Service-level barriers to and facilitators of access to services for the treatment of alcohol use disorder and problematic alcohol use: protocol for a scoping review

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ABSTRACT

Introduction Prior to the COVID-19 pandemic, substance use health services for treatment of alcohol use disorder and problematic alcohol use (AUD/PAU) were fragmented and challenging to access. The pandemic magnified system weaknesses, often resulting in disruptions of treatment as alcohol use during the pandemic rose. When treatment services were available, utilisation was often low for various reasons. Virtual care was implemented to offset the drop in in-person care, however accessibility was not universal. Identification of the characteristics of treatment services for AUD/PAU that impact accessibility, as perceived by the individuals accessing or providing the services, will provide insights to enable improved access. We will perform a scoping review that will identify characteristics of services for treatment of AUD/PAU that have been identified as barriers to or facilitators of service access from the perspectives of these groups.

Methods and analysis We will follow scoping review methodological guidance from the Joanna Briggs Institute. Using the OVID platform, we will search Ovid MEDLINE including Epub Ahead of Print and In-Process and Other Non-Indexed Citations, Embase Classic+Embase, APA Psychinfo, Cochrane Register of Controlled Trials, the Cochrane Database of Systematic Reviews and CINAHL (Ebsco Platform). Multiple reviewers will screen citations. We will seek studies reporting data collected from individuals with AUD/PAU or providers of treatment for AUD/PAU on service-level factors affecting access to care. We will map barriers to and facilitators of access to AUD/PAU treatment services identified in the relevant studies, stratified by service type and key measures of inequity across service users.

Ethics and dissemination This research will enhance awareness of existing evidence regarding barriers to and facilitators of access to services for the treatment of alcohol use disorder and problematic alcohol use. Findings will be disseminated through publications, conference presentations and a stakeholder meeting. As this is a scoping review of published literature, no ethics approval was required.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This study will employ a rigorous set of scoping review methods to explore information regarding characteristics of services for the treatment of alcohol use disorder and problematic alcohol use that have been identified by clients and/or care providers as barriers to or facilitators of access to services. This is an important knowledge gap, and this evidence will provide data for future research to inform changes that can improve access to care.⇒ The research will address a large body of literature which, to our awareness, has not previously been synthesised.⇒ Findings from this work will be relevant generally as well as to pandemic situations.⇒ This review will not formally assess the quality of included studies.

INTRODUCTION

Alcohol use is a leading risk factor of disease, disability and premature mortality globally.1,2 In Canada, the annual financial costs attributable to alcohol use, including costs for healthcare, lost productivity, criminal justice and others, amount to approximately $16.6 billion.3 The Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5) defines alcohol use disorder (AUD) as ‘a maladaptive pattern of substance use leading to clinically significant impairment or distress’, as manifested by two or more of 11 criteria over a 12-month period; this
definition replaced previous diagnoses of ‘alcohol abuse’ and ‘alcohol dependence’ in DSM-IV and earlier. Problematic alcohol use (PAU) is not a formal diagnosis; however, systematic reviews of ‘problematic substance use’ have found a range of definitions, including frequency of use meeting a certain threshold (e.g., daily or near daily), treatment seeking for substance use, or individuals identified as a result of use (e.g., emergency department visits as a result of substance use). 4 Although substance use health services (SUHSs) are available to treat AUD and PAU, these services often are fragmented, challenging to access and have lengthy wait times. 5–9 The COVID-19 global pandemic has escalated the impacts of alcohol and caused abrupt disruptions of care. 10–13 Survey studies from Canada and the USA indicate that 30% of respondents who use alcohol reported an increase in alcohol use during the pandemic, with higher rates among those with existing substance use and mental health concerns. 14–16 In a survey conducted by the WHO, over 60% of 130 participating countries reported disruptions to counselling, psychotherapy and critical harm reduction services. 17 Decreased access to SUHSs may exacerbate symptoms in individuals with AUD or PAU and may also lead to increased alcohol consumption among healthy individuals. 12 18–20 We hypothesise that lower utilisation of SUHSs for alcohol consumption during the COVID-19 pandemic may have occurred as a consequence of fears of exposure to COVID-19, service restrictions to reduce the burden on healthcare systems (e.g., cancellation of elective care and redeployment of health workers to COVID-19 clinics), and/or decreased access to SUHSs (e.g., instructions for individuals to avoid face-to-face clinical care, limitations on the number of individuals able to be seen daily, individuals’ difficulties in travelling to healthcare facilities using public transport and financial barriers that hinder access to care). Virtual care was implemented in many countries to replace in-person consultations and overcome disruptions, but a study found that its use was not high enough to fully offset the drop in in-person office visits, potentially due to accessibility issues, such as poor internet connectivity, lack of access to technology, lack of insurance coverage and inability to afford the services, limited number of providers offering virtual care services and the inability of a service to transition to virtual care. 21 Barriers to care may be different for different people. Assessing clients’ preferences for SUHSs for the treatment of AUD or PAU and incorporating them into clinical decision-making can help increase access to and uptake of the services and optimise treatment engagement and retention, 22–26 thereby improving health outcomes. 26 It is well known that many factors such as variations in time, place or provider, as well as different modes of intervention, can affect the therapeutic value of a service for a client. Furthermore, non-clinical factors, such as the preference to self-manage, gender norms, stigma, availability and cost are known to shape decisions to seek support for substance use or mental health problems. 14 27 However, little is known about how the COVID-19 pandemic may affect preferences for the utilisation of SUHSs for the treatment of AUD or PAU. The available literature on individual preferences in the context of the pandemic has focused almost entirely on vaccinations, 28–31 public health measures 32–34 and resource allocation. 35 We propose to conduct a scoping review to address the gap related to individual preferences for SUHSs for the treatment of AUD/PAU by identifying characteristics of the services that affect access to them, based on the perspectives of individuals with current or past AUD or PAU and those who deliver treatment services (e.g., clinicians, other care providers and administrators). Findings from this review will highlight service-level factors in which changes are most likely to result in improved access to SUHSs for the treatment of AUD/PAU in general, as well as in pandemic circumstances.

Study objectives
We will conduct a scoping review to answer the following review question:
What characteristics of SUHSs for the treatment of AUD/PAU have been identified as barriers to or facilitators of access to the services, from the perspective of the individuals with AUD/PAU or those delivering the services?

METHODS AND ANALYSIS
This research will be undertaken using a scoping review approach. Our scoping review will be underpinned by the framework proposed by Arskey and O’Malley, 36 and our methods will be guided by methodology described by the Joanna Briggs Institute 37 as well as additional recent methods guidance. 38–40 Scoping reviews are commonly used for mapping of existing evidence related to a topic of interest and can be highly informative to identify key themes on a focused topic. Scoping reviews can also be extremely helpful to summarise and disseminate research findings to knowledge users. 36

Protocol and registration
This protocol has been drafted to adhere to the Preferred Reporting Items for Systematic Reviews and Meta-analysis Protocols reporting guidance (PRISMA-P; online supplemental appendix 1). 31 The protocol has been registered with the Open Science Framework. Given the reflexive and iterative nature of scoping reviews, 36 amendments to the registered protocol are anticipated and will be described in the final study report. The final review will be submitted for publication to an open access journal, with its reporting to be guided by the PRISMA Extension Statement for Scoping Reviews 41 as well as the Enhancing Transparency in Reporting the Synthesis of Qualitative Research (ENTREQ) guidelines. 42

Eligibility criteria
Our eligibility criteria may be refined as we develop familiarity and further expertise with the literature, given...
the flexible nature of scoping reviews. We will base our eligibility criteria on the PCC (Participants–Concept–Context) framework as follows:

**Participants**

Studies that enrolled:
1. adults (18+ years) with a current or past AUD, alcohol abuse, alcohol dependence or PAU, as defined below:
   - AUD: DSM-5 criteria or ICD coding.
   - Alcohol abuse or alcohol dependence: DSM-IV or earlier criteria or ICD coding.
   - PAU: any definition of chronic high-level use (eg, daily or near daily use), excluding non-chronic high-risk use (eg, binge drinking).
2. adults seeking treatment for their alcohol use.
3. adults identified in the emergency department or primary care as a result of their alcohol use (eg, accident while driving under the influence of alcohol).
4. health care providers and administrators who deliver services for treatment of individuals with one of the conditions above (‘care providers’).

We will include studies that enrolled specific subgroups (eg, individuals with comorbid mental health conditions, indigenous peoples, sexes/genders, older adults, pregnant people) that meet all other eligibility criteria.

Based on the different approaches to the treatment of substance use disorders (SUD) other than AUD, studies that include both individuals with AUD and individuals with SUDs other than AUD will not be included in the review, unless results have been stratified by substance and findings regarding AUD have been summarised separately. Studies of individuals with both AUD and SUD will be excluded, unless the individuals had a comorbid mental health condition (ie, dual diagnosis). These studies will be included due to the high vulnerability of the dual diagnosis population in receiving treatment.

**Concept**

Primary research studies designed to identify characteristics of SUHSs for treatment of AUD/PAU that are perceived to be barriers to or facilitators of access to the services, from the perspective of one of the target population groups. ‘Access’ will be considered the first point of contact with the treatment continuum and will include screening for alcohol use problems, treatment seeking or initiation or treatment of any duration. Although many individuals being screened for alcohol use problems may not meet the review participant eligibility criteria (ie, many may not have AUD/PAU), screening will be considered relevant because it is often the initial access point with the treatment system. ‘Treatment’ may incorporate psychosocial and/or pharmacologic therapy, including the following:

- Pharmacologic interventions to reduce alcohol cravings or consumption: naltrexone, acamprosate, disulfiram, gabapentin, topiramate, baclofen and ondansetron.
- Acute treatment of withdrawal symptoms, alone, will not be relevant, although concurrent treatment of withdrawal symptoms and reduction of alcohol cravings or consumption will be relevant.

Characteristics of services, generally, as well as of specific types of services (eg, CBT) will be of interest. Services of interest may occur anywhere along the healthcare continuum, including the emergency department or primary healthcare provider (eg, alcohol-use screening, brief interventions and referral services), specialist clinics and services and community-based services. Services delivered either in person or virtually (ie, telehealth) will be of interest, as will be information and client education services. The review will focus on views from service users and providers regarding factors that are modifiable at the service level (eg, location, hours, abstinence criteria, virtual vs in-person care, cultural compatibility, cost); those that are not amenable to change at the service level, such as characteristics of the healthcare system as a whole or a governing body, will not be relevant (eg, changes to national legislation for coverage of mental health services).

Survey (quantitative or semiquantitative), focus group and interview data will be eligible, collected within any study design; interview studies will be restricted to those with a sample size of 13 or more, the minimum threshold for data saturation as per Francis et al and/or those with a definitive claim of data/thematic saturation. Studies analysing routinely collected administrative data or data from in-clinic medical records or chart review will be excluded (eg, logistic regression to identify factors influencing service utilisation). Prior systematic reviews, rapid reviews and scoping reviews will be of interest, if identified.

**Context**

Studies from any geographic region will be of interest. Given changes over time in the provision of services for the treatment of AUD/PAU that may influence client and care-provider perspectives on barriers and facilitators to access, as well as the large volume of literature anticipated, we will limit our interests to studies published in 2010 and onward. Studies providing pandemic-related characteristics of SUHSs will be of interest. Only studies published in English and French will be sought, and conference abstracts, letters and commentaries will be excluded given they will likely provide insufficient information for our purposes.

**Information sources and search strategy**

Using the OVID platform, we will search Ovid MEDLINE, Embase Classic+Embase, APA PsycInfo, Cochrane...
Central Register of Controlled Trials and the Cochrane Database of Systematic Reviews. We will also search CINAHL (Ebsco platform).

Search strategies will utilise a combination of controlled vocabulary (eg, ‘Alcohol-Related Disorders’, ‘Mental Health Services’, ‘Help-Seeking Behaviour’) and keywords (eg, heavy drinking, addictions services and personal preferences). A filter for client and provider values and preferences will be applied, including qualitative research terms such as ‘questionnaire’ and ‘survey’. Vocabulary and syntax will be adjusted across the selected databases as needed. When possible, animal-only, opinion pieces and case studies will be removed from the search results. Conference abstracts will be removed from Embase and Cochrane CENTRAL. Specific details regarding the strategies are provided in online supplemental appendix 2.

The final search strategy will be peer reviewed by another senior information specialist using the Peer Review of Electronic Search Strategies (PRESS) Checklist.44 As described above, all searches will be restricted to the period from 1 January 2010 to the present date, given the continued evolution of treatment of AUD and PAU over the past two decades. The formal search was conducted on 4 April 2022.

With the objective of capturing literature regarding virtual services for prevention and treatment of AUD or PAU that may have arisen during the COVID-19 pandemic, we will also search COVID-related resources that provide coverage of preprint servers. These are partially covered in the traditional databases, but we will expand to include the Cochrane COVID-19 Study Register, COVID-END, LOVE, UNCOVER and the WHO COVID-19 database.

**Process of study selection**

Citations will be collated and deduplicated using EndNote.45 The remaining unique citations will be uploaded to DistillerSR (DistillerSR; V.2.98. Evidence Partners; 2022. https://www.evidencepartners.com) and further deduplicated. Screening will be conducted in two stages. Citations included at the title/abstract stage will be further reviewed in full text. A team of reviewers will pilot test the screening questions on batches of 50 citations at level 1 and two citations at level 2, until each reviewer is comfortable with the screening process and conflicts have been reduced to a low frequency (≤5%). Once reviewers’ responses have been calibrated, all titles and abstracts will be screened by independent reviewers in duplicate for eligibility. We will use DistillerSR’s artificial intelligence (AI) active-machine learning (AML) feature to implement prioritised screening at the title/abstract stage. Using this approach, following a training set of citations (approx 200, dependent on needs of the algorithm), the remaining titles/abstracts will be presented to reviewers in order of highest to lowest relevance, as perceived by the software’s classification algorithm. This approach will expedite the identification of potentially relevant citations to be screened at full text. As reviewers screen titles/abstracts in order of likelihood of inclusion, DistillerSR’s AML technology will continue to learn from each selection and adjust the ordering of articles over time. Once an estimated recall of 95% of included studies is achieved (ie, the AML feature perceives that 95% of potentially relevant citations have been identified), the AI reviewer in DistillerSR will be assigned to exclude the remaining citations. We will record the number of screened citations at which this occurs as well as the highest remaining prediction/relevancy score of remaining records to be screened. A human reviewer will screen all citations excluded by the AI reviewer, with any conflicts to be resolved by two human reviewers. Our approach is in alignment with recent guidance for the use of AI in knowledge syntheses.46 All potentially relevant full-text articles will be screened by independent reviewers in duplicate for eligibility, with conflicts to be resolved through discussion or consultation with a third reviewer until consensus is reached.

**Data collection and risk of bias considerations**

Data collection from the included studies will be conducted by two reviewers using DistillerSR Software. A pilot test of the data collection form will be performed on five studies and refined accordingly. We will gather information related to publication characteristics (eg, author, year, journal); study design and methods used (eg, quantitative survey, semistructured interviews, focus groups and other qualitative methods); study sample characteristics, including participant type (eg, individuals with past/current AUD/PAU and clinicians/administrators), age, measures of equity/diversity/inclusion (sex, gender, ethnicity, immigration status, food security, access to safe/secure shelter, income level and physical abilities), risk factors related to alcohol use (eg, psychological risk factors such as depression, mood and emotion dysregulation, attachment and trauma) and country of residence; study sample size; alcohol consumption frequency, severity and amount and data of varied forms related to study participants’ perspectives regarding influential characteristics of SUHS that impact access to services for treatment of AUD/PAU. Perceptions of non-service-related factors that could influence treatment seeking or access (eg, family influences, motivations, factors for change, peer influences, role in life, advantages and disadvantages, satisfaction level and experience of care, sex-based and gender-based factors, trust in healthcare system and ethnoracial identity) may also be extracted to add depth to the review’s primary findings.

Risk of bias assessments of the included studies will not be completed, in keeping with scoping review methodological guidance.37

**Mapping/synthesising the evidence**

We will map themes identified from the perspectives of clients and care providers separately, and if the data permit, we will stratify mapping of client-identified themes by key subgroups (eg, sex, gender, ethnicity and concurrent mental health conditions). Syntheses will be presented
separately according to type of service (eg, specialist psychosocial intervention, primary healthcare provider of pharmacologic therapy, brief intervention, combined services for mental health and alcohol-related conditions) as well as type of delivery (virtual vs in-person), in consideration of current and future pandemic circumstances that may require broader use of virtual services. Resilience of source country to the COVID-19 pandemic (eg, developed vs developing countries) may be considered as an additional stratification factor and lens for interpretations. Exploration according to specific interventions will also be considered given the potential that influential factors regarding access may also vary in this regard. We will use structured tables and graphics to present these themes to readers along with descriptive synthesis to present themes and/or client/stakeholder experiences. We anticipate themes expressed from clients and other stakeholders to be diverse and may address a variety of considerations related to availability of services, cost to client, frequency and intensity of therapy, type of delivery, availability of technology, equity of access, privacy considerations, barriers or facilitators to seeking and engaging with SUHSs and continuity of care, including changes in SUHSs before and during the pandemic.

**Ethics and dissemination**

Scoping reviews involve the performance of both review and collection of data from publicly available literature. Therefore, this research does not require formal ethics approval. Strategies for dissemination will include a peer-reviewed publication, conference presentations and a stakeholder meeting.

**Patient and public involvement**

We have engaged people with lived experience during the planning and conduct of this research. Input was gathered from multiple organisations as represented in the make-up of our authorship team, to ensure its findings will be of relevance to multiple groups. Representatives from these organisations will also be part of a planned stakeholder meeting that will inform planning and prioritisation of future research in this area.

**DISCUSSION**

This scoping review will provide valuable information from key perspectives regarding influential characteristics/factors of SUHSs for the treatment of AUD/PAU. We are unaware of other knowledge syntheses addressing this topic, and thus we will address an important knowledge gap in this area. We anticipate certain challenges related to the identification of literature regarding virtual services published during the COVID-19 pandemic that may only be available on preprint servers and not as peer-reviewed articles. However, we have made plans to carefully review literature sources that provide coverage of preprint servers. Collectively, our research team holds the necessary expertise in the conduct of scoping reviews and knowledge syntheses, and we are well positioned to carry out this work. Our integration of knowledge users in designing this review will also ensure that both our findings are fit for purpose and will identify the most relevant evidence towards our objectives. Our approach will consider both in-person and virtual services, and thus will also be relevant in the context of COVID-19 and other pandemic circumstances. Virtual services are also anticipated to become increasingly relevant to service provision in general, moving forward, further increasing the relevance of this research.

More broadly, the evidence generated from this scoping review will contribute evidence to an initiative in which our team of researchers and knowledge users will use a mixed-methods, sequential design that will be carried out in three phases, with the overall objectives being to increase service uptake, optimise treatment engagement and improve health outcomes. Phase 1 of this work consists of the scoping review we have described above; reviewing 12 years of the most recent perspectives will give us valuable information to inform the future phases of this work. Phase 2 will use qualitative research methods in the form of focus groups and interviews to identify additional perspectives from both clients and care providers regarding SUHSs geared towards treatment of AUD/PAU. Finally, phase 3 will involve a self-administered, web-based discrete choice experiment survey; this step will elicit the preferences for services from individuals who currently or have previously needed services to address AUD or PAU. Collectively, this work will provide an excellent base of knowledge that can be used to bring about changes geared towards enhancing SUHS access and uptake for the treatment of AUD and PAU, and ultimately to improve client outcomes and substance use health.

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REFERENCES

1. Canadian Institute for Health Information. Alcohol harm in Canada: examining hospitalizations entirely caused by alcohol and strategies to reduce alcohol harm. CIHI, 2017.


35. Street AE, Street DJ, Flynn GM. Who gets the last bed? A Discrete-Choice experiment examining general population preferences for...


