key elements of a recovery-oriented approach to supporting people with addiction (Davidson & White, 2007).

Peer workers with a lived or living experience of AOD recovery, are increasingly acting as navigators in various healthcare settings (Greer et al., 2021; James et al., 2023; Lennox et al., 2021; Samuels et al., 2018). Emerging research suggests the potential of peer workers to assist with access to primary care (Cos et al., 2020) and navigating transitions from hospital to outpatient care, particularly at discharge from acute care (Lennox et al., 2021). New studies are exploring the impact of peer workers across a range of treatment settings and recovery-related outcomes, for example, measures of recovery capital, use of recovery-oriented services, and social functioning (Bassuk et al., 2016; Eddie et al., 2019). However, research exploring recovery-related concepts has not been extended to AOD helpline settings. How peer navigators could work to address barriers to care, and improve recovery-related concepts, for example, self-efficacy, confidence to take steps to change substance use, and recovery capital in an AOD helpline has not been explored (Best & Hennessy, 2021).

Self-efficacy, confidence to change AOD use, and recovery capital, are considered important antecedents to the concept of recovery (Brophy et al., 2023). Perceived *self-efficacy* refers to the belief in one's capability to perform a particular task or cope with adversity, and is related to subsequent behaviour change (Schwarzer, 1992). High levels of self-efficacy are associated with adaptive coping strategies (Salsman et al., 2019) and predictors of AOD treatment outcomes (Kadden & Litt, 2011). *Confidence* in the ability to change AOD use also may have predictive value for behaviour change (Bertholet et al., 2009, 2012). Peer-led approaches have been associated with improved self-efficacy and confidence to change AOD use, and addiction treatment engagement (Andreas et al., 2010; Jason et al., 2007; Tracy & Wallace, 2016). *Recovery capital* has been described as the breadth and depth of a person's internal (for example, self-efficacy) and external (for example, finances) resources that can be drawn upon to initiate and sustain recovery from AOD use problems (White & Cloud, 2008). Peer workers may assist people to build recovery capital, improve access to care, and navigate different systems of care (Eddie et al., 2019; O'Connell et al., 2017; Tracy et al., 2011), however more research is required, particularly for people who are not connected to the treatment system (Bassuk et al., 2016; Stanojlović & Davidson, 2021).

Through AOD helplines, referrals to peer navigators may be an opportunity to engage people who may be reluctant to access care in traditional settings due to known barriers to care such as stigma, or reduced recovery-related concepts such as self-efficacy, confidence to change their AOD use, or recovery capital. Therefore, to address these barriers, we developed and piloted a peer navigator intervention embedded within an AOD helpline. The intervention was delivered following a telephone call to DirectLine. DirectLine is a 24-hour telephone counselling, information, and referral

service for anyone in Victoria, Australia, wishing to discuss an AOD-related issue. DirectLine receives almost 36,000 calls for assistance each year. More than half of callers contact DirectLine for three main reasons: (1) seeking counselling or support, (2) seeking information on substance use and/or treatment options, or (3) requesting a referral to AOD treatment or services.

We considered peer workers, acting as a navigator could, with their knowledge of services and access, alongside their skills in building relationships with people with AOD concerns, assist helpline callers to take steps to improve their recovery-related outcomes. We were interested in whether, and to what extent, the intervention impacted helpline callers' recovery skills and substance use severity, and helped to address any barriers to accessing care. Our research questions were:

1. Does the intervention show potential to improve participants' recovery capital, self-efficacy, and confidence to make change?
2. Does the intervention show potential to reduce participants' substance use problem severity?
3. Is the intervention considered to be acceptable and satisfactory by participants?
4. What were participants' experiences of the intervention, particularly working with the peer worker and linkage to other services?

Methods

Participants and recruitment

To be eligible for this study, potential participants needed to live in Victoria, Australia, be aged 18 years or older; be a caller to the helpline, DirectLine, and report an AOD use problem, and not currently receiving AOD treatment (e.g. medically supervised detoxification, residential rehabilitation, drug counselling, pharmacotherapy). Potential participants needed to confirm interest in working with a peer worker, have access to a telephone and be able to communicate in English.

During their DirectLine call, potential participants were identified by the helpline counsellor as eligible and interested in participating, based on the content of the call and the eligibility criteria. The helpline counsellor provided a brief overview of the intervention, and with the potential participant's agreement, completed an online referral that emailed their contact details to the research team. Potential participants were also recruited via Turning Point-affiliated social media channels (Facebook and Twitter), and were instructed to complete an online form expressing their interest.

All potential participants were emailed a participant information sheet, which outlined the project and provided information about participation and consent. They were contacted by a researcher by phone, received a verbal explanation of the study, checked for eligibility, and screened for an additional inclusion criterion: a score of 4 or above on the Readiness Ruler (see measures below) (Hesse, 2006). This score was chosen following a discussion with Self Help Addiction Resource Centre, a project partner, as indicative of

participants being most ready to work with a peer worker. Potential participants were excluded if DirectLine counsellors and/or the researchers assessed them as (a) unlikely to be able to provide informed consent due to current signs of an acute illness or intoxication; or, (b) at imminent risk of suicide/self-harm, family violence, child protection intervention, or risk to others.

Intervention

The intervention was developed in consultation with DirectLine and the Self Help Addiction Resource Centre (SHARC). SHARC is a Victorian community-based mutual self-help organisation for people experiencing addiction, and their families and friends, and provided peer workers for this study. We drew upon three existing frameworks to develop the intervention:

1. The Access to Resources in the Community (ARC) Model, a patient-centred primary care approach that uses navigation services to understand participant needs, priorities, and access barriers, establish trust, and provide emotional support to build participant engagement and link them to the most suitable resource (Dahrouge et al., 2022);
2. A model of change underpinning peer worker interventions, adapted from mental health services, comprising three mechanisms: (a) building trusting relationships based on shared lived experience; (b) role-modelling recovery; and, (c) engaging help-seekers with services and the community (Gillard et al., 2015); and,
3. The CHIME recovery framework: Connectedness; Hope and optimism about the future; Identity; Meaning in life; and, Empowerment, for recovery, health, and well-being (Leamy et al., 2011). Through a sense of CHIME, it is anticipated that a person's recovery capital will be enhanced (Collinson & Best, 2019). We were also interested in the concept of self-efficacy in relation to the Empowerment concept (Grisamore et al., 2022).

Our intervention involved connecting participants to a peer navigator for six telephone sessions, occurring approximately weekly over six to eight weeks. This schedule was chosen following a discussion with SHARC, as an appropriate timeframe to pilot the intervention, based on their experience of undertaking peer-based programs in the community. In these sessions, the peer navigator aimed to build trusting relationships with the participant based on shared lived experience, role-model recovery, provide connection and support, and engage the participant with services in the community.

After providing verbal consent and completing the baseline interview with a research team member, participants were referred to one of two peer navigators using a secure web-based form and then contacted by phone. At first telephone contact, peer navigators discussed their role and how they could help. The content was determined by the peer

and participant, however, each contact included elements of problem-solving; sharing personal experiences; identifying needs; offering help as an equal; exploring resources and options; and, providing support to overcome barriers to needed care alongside the possibility of change. The Template for Intervention Description and Replication (TIDieR) checklist (Hoffmann et al., 2014) provides further detail about the intervention (Appendix A).

Data collection

Data collection occurred at three time points: (i) baseline, (ii) exit (defined as within one week of the final telephone call); and (iii) three-month follow-up. Data were collected and stored in REDCap (Research Electronic Data Capture; Harris et al., 2009) hosted at Eastern Health (which operates DirectLine), with an electronic Case Report Form completed for each participant. Participants were reimbursed with an AUD20 retail voucher for each research assessment (maximum AUD60).

The primary outcome variable was recovery capital measured using the Brief Assessment of Recovery Capital (BARC-10; Vilsaint et al., 2017). The secondary outcome variables were self-efficacy and confidence to change, measured using the General Self-Efficacy Short Form (Salsman et al., 2019) and the modified Readiness Ruler Confidence Sub-Scale (RR-C; Heather et al., 2008). Substance use outcome variables were measured using the Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993) or Drug Use Disorders Identification Test (DUDIT; Berman et al., 2005).

The baseline assessment included demographic information (age, gender, sexuality, education, postcode, Aboriginal/Torres Strait Islander status, disability status, and housing), as well as the following standardised measures:

1. *Brief Assessment of Recovery Capital* (BARC-10; Vilsaint et al., 2017): a 10-item measure of personal, social, physical, and professional resources that could support long-term AOD recovery. Participants responded to statements (e.g. 'My living space has helped to drive my recovery journey') on a scale of 1 (strongly disagree) to 6 (strongly agree). Scores can range between 10 and 60. A score of 47 or higher suggests a greater chance of long-term recovery (Groshkova et al., 2013; Vilsaint et al., 2017). To aid interpretation, the BARC-10 scores at each point were standardised. Standardisation was done by dividing each score with the baseline standard deviation. Vilsaint et al. (2017) report the BARC-10 to have high content validity and equivalent psychometric properties related to the Assessment of Recovery Capital (Groshkova et al., 2013).
2. *General Self-Efficacy Short-Form* (PROMIS Item Bank v1.0 – General Self Efficacy – Short Form 4a): a 4-item measure of the level of confidence in managing various situations and problems (e.g. 'If I am in trouble, I can think of a solution'), on a scale of 1 (not at all confident) to 5 (very confident) (Salsman et al., 2019). Responses were

summed; higher scores indicated greater perceived self-efficacy. To aid interpretation, scores were standardised by dividing each score with the baseline standard deviation. Salsman et al. (2019) report that this measure demonstrates excellent internal consistency reliability, with a coefficient alpha of 0.88.

3. *Readiness Ruler Confidence Sub-scale* (RR-C; Heather et al., 2008): Participants were asked to rate their confidence to make a change in their AOD use, on a 10 point 1 item scale; where 1 represented not at all ready to change, and 10 represented extremely ready to change. To aid interpretation, scores were standardised by dividing each score with the baseline standard deviation. The RR-C has shown validity for measuring readiness to change drinking behaviour (Heather et al., 2008).
4. *Alcohol Use Disorders Identification Test* (AUDIT; Saunders et al., 1993) or *Drug Use Disorders Identification Test* (DUDIT; Berman et al., 2005): These measures are World Health Organization-approved screening instruments, widely used to assess alcohol or drug problem severity. Their reliability and validity have been established in various settings (Hildebrand & Noteborn, 2015; Källmén et al., 2019). Participants completed either the AUDIT or DUDIT based on their reported primary substance of concern. Higher scores indicate a more severe substance use problem.
5. *Time* was measured as baseline, exit, and 3-month follow-up. This was represented as a continuous variable where 1 represented the baseline and 3 represented the 3-month follow-up.

A series of open-ended questions were also asked, exploring reasons for seeking help, barriers to care, support needs, and previous AOD treatment.

Participants were reassessed by phone at exit, using the BARC-10, General Self-Efficacy Short-Form, and RR-C. Participants also completed the Acceptability of Intervention Measure (AIM; Weiner et al., 2017): a 4-item measure of intervention acceptability (Cronbach's $\alpha=0.941$, indicating excellent reliability), as well as the Client Satisfaction Questionnaire (CSQ; Larsen et al., 1979), an 8-item measure of satisfaction with a service (Cronbach's $\alpha=0.949$, indicating excellent reliability). Open-ended questions were also asked about their experience of the intervention, its perceived benefits or weaknesses, and recommendations for improvement.

Participants were contacted by phone three months after the program ended for follow-up. Four baseline measures were repeated: BARC-10, General Self-Efficacy Short-Form, RR-C, and either the AUDIT or DUDIT. The AUDIT or DUDIT was assessed at baseline and the three-month follow-up. The other three measures were measured at three timepoints: baseline, exit, and three-month follow up.

Analytic strategy

Quantitative analyses

Baseline characteristics of participants who did and did not complete exit and follow-up data (non-completers) were

compared using independent samples *t*-tests with Bonferroni corrected alphas of $p < .025$ (two-sided). Linear mixed models (LMM) with a random intercept were used to analyse the primary, secondary, and substance use outcomes. The LMM included a fixed effect continuous time variable. A p -value of $<.05$ (two-sided) was used as the level of significance. Analyses were conducted in R (4.2.2; RStudio Team 2020) and Stata, version 17. For standardised scores, Cohen's *d* effect sizes were used to interpret Beta coefficients: small ≤ 0.2 ; medium ≈ 0.5 ; large > 0.8 . Acceptability and satisfaction outcomes were presented as means (SD) and barriers to care were presented as frequencies (%). Eligible participants' demographic data were presented as means (SD) for numeric variables or medians (IQR) for non-normally distributed numeric variables and frequencies (%) for categorical variables.

Qualitative analyses

Participants' free-text responses were analysed using a qualitative descriptive approach by the second author and confirmed with the first author. Qualitative description is used to produce a comprehensive summary of a phenomenon, staying close to the data and using the everyday terms of the phenomenon (Sandelowski, 2000). Qualitative description was chosen as it is a data-driven, low-inference approach, suitable for mixed methods research (Neergaard et al., 2009). Analyses followed six steps: (i) Coding of data; (ii) Recording insights and reflections; (iii) Identifying important features and patterns in the data; (iv) Looking for commonalities and differences and extracting them for further consideration; (v) Deciding on a small group of generalisations that hold true for the data; and (vi) Examining these generalisations in the light of existing knowledge (Neergaard et al., 2009). These generalisations were summarised into key 'themes' describing participants' experiences.

Pseudonyms were used to protect participant confidentiality. We applied several strategies to meet trustworthiness criteria during the analytic process (Lincoln & Guba, 1985). These strategies included, for example, establishing rapport with participants (credibility); analytic meetings and note-taking during data collection and analysis, and a description of the demographics of participants (confirmability); following a study protocol (dependability); and, providing sufficient details about the study (transferability) (Bradshaw et al., 2017).

Results and findings

Participant characteristics

Sixty-nine individuals expressed interest in the program and 34 (49.3%) were eligible and referred to a peer worker. Of the ineligible individuals ($n=35$, 50.7%), 17 were unable to be contacted for screening (48.6%), 11 were already receiving AOD treatment (31.4%), 5 declined to participate (14.3%), and 2 were under 18 years of age (5.7%). Of the 34 included participants, 26 (76.5%) completed the exit interview and 22 (64.7%) completed the three-month follow-up.

Participants' mean age was 41.3 years (SD = 11.4, range 23 to 62 years). Most participants ($n=26$, 76.8%) had received some AOD treatment in the past, whereas 4 (11.8%) had never received AOD treatment (4 had missing data). All participants had a fixed address. No participants identified as Aboriginal or Torres Strait Islander.

Twenty-four of the 34 baseline participants (70.6%) stated they had experienced barriers to accessing care. These reported barriers included concerns around privacy, stigma, and discrimination ($n=6$, 17.7%), service availability and wait-lists ($n=5$, 14.7%), geographic barriers ($n=4$, 11.8%), knowledge of treatment options ($n=3$, 8.8%), financial barriers ($n=2$, 5.9%), and transport (1, 2.9%).

Participants attended an average of 4.2 intervention contacts (SD = 2.4, range 0 to 8). Further demographic information is shown in Table 1. Correlations between the primary and secondary outcome variables are presented in Table 2. There were medium to large correlations between some of the variables. However, only the medium correlation between the BARC10 and the self-efficacy scale was significant ($r=0.43$; $p<0.05$).

Quantitative results

Comparison of completers and non-completers

Baseline characteristics of participants who did and did not complete exit data ($n=26$ and $n=8$ respectively), and who did and did not complete follow-up data ($n=22$ and $n=12$ respectively) were compared. Participants who completed the exit data were significantly older ($M=44.3$) than non-completers ($M=31.4$) ($t=-3.88$, $p=.001$). For participants who selected a (non-alcohol) drug as their primary substance of concern ($n=21$), those who completed the exit data had significantly lower DUDIT scores at baseline ($M=17.9$) compared to participants who did not complete exit data ($M=37.1$) ($t=4.46$, $p<.001$).

No significant differences were found for baseline recovery capital or self-efficacy for participants who did and did not complete exit data. Similarly, no significant differences were found for any of the baseline characteristics (age, DUDIT, BARC10, SE) when comparing participants who did and did not complete follow-up data (all $p>0.025$, further details are in Table 3). Due to small group sizes ($n<5$), gender and AUDIT baseline scores were not compared.

Table 1. Demographic characteristics and variables for participants at three time points.

Variable	N (%)		
	Baseline	Exit	Three-month
Gender			
Female	12 (35.293)	10 (38.465)	9 (40.91)
Male	21 (61.778)		
Non-binary or another gender	1 (2.94)	15 (57.697)	13 (59.10)
Primary substance			
Alcohol		1 (3.859)	0 (0)
Methamphetamine	13 (38.24)	12 (46.152)	10 (45.45)
Cannabis	10 (29.41)	6 (23.081)	4 (18.182)
Cocaine	4 (11.768)	4 (15.394)	4 (18.182)
Other	2 (5.889)	0 (0)	0 (0)
Geographic area			
Major cities	5 (14.71)	4 (15.394)	4 (18.182)
Regional areas	26 (76.475)	19 (73.081)	16 (72.73)
Rural areas	6 (17.657)	6 (23.081)	5 (22.72)
Education completed			
Some high schooling	2 (5.889)	1 (3.859)	1 (4.556)
High school certificate	6 (17.64)	4 (15.394)	3 (13.64)
TAFE/Trade	5 (14.71)	3 (11.54)	2 (9.091)
Graduate	5 (14.71)	4 (15.394)	5 (22.72)
Postgraduate	13 (38.24)	11 (42.31)	9 (40.91)
	5 (14.71)	4 (15.394)	3 (13.64)
	0 (0)	0 (0)	0 (0)
M; (SD); d			
	Baseline	Exit	Three-month
BARC10	401.960; (6.70); 6.11	44.04; (7.253); 6.596	46.91; (7.091); 7.01
Self-efficacy Scale	3.54; (0.94); 3.74	3.879; (0.74); 4.10	3.88 9 (0.78) 4.10
Confidence	6.687; (2.04)	7.58 6 (2.061)	8.41 (1.44)
AUDIT	26.10; (7.192)	–	9.70 (9.67)
DUDIT	21.64; (14.697)	–	13.55 6 (14.23)

Table 2. Correlations of key variables at baseline ($N=38$).

	BARC10	Self-efficacy	Confidence	AUDIT	DUDIT
BARC10	1				
Self-efficacy	0.43*	1			
Confidence	0.15	0.22	1		
AUDIT	0.12	0.51	0.10	1	
DUDIT	0.60	0.47	0.08	#	1

Note: BARC10, Brief Assessment of Recovery Capital; AUDIT, Alcohol Use Disorder Identification Test; DUDIT, Drug Use Disorder Identification Test; # participants were asked either AUDIT or DUDIT, so there is no correlation; * $P<0.05$.

Table 3. *t*-tests comparing baseline characteristics of participants who completed and did not complete exit data ($n=26$ and $n=8$) and three-month data ($n=22$ and $n=12$).

Variable	Comparisons					
	Exit complete v. non-complete			3-month complete v. non-complete		
	Md	95CI	<i>p</i>	Md	95CI	<i>p</i>
Age	12.93	−19.97; −5.90	.001	5.94	−14.36, 2.46	.157
BARC10	0.859	−12.04, 10.34	.844	2.84	10.07, 4.40	.396
SE	−0.03	−0.80, 0.87	.931	0.03	−0.69, 0.64	.940
Confidence	−0.596	−0.70, 1.88	.355	0.667	−2.11, 0.79	.359
DUDIT	−19.21	10.09, 28.34	<.001	−10.50	−3.17, 24.17	.124

Note: Bonferroni corrected *p*-value of $p < .025$ is used. Mean difference (Md) = $M_{\text{complete}} - M_{\text{non-complete}}$. BARC10, Brief Assessment of Recovery Capital; SE, Self-Efficacy Scale; DUDIT, Drug Use Disorder Identification Test. Due to small group sizes ($n < 5$), Alcohol Use Disorder Identification Test (AUDIT) comparisons were not included.

Table 4. Findings from linear mixed models for primary and secondary outcomes regressed onto time.

Primary outcome	Non-standardised			Standardised		
	Coeff.	(SE)	95CI	Coeff.	(SE)	95CI
BARC10	2.55***	(0.61)	1.34, 3.77	0.38****	.09	.20, .56
Secondary outcomes						
Self-efficacy	0.18*	(0.07)	0.04, 0.32	0.19*	.08	.04, .34
Confidence	0.81***	(0.22)	0.39, 1.24	.40***	.10	.19, .60
AUDIT	−16.40***	(3.81)	−23.84, −8.96			
DUDIT	−8.09**	(2.98)	−14.19, −1.99			

Note: * $p < .05$; ** $p < .01$; *** $p < .001$; SE, Standard Error; BARC10, Brief Assessment of Recovery Capital; SE, Self-Efficacy Scale; AUDIT, Alcohol Use Disorder Identification Test; DUDIT, Drug Use Disorder Identification Test; Confidence, Readiness ruler confidence scale.

Primary outcome

For the primary outcome (recovery capital), mixed model regression results indicated there was a significant increase in BARC10 of an average 2.6 ($p < .001$) from baseline to exit and exit to follow-up. The standardised model indicated this change was equivalent to 0.4, a small to medium effect size.

Secondary outcomes

For the secondary outcomes, mixed model regression indicated significant increases in the self-efficacy scale of 0.2 ($p = .015$). The standardised model indicated this change was equivalent to 0.2, a small effect size. There was an average increase in the confidence scale of 0.8 ($B = 0.8$; $p < .001$) from baseline to exit and exit to follow-up. The standardised model indicated this change was equivalent to 0.4, indicating a small to medium effect size.

Substance use outcomes

Mixed model regressions indicated a significant, average improvement (reduction) of 16.4 in AUDIT scores ($p < .001$) from baseline to exit and exit to follow-up. Similarly, a significant, average improvement (reduction) in DUDIT scores of 8.1 ($p = 0.022$) from baseline to exit and exit to follow-up. It is notable that three of the 11 participants seeking support for drug use had a DUDIT score of 0 at baseline.

Further details of the findings from linear mixed models for primary, secondary, and substance use outcomes are in Table 4.

Acceptability and client satisfaction

Responses to the AIM at exit indicated the mean participant score was 4.4 ($SD = 0.9$, range 1.8 to 5.0), suggesting participants considered the intervention to be acceptable to very acceptable. Responses to the CSQ-8 at exit indicated that average participant satisfaction was 25.3 ($SD = 6.6$, range 8–32), suggesting participants were generally satisfied or very satisfied with the intervention.

Qualitative findings: participant experience of the intervention

Through our analyses of the responses from 26 participants (exit and follow-up feedback), we identified three themes relating to their experiences of the intervention. The three themes were: (1) relating to the peer worker; (2) the peer worker enabling access to services; and, (3) participant expectations.

Theme 1: relating to peer worker

Theme 1 described participants reporting the relational aspects of the peer worker. In their accounts, they described the unique benefits of receiving peer support that came from shared or similar lived experiences. In particular, participants felt the peer worker empathised with and understood them because of their shared experiences.

I was talking to someone who'd been there and done it, that made a huge difference to me, so I could relate to the other person on the end of the phone. [The peer worker] was really down to earth and you could tell, [they] had been through hell and come out the other end, so there is hope. (Jennifer, female, 41 years, cannabis)

Additionally, hearing peer workers' stories increased participants' sense of hope for recovery, and helped them to feel less stigmatised and alone. These benefits were unique to the peer contact and integral to the benefits they received from the program.

[The peer worker] taught me what I wouldn't have got from just an everyday person, a person who'd been through it knew a lot better. [They] made me feel like normal, like what I'm going through is normal, not like an outcast, yeah that these things happen to everyday people, that I'm not not normal because I'd gone through this. (Michael, male, 35 years, methamphetamine)

[The peer worker] gave me, not even advice, it was talking through options, while a doctor is more likely to just refer you to such and such. But to get [me to attend] detox, I needed someone to answer questions around, will I be safe, my fear, how I felt about it. With [the peer worker] it was just someone who was able to share [their] own journey, which made it far more human, that's the big difference, even if you saw a social worker or psych, you won't get that. (Lisa, female, 60 years, alcohol)

Participants reported the relationship and rapport with the peer worker were key to the success of the program. While most described having a good rapport with the peer worker, two felt there was a mismatch between their values and goals and those of the peer worker. This was raised in relation to the use of 12-step or religious-based support services,

for which some participants had strong feelings. These participants felt a need for the peer workers to be more flexible with the services they suggest, regardless of whether a particular service or approach had worked for them.

It's a difficult one, people are sharing life experiences, but I guess if a person says if that [religion-based support is] not going to work [the peer worker] needs to acknowledge that and see for other options and alternatives [...] I hope the program works, there is value in it, but it wasn't working for me, as soon as religion is raised, I checked out. (Maria, female, 61 years, alcohol)

... people need options outside of [Narcotics Anonymous (NA)], that's probably why they're coming to you, so you need to have people who think about stuff other than NA, who give options other than NA. (Jason, male, 44 years, methamphetamine)

Theme 2: peer worker enabling access to services

The second theme relates to how participants described the peer worker as providing links to services and ongoing support. They talked about how the peer workers' experiences encouraged them to try new approaches to access services.

[The peer worker] put me onto my local AOD service, I did an intake form for some support and received some contact with a psych nurse, he's been checking up on me, and I'm positioned to catch up with an AOD counsellor in a few weeks, so that'll be really great keeping the ball rolling. (Aron, male, 26 years, cannabis)

With AA as well, I'd said it wasn't for me, I was resistant to the idea, thinking I don't have that big a problem. [The peer worker] just talked about how AA had been such a big part of [their] recovery, and said, you know, you have to shop around and why don't I give it another try, and that day I found a group with a person there [that the peer worker] knew and got me connected with. (Lisa, female, 60 years, alcohol)

However, one participant, Kris, still reported barriers to accessing ongoing support, in particular, wait times to access services:

I'm going round in circles again in endless circles of referrals and waitlists [...] [The peer worker] was great and [they] knew it [the intervention] was only six sessions. You feel like you've got this person there for you, but support is inaccessible for normal people. I can't even get my inpatient stay because my psychiatrist has gone missing, I've been waiting six months for that, the system is broken. (Kris, 44 years, non-binary, alcohol)

Theme 3: participant expectations

Theme 3 is related to participants' expectations of the intervention, including perceptions of the role of the peer worker, and the need for the intervention to be longer than the six telephone calls. While most participants felt the program was positive and had potential, they differed in their expectations of the peer worker. For example, Daniel (male, 39 years, methamphetamine) preferred a 'professional' approach, with the presence of 'boundaries from the worker ... I realised [peer workers] aren't necessarily a professional or therapist. I didn't really consider that going in'. Rob (male, 51, methamphetamine) found the peer approach to be informal, 'It was like a friend chatting [...] there should be a structure but there

wasn't. I was guiding it almost each time I had the call'. In contrast, Angelo (male, 55 years, alcohol) referred to their peer worker as their 'counsellor', stating, 'it wasn't just a one-way traffic, [they] really opened up and shared [their] experience, it wasn't all about examining me, which I liked'. For some participants, the less clinical approach of the intervention was a strength, as Lisa (female, 60 years, alcohol) described, 'It's less clinical, it comes from people who've been there. Instantly there's a way of building rapport [...] It's sort of like talking to a friend you've never met'.

In addition, participants emphasised the nature of recovery as a continuing journey that requires long-term support, not just a short-term intervention. For example, Ali (male, 41 years, alcohol) described the intervention as 'a good place to work out other strategies perhaps, but it's not an ongoing program, so it's tough in that sense, cos it just kind of ends'. Participants stated the program would be more beneficial with greater flexibility around the number of sessions they could access. They mentioned that having the option for additional check-in sessions after their core sessions were complete would be useful to ensure they were properly connected to other supports, or had the opportunity to talk through important shared recovery experiences (such as going through inpatient withdrawal).

Someone to link in with more if you haven't achieved what you want to achieve at the time, or there's an option to link in again after those six sessions. People who're alcoholics have deep problems, six phone calls isn't going to help. (An, female, 48 years, alcohol)

I think probably I would've liked to have more, to talk through the post detox, as part of the whole detox. Detox is kinda like a bubble and the real work happens after, I think [the intervention would] have a greater success rate if it was also like once a month post detox where you meet and talk with that person. (Lisa, female, 60 years, alcohol)

Discussion

We aimed to develop, pilot, and evaluate a peer worker navigation intervention for people seeking support for AOD use problems. We identified from baseline to exit and three-month follow-up, small to moderate significant improvements in participants' recovery capital, self-efficacy, and confidence to make a change. In our pilot, improvements in the measure of recovery capital, the BARC-10, indicate improvements in the number of resources available to participants, and the supports around them, to initiate and sustain recovery (Vilsaint et al., 2017). We also identified significant improvements in substance use problem severity as measured. In addition, participants reported that the program was acceptable and satisfactory, and qualitative feedback indicated that there were unique benefits of a peer worker approach, and the intervention had helped to access resources and support.

To our knowledge, this is the first study to assess the impact of a peer navigation intervention for people with AOD use problems, accessed through an AOD telephone helpline. Peer navigation has the potential to link people to appropriate care by establishing a relationship with the person and

assisting them with identifying and accessing services (Greer et al., 2021; Peart et al., 2018). Peer support has been described as an essential element in substance use recovery (Greer et al., 2021; Tracy & Wallace, 2016), and peer coaches in acute settings have contributed to reduced hospital readmission rates (Magidson et al., 2021; Upadhyaya et al., 2021;) and navigating transitions in care, particularly at discharge and improving connections to outpatient treatment (Lennox et al., 2021; Magidson et al., 2021; Samuels et al., 2018). Peer workers in mental health settings offer the potential to increase recovery outcomes including self-efficacy (Burke et al., 2019). Building on this literature, our findings suggest the potential for peer worker navigation for helpline callers as a relational-based approach to build key recovery-related resources strengths, and potentially reduce the severity of substance use.

Our use of a mixed-methods quantitative and qualitative design was a key strength of this research, allowing us to assess change in core outcomes as well as acquire insights into participants' experiences of the program. It is notable that three of the 11 participants seeking support for drug use were not regularly using their substance of concern at baseline (i.e. had a DUDIT score of 0). These participants reported seeking the intervention to maintain recovery, by responding to a recent relapse or preventing an anticipated relapse. In their qualitative feedback, participants outlined a key element of the intervention was an increased sense of hope for recovery through shared stories with the peer worker. Participants' accounts align with the CHIME framework that identifies the core recovery processes as Connectedness, Hope, Identity, Meaning, and Empowerment (Leamy et al., 2011). In particular, participants outlined how speaking with the peer worker increased their feelings of connectedness, and gave them hope for recovery, and confidence and information to access services.

Feedback from participants about aspects of the intervention that weren't satisfactory to them is important to document and requires further examination. Participants' views on the expected nature of the intervention differed, with some valuing an informal and non-clinical approach, while others felt the intervention should be more clinical and structured. A challenge is that the peer role is not universally defined or understood (Greer et al., 2021). In many settings, peer workers lack a well-defined occupational identity; participants in our intervention may have had different expectations for the responsibilities and nature of the peer role (Greer et al., 2021). Participants also reported that it was important that the intervention either provided or made more accessible, ongoing support. Further research examining the key elements of peer work, including what elements work, and for whom, is required, alongside greater clarity in peer role definition and framing of expectations. Identifying the optimum number of sessions, and designing interventions to secure ongoing support in anticipation of the end of the intervention, are important priorities for future research.

Peer interventions have been discussed as a means to support people experiencing addiction by assisting them to overcome barriers to long-term recovery and successfully transition between stages of recovery (Stanojlovic &

Davidson, 2021). Given the known barriers to care and significant treatment delays, as well as the propensity for AOD use problems to have periods of lapse/re-lapse within the recovery process, peer navigation may be a suitable intervention or adjunct to traditional services, to support people to achieve long-term recovery goals (Chapman et al., 2015; Mojtabai et al., 2014; Ross et al., 2015; Wang et al., 2007).

Limitations

There are several strengths and limitations to this research. This study used a repeated measures design without a control or comparison group, with a small sample size. We, therefore, cannot attribute causality to the intervention, nor, indicate the results are representative or generalisable to other settings. Participants reported a score of 4 on the Readiness Ruler at baseline, indicating readiness for change, therefore this intervention may not be as beneficial for people reporting low readiness scores. However, as a pilot study, we were interested in the acceptability and experience of the program, as well as changes in outcomes. This goal led us to use a mixed-methods approach, collecting both change outcome data over time and qualitative feedback. In their qualitative feedback, participants' responses indicated that the intervention helped to support their recovery journey, and the peer worker encouraged them to access services.

Given our pilot used only two peer workers, further research is needed to understand what elements of their delivery are important for the success of peer navigation programs. As peer work is deeply personal, with peer workers sharing their lived experiences and journeys with participants, it is important to understand what elements of peer navigation are necessary for success when delivered by different peer workers (Greer et al., 2021; Stack et al., 2022). Future research exploring the experiences of peer workers providing a navigation service would assist with understanding the key elements for success.

Conclusion

Our findings show the potential for a peer-based navigation intervention within an AOD telephone helpline, to improve recovery-related outcomes and reduce AOD use problem severity. The peer workers provided participants with a sense of connection through sharing experiences, and hope that recovery is possible. A peer-based navigation intervention could add to the routine care of telephone helplines to reduce barriers to care and improve callers' recovery skills and assets. While peer workers can encourage callers to access services, the key elements of success for peer-based navigation require further investigation.

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Ethics statement

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