


A systematic review of qualitative research on substance use among refugees

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Abstract

Aims: To evaluate qualitative research on substance use and substance use disorders (SUDs) among refugees in terms of practitioners' and substance users' attitudes, beliefs and experiences.

Methods: Six medical, allied health and social sciences databases (EBSCO, PubMed, ScienceDirect, Web of Science, Scholar and the Cochrane Library) were systematically searched in a time frame between January and April 2021 to identify original peer-reviewed articles describing qualitative findings related to substance use among refugees (alcohol, illicit drugs, tobacco and prescription drugs). Study selection, critical appraisal and detailed extraction were performed via the Joanna Briggs Institute Database of Systematic Reviews and Implementation Reports according to Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Systematic Reviews (PRISMA) (2018). Three independent reviewers selected the relevant abstracts and articles. Synthesis of the evidence identified prominent themes relating to the context and consequences of substance use.

Results: Twenty-six studies were included in this review. Twenty-three studies applied qualitative methods and three applied mixed methods. Synthesis of the evidence from the included studies resulted in four main findings: there is a considerable susceptibility of refugees to substance use and SUDs; the harmful consequences of substance use are complicated by the social insecurities of refugees; there are rather high barriers to treatment and health facilities for refugees in many host countries; and there is a strong need to improve effective access to treatment, interventions and prevention approaches.

Conclusions: Refugees are at high risk for substance use and substance use disorders and often face high barriers to treatment and interventions in host countries.

KEYWORDS

Ethnographic observations, focus group discussion, qualitative interviews, refugees, substance use, substance use disorder

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INTRODUCTION

Substance use disorders (SUDs) are defined as the use of alcohol, pharmaceuticals or street drugs at a clinically significant level as indicated by key symptoms such as tolerance development, withdrawal, craving and loss of control, which can be interpreted as impairments of the key functions relevant for human life and survival, as well as individual harm caused by this consumption [1]. Substance use is influenced by various environmental and sociocultural factors, including social stress exposure as well as the social acceptance of some substances, health, age and the consequences of use [2, 3]. As such, certain populations appear more vulnerable to SUDs; in particular, refugees are considered to be highly vulnerable to substance use as a coping mechanism and self-medication behaviour based on studies that have been conducted in Europe, North America and Australia [4, 5]. The assumed reasons for these elevated risks are migration and post-migration stressors that are significantly associated with mental health disorders such as posttraumatic stress disorder (PTSD) and depression [4].

According to the 1951 Refugee Convention treaty, refugees are 'people who are unable or unwilling to return to their country of origin owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion' [5]. The United Nations High Commissioner for Refugees (UNHCR) provided further clarification of displaced population compared to refugees 'Internally displaced people (IDPs) have not crossed a border to find safety. Unlike refugees, they are on the run at home. IDPs stay within their own country and remain under the protection of its government, even if that government is the reason for their displacement' [6]. However, the legal frameworks and policies regarding refugees lack consistency among countries, which impacts refugees' access to health services [7]. For instance, in the early 1990s, Cuban migrants in the United States (US) were granted refugee status, which facilitated their access to health services, whereas many African migrants in Europe are given the status of undocumented migrants, which limits their access to health services [8, 9]. In low- and middle-income host countries, access to health services is usually granted for documented and undocumented refugees via the UNHCR and the International Organization for Migration (IOM) [10, 11].

According to a relevant global systematic review, the available quantitative evidence of SUDs among refugees is still limited; hence, the generalization of the findings is a point of concern because of the limited representativeness of the study samples [12].

Qualitative research contributes significantly to providing evidence and understanding the micro and macro dimensions of substance use [13, 14]. Quantitative surveys about substance use, on the other hand, can be prone to misinterpretation because of social and cultural differences in the explanatory models, which limit mutual understanding even when using the same medical terminology [15]. Moreover, survey instruments are designed with standardized question sets and scales, without the benefit of an additional contextual understanding of changing patterns of drug use among different

migrant groups [14–16]. Hence, the context-sensitive and iterative approach of qualitative methods can help inform survey development for substance use and may improve the validity of survey instruments [14]. Contextualization is an important objective of qualitative research; it is significant to contextual investigations of substance use conducted in the service of developing, monitoring and evaluating all public health interventions [17]. It is thought that a deeper understanding of the specific reasons for substance use can help to effectively tailor communications and policy development to the appropriate target populations [18, 19].

Refugees are groups of people who are vulnerable to stressful circumstances. Interviewing stressed and traumatized populations regarding substance use is sensitive work, and the findings can sometimes be stigmatizing [20–22]. However, qualitative researchers have developed techniques that are incorporated throughout their research processes to minimize these challenges [23]. In addition, there is evidence to suggest that, when handled correctly, participants find that telling their stories provides them with a sense of relief [23].

Aim and significance of this review

This systematic review aimed to answer the following main question: what qualitative research studies on substance use among refugees are available, and what contributions do these studies make to understanding the development, explanation, consequences and treatment of SUDs among refugees? Finding the answer to these questions can also help inform survey development and improve the validity of survey use for future research on SUDs among refugees.

METHODS

The current review involved structured and systematic searches for peer-reviewed qualitative literature conducted based on the Joanna Briggs Institute (JBI) guidelines [24, 25] (Supporting information Table S1: PRISMA checklist). This review was carried out by a team of six experts in pharmacy, addiction sciences, mental health, psychiatry, clinical psychology and transcultural psychotherapy. No current or ongoing systematic reviews on SUDs among refugees were identified. No protocol for this systematic review has been published.

Identification of the essential research questions

The main question of this review and the search strategy were developed using the SPIDER process, which was designed for qualitative and mixed methods literature [26]. Our SPIDER parameters were as follows: sample, refugees; phenomena of interest, substance use and SUDs; design, any; evaluation, any; and research type, qualitative. For this review, a substance was defined as any psychoactive compound that has the potential to cause health and social problems, including

legal substances (e.g. alcohol and tobacco), illegal substances (e.g. heroin and cocaine) and controlled substances such as hydrocodone or oxycodone (e.g. Oxycontin, Vicodin).

Search strategy and eligibility criteria

The search strategy aimed to locate both published and unpublished studies. To identify appropriate synonyms in the thesaurus terms for this systematic review, an initial limited search of MEDLINE and the Cochrane Library was conducted in January 2021, which enabled us to add more terms that have been evaluated by the number of records affected during the optimization process for the search keywords. The keywords algorithm is described in the supporting information (Supporting information Table S2). The titles and

abstracts of relevant articles and the index terms used to describe the articles were used to develop a full search strategy for the EBSCO, PubMed, ScienceDirect, Web of Science, Scholar and the Cochrane Library databases from January until March 2021 and updated in April to May 2021.

Studies were considered eligible for inclusion if they described any findings related to SUDs among refugees. The findings considered relevant included the experiences of substance use among refugees, substance use service provisions, demand for services and utilization, exposure to substance use, engagement in drug or alcohol production and illegal work and consequences of SUDs. All qualitative studies that involved refugees, key informants, professionals or stakeholders working with refugees were included.

There were no limitations on age, sex, or publication type. The research team consisted of three native German speakers, two

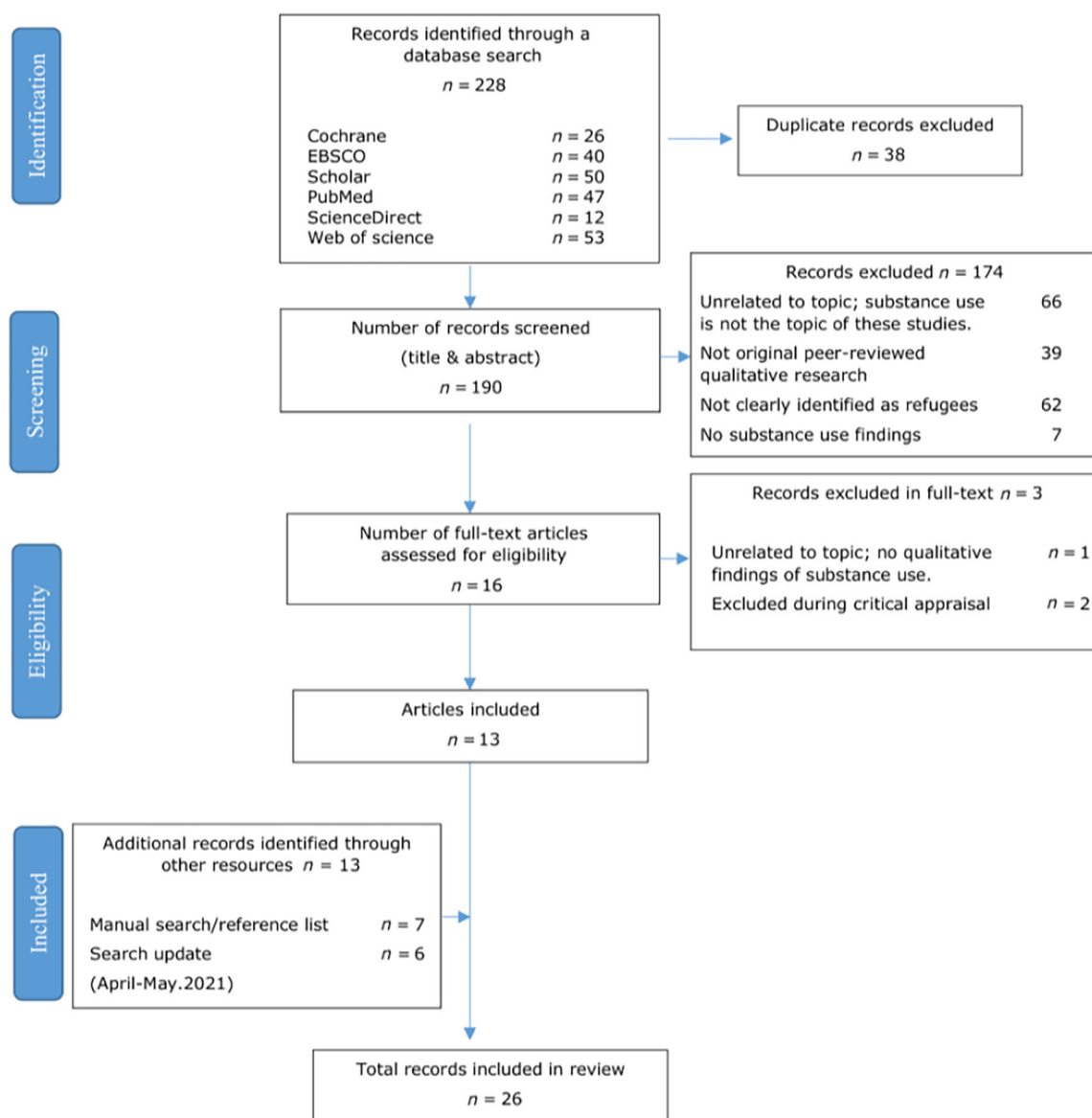


FIGURE 1 Flow chart of articles screened and selected for review. Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement [25]

TABLE 1 Characteristics and key findings of studies of substance use among refugees ($n = 26$)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Carter [28]	United States, 2017	Sociostructural barriers, problem drinking behaviours, and intimate partner violence within a Bhutanese-Nepali Refugee community	-Bhutanese-Nepali refugees -Men and women - $n = 100$	Qualitative in-depth interview Analysis: open-inductive coding	Types of substances: heavy alcohol drinking was the problematic substance of use among refugees in this study Motives: heavy alcohol consumption as a coping mechanism with; (i) the trauma of many forms of loss; (ii) sociostructural barriers Perceptions of substance use: all respondents believed that problem drinking was a serious community-wide problem The barrier to treatment: fear of stigma
Deilamizade et al. [29]	Iran, 2013–2014	The sources of stigma and the impacts on Afghan refugees with substance abuse disorders	-Afghan refugees -Only men -Age 26 - $n = 27$	Qualitative semi-structured interview Analysis: content analysis and data coding continued during the data collection simultaneously	Stigma sources: in this study, Afghan refugees who used drugs experienced stigma in five areas: family, friends, workplace, neighbourhood, and drug treatment centre The consequences of stigma: (i) frequent treatment failure; (ii) family relationship disruption; (iii) superficial conformity with the host society; (iv) self-stigma
Deimel [30]	Germany, 2013	Obstacles in the treatment of addicted migrants	-Counsellors who are working in specialized institutions -Work experience of 3.5 and 22 years - $n = 6$	Qualitative interview exploratory in combination with database entries regarding legislative decisions Analysis: qualitative content analyses	Barriers to treatment: this study summarized the barriers to treatment based on the legal status of refugees and documentation in the host country: First: undocumented migrants (i) they lack health insurance; (ii) impossibility to find accommodation, so they usually live in an emergency sleeping facility; (iii)

(Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
					<p>impossibility to apply for social assistance; (iv) the clients could not be placed in substitution therapy or withdrawal treatment due to a lack of payment, such as asylum seekers; (v) the municipality only grants medical services on a case-by-case basis; (vi) cultural differences regarding smoking opium, while the system would see them as 'addicted', the individuals do not see it that way</p> <p>Second: migrants with temporary permits</p> <p>Institutional Barriers: (i) it is hard to pin down which institution would pay for a measure; (ii) pension insurance only pay for longer-term permits; otherwise - cooperation with the Foreigners' Registration Office is needed</p> <p>Psychosocial barriers: (i) there is often a lack of a work permit, which in turn leads to a lack of a daily structure; (ii) the unsecured situation is accompanied by fear, which is combated by drug use; (iii) if drug use is accompanied by criminal activity, there is a threat of deportation, leading to further destabilization and anxiety</p>
Ezard et al. [31]	Kenya, Liberia, northern Uganda, Iran, Pakistan, Thailand, 2006–2008	Six rapid assessments of alcohol and other substance use in populations displaced by conflict	-Culturally representative (non-probabilistic) sample of community members and service providers -Settings: in six countries	Intervention-oriented qualitative rapid assessment and response methods	Type of the substances used based on locations of the study: -Kenya: alcohol use and other substances; khat, cannabis, (Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
			1. Kenya: -African refugees in a camp setting -Age = 17–57 years -n = 20 key informants -n = 14 refugees 2. Liberia: -Afghan refugees and IDPs in an urban setting -Age = 17–58 years -n = 15 key informants 3. Uganda: -IDPs in a camp setting -Age = 21–54 years -n = 13 key informants 4. Iran: -Afghan refugees in urban settings -Age = 16–55 years -n = 41 key informants 5. Pakistan: -Afghan refugees in the camp and urban settings -Age = >16 years -n = 53 key informants 6. Thailand: -Burmese refugees in a camp setting -Age = 17–55 years -n = 36 key informants	Qualitative focus group discussions and direct observation Analysis: a thematic analysis	petrol, and some solvent inhalation -Liberia: alcohol and cannabis were considered easily available and consumed by men and women of all ages; other drugs, benzodiazepine, and cocaine, were also available, as well as heroin -Uganda: alcohol use among men and women -Iran: opium is the main substance used among Afghan refugees, heroin, Iranian “crack,” and crystal; other substances are cannabis and amphetamines -Pakistan: opiates are the main substance of use among Afghan refugees -Thailand: alcohol was the most important substance-related public health and social concern among refugees from Myanmar Motives: limited skills, education, and employment opportunities promoted substance use among Afghan refugees in Pakistan Behaviours associated with substance type: (i) alcohol use was linked to sexual behaviour among African refugees in Kenya; (ii) alcohol use was linked to dispossession among IDPs in Uganda and Myanmar refugees in Thailand (Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Ezard et al. [32]	Thailand, 2009	Risky alcohol use among Burman (Karen) refugees	-Refugee women -Age = 15–49 years -n = 636 -Key informants -n = 97	Mixed methods study: (i) The quantitative part involved all pregnant women attending the camp's antenatal care clinic for 2 weeks. A single-item measure of the frequency of risky high-volume drinking based on the third question from AUDIT was used to assess women's and their reports of their partners' alcohol consumption; (ii) The qualitative component included interviews with key informants -Analysis: A thematic and statistical analysis	Types of substances: rice-whisky was the predominant alcoholic beverage in the camp Motives: (i) to cope with the pressures of displacement and camp life; (ii) to enhance socialization and mood Perceptions and beliefs: a dominant perception was that small amounts of alcohol use were beneficial for physical health Substance use and gender: alcohol drinking behaviours and norms were gendered; the pressures drove men's, not women's drinking behaviour Preventing factor: hopefulness provided by access to education and resettlement was seen as preventing problem alcohol use
Ezard [33]	Thailand, 2009	Gender, alcohol use, and intimate partner violence in Mae La refugee camp	-Burmese residents of Mae La refugee camp -Men and women -Age = 15–20 years -n = 97	Qualitative study using semi-structured interviews focused on alcohol use and related harms—recruitment through health services and chain referral Analysis: A thematic analysis	Types of substances: heavy alcohol consumption is common among men and women of Burmese refugees Risk factors: alcohol use is changing under the pressures of displacement Consequences: heavy alcohol consumption is associated with IPV Substance use and gender: alcohol use is subject to strongly gendered social controls

(Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Furber et al. [34]	Australia	Tobacco smoking and betel quid use among Burmese refugees	-Burmese (Karen) refugees -n = 31 -Service providers -Men and women -Age = 19–65 years -n = 10	Qualitative study using focus group discussions and semi-structured interviews Analysis: a thematic analysis	First: findings from focus groups discussions (refugees) Types of substances: (i) smoking tobacco; (ii) Betel quid (a betel nut limestone paste and tobacco used by both men and women Motives: (i) betel quid is used at ceremonies and social gatherings; (ii) awareness; (iii) refugees know about the health consequences of smoking and its addictive nature however, they were unaware of available services to support quitting; (iv) some refugees were aware of the health consequences of betel quid, as it may lead to cancer, teeth, and gum problems Second: findings from individual interviews (service providers) Participants noted the lack of resources on smoking and betel quid use for Burmese refugees and suggested further informative tools
Horyniak et al. [35]	Australia, 2012–2013	Experiences of and attitudes toward injecting drug use among marginalized African migrant and refugee youth	-African refugees -Age = >16 -Only men -n = 18	Qualitative semi-structured interview Analysis: coded in a constant comparative method	Types of substances: injecting illicit drugs Motives for IDU: (i) traumatic experiences associated with migration and resettlement were a key factor in susceptibility to IDU; (ii) family separation, intergenerational conflict, disengagement from education and employment, (Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Horyniak et al. [36]	Australia, 2012–2013	Heavy alcohol consumption among marginalized African refugee youth; motivations, experience, and barriers to managing the problem	-African refugees -Age = >16 -Only men -n = 16	Qualitative in-depth interview Analysis: interview transcripts, field notes, and photos taken during field visits were managed Thematic inductive analysis	unstable housing, and dependence on welfare Attitudes toward IDU: participants have a negative attitude toward IDU and described it as 'dangerous, no good, stupid and disgusting,' reflecting their desire to avoid or quit injecting drugs Types of substances: heavy alcohol consumption is common among African refugees in this study on a daily or near-daily basis Motives: (i) to cope with trauma; (ii) to cope with boredom and frustration; (iii) drinking as a social experience Consequences: (i) breakdown of family relationships; (i) homelessness; (iii) interpersonal violence, contact with the justice system; (iv) poor health Barriers to treatment: (i) stigma; (ii) lack of support and limited knowledge of services; (iii) perceived inability to meet needs Strategies to manage alcohol consumption: (i) attending counselling or residential detoxification programs; (ii) self-imposed physical isolation; (iii) intentionally committing a crime to be incarcerated
Horyniak et al. [37]	Australia, 2012–2013	The role of respect in interactions with police among substance-	-African refugees -Age = >16 years	Qualitative in-depth interview	Types of substances: alcohol and other drugs (Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Im & George [38]	Kenya, 2020	Lived experiences of substance use among refugee youth in displacement	<ul style="list-style-type: none"> -Only men who use alcohol and/or drugs examined -Interactions with police -n = 18 	<ul style="list-style-type: none"> -Analysis: a thematic approach using inductive coding 	<ul style="list-style-type: none"> -Experiences and interactions with the police: (i) negative experiences in nature and context of interactions with police; (ii) a range of behaviours was engaged in by police, which they perceived as attacks against their human dignity -Types of substances: khat, tobacco, alcohol and cannabis are the main substances consumed among Somali refugees in this study -Motives: (i) seeking protection 'from a refugee to a gang affiliate'; (ii) coping with past and current trauma -Substance use and gender: women who use khat or tobacco products are highly stigmatized
Lindert et al. [39]	Germany, 2019	Substance use among Syrian men refugees in Germany	<ul style="list-style-type: none"> -Syrian refugees -Only men -n = 19 	<ul style="list-style-type: none"> -Qualitative focus group discussions -Analysis: inductive and deductive thematic frameworks 	<ul style="list-style-type: none"> -Types of substances: alcohol and other drugs are substances consumed among refugees in this study -Risk factors: (i) refugees perceived those substances are widely available and accepted in Germany; (ii) refugees perceived those rules and norms in Germany differ from those in the home country and favour the availability of substances -Motives: (i) to escape the past; (ii) to live in the present through connecting with others and being part of the community -Barriers to treatment: mental health professional treatment

(Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
McCleary et al. [40]	United States, 2013	Connecting refugees to substance use treatment	-Professionals/service providers -n = 15	Qualitative semi-structured interview Analysis: a thematic approach	for substance use is associated with shame Barriers to treatment: (i) a lack of culturally and linguistically informed substance use treatment programs for refugees; (ii) client characteristics such as motivation and past trauma Facilitators to treatment: (i) coordination of care is important to successful referrals
McCleary & Weiling [41]	United States and Thailand, 2011–2012	Forced displacement and alcohol use in two Karen refugee communities	In Thailand: -Karen refugees in a refugee camp community -Age = >18 years -Men and women -n = 22 In the United States: -Karen refugees in a resettlement community -Age = >18 years -Men and women -n = 34	A comparative qualitative method: semi-structured individual and focus group discussions Participant observation and field notes included Analysis: data analysed using Developmental Research Sequence	Types of substances: heavy alcohol consumption is the substance of use among refugees in this study Perceptions and beliefs: (i) participants from both settings defined alcohol use in general as harmful; (ii) participants in both locations endorsed the belief that harmful alcohol use is a significant concern for the Karen community; (iii) appropriate reasons for using alcohol, even to excess, generally led to appropriate or socially acceptable consequences, such as falling asleep, being too noisy, or being drunk without causing problems; (iv) inappropriate reasons for using generally led to inappropriate or harmful consequences, primarily violence between spouses or unrelated adults, legal and financial problems, and poor health

(Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
McCleary [42]	United States 2011–2012	Applying a collective resilience framework to refugees' perceptions of recovery from harmful alcohol use	-Karen refugees -Age = >18 years -Men and women -n = 34	Qualitative focus group discussions Six focus groups were distributed based on gender (4 men groups and 2 women groups) Analysis: using developmental research sequence	Motives: (i) to cope with conflict and displacement pressure; (ii) refugees in both settings agreed that displacement and resettlement damage culture and increase harmful alcohol use substance use and gender: alcohol drinking was gendered, and both men and women agreed that men use alcohol at higher rates than women Differences in alcohol-related problems between camps and resettlement: (i) participants agreed that the most significant problem related to harmful alcohol use was interpersonal violence between spouses and unrelated adult men in refugee camps; (ii) in resettlement communities, participants agreed that domestic violence, continued to happen but that more laws and rules governing alcohol use created a host of new problems Types of substances: heavy alcohol consumption is the substance of use among refugees in this study Risk factors/reasons: forced displacement has contributed to a fracturing of Karen culture and community Strategies for recovery: (i) the community must be repaired to stop harmful alcohol use; (ii) the community is

(Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Meyer et al. [43]	Thailand, 2011	The nature and impact of chronic stressors on refugee children	-Burmese (Karen) residents of Ban Mai Nai Soi refugee camp -n = 78	A qualitative study involving free listing and semi-structured interviews A convenience sample of adult and child camp residents and purposely selected key informants Analysis: a thematic analysis	responsible for helping people stop drinking Types of substances: heavy alcohol consumption is the substance of use among adults and children of refugees in this study Risk factors/reasons: (i) alcohol is associated with economic problems, violence, and neglect; (ii) alcohol use among children is described as a response to stressors including poverty, adult drinking, social pressures, and abuse and neglect
Mirza et al. [44]	United States, 2017	Community perspectives on substance use among Bhutanese and Iraqi refugees resettled in the United States	-Bhutanese refugees -Age = >18 -n = 28 -Iraqi refugees -Age = >18 -n = 22	Qualitative focus group discussions Analysis: a conventional content analysis	Types of substances: alcohol and other drugs are the substances consumed among refugees in this study Perceptions of substance use: (i) Bhutanese refugees perceived excessive alcohol consumption as a problem affecting many young and middle-aged men in their community; (ii) both refugee groups have a misconception of the meaning of 'excessive'; 'normal use'; and 'overuse' as explained by Iraqi refugees that it is normal to be a self-prescriber in Iraq and other Middle East countries to overuse pain medication, including opioid medication, even without prescription Motives/reasons: (i) stress-related to migration history was a common trigger among both refugee groups; (ii) both

(Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
					<p>refugee groups mentioned work-related stress as a possible trigger; (iii) Bhutanese refugees discussed an individual's social environment as a trigger, such as friends and family</p> <p>Postmigration changes in substance use behaviours: (i) Both groups agreed that substance use behaviour changed after immigration; (ii) Bhutanese participants, who had lived in transit refugee camps in Nepal before coming to the United States, described how alcohol was more easily available in Nepal and the United States than in their native Bhutan; (iii) Iraqi refugees were aware of restricted prescriptions for pain medications, therefore, they would refrain from inappropriate use for fear of breaking the law and jeopardizing their prospects of permanent residency in the United States</p> <p>Intervention approach: (i) both refugee groups struggled with stigma and social isolation due to substance use; therefore, they suggested using an approach that preserves the respect and dignity of affected individuals; (ii) both groups suggested community-wide awareness about norms related to prescription medication in the United States and alternatives</p>

(Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Naseh et al. [45]	Iran, 2012	Prevalence of and risk factors for substance use among Afghan refugees in Iran	-Key informants with 3–15 years of experience working with Afghan refugees -n = 15	Mixed method: 1. Primary qualitative data to identify risk factors for substance use; Variables from the qualitative data were created to identify risk factors 2. The secondary quantitative data set was used to explore possible correlations with substance use Analysis: Interviews underwent thematic analyses statistical analysis for the quantitative data	for pain medication; (iii) both groups identify employment as a common area for intervention Types of substances: alcohol and other drugs Risk factors for substance use: (i) illiteracy; (ii) unemployment; (iii) long work hours; (iv) lack of documentation 'undocumented Afghans'; (v) living in outskirts and slum areas and poverty
Pagano [46]	United States, 2012–2013	Barriers to drug abuse treatment for Latino migrants: treatment providers' perspectives	-Latino refugees in a residential treatment program -n = 11	Qualitative semi-structured interview Analysis: thematic analysis using a grounded theory approach	Barriers to treatment: (i) language barriers 'too few Spanish-language programs, cultural appropriateness'; (ii) legal barriers, fear of deportation, ineligibility, program 'illegality'; (iii) gender-based barriers 'fewer women addicts, greater stigma, women are more complicated than men, family responsibilities'
Posselt et al. [47]	Australia, 2013–2014	Etiology of coexisting mental health and alcohol and other drug disorders: perspectives of refugee youth and service providers	-Bhutanese, Afghan and African refugees -Age = 12–26 years -n = 15 -Service providers -n = 15	Qualitative study using semi-structured interviews Analysis: thematic analyses	Risk factors as revealed by refugees and service providers: (i) premigration experiences of torture and trauma; (ii) familial factors of intergenerational conflict; (iii) post-migration adjustment difficulties in terms of language, culture, education, and employment; (iv) exposure to and availability of

(Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Posselt et al. [48]	Australia, 2014	Improving the provision of services to young people from refugee backgrounds with comorbid mental health and substance use problems	-Bhutanese, Afghan and African refugees -Age = 12–26 years -n = 15 -Service providers -n = 15	Mixed method -Qualitative semi-structured interviews with refugee youth and service providers -An online survey with managers of services Analysis: a thematic and statistical analysis	substances; (v) maladaptive coping strategies and self-medication; (vi) access to information and services Barriers and facilitators to treatment: (i) organizational and structural barriers; (ii) access and engagement; (iii) treatment and service delivery; (iv) training and resources
Power & Pratt [49]	United States	Describe the health experiences of a recently arrived group of refugees, the Karen from Burma, in an American mid-western city	-Burmese (Karen) refugees -n = 40	Qualitative study using focus group discussions and two additional in-depth interviews Analysis: a thematic analysis	Types of substances: alcohol Motives: (i) drinking alcohol is regularly described as an important part of social life in their community; (ii) drinking is generally reduced following migration because of the cost of alcohol
Sandberg [50]	Norway, 2005–2006	Black drug dealers in a white welfare state: cannabis dealing and street capital in Norway	-Cannabis dealers, including newly arrived refugees -n = 20	Qualitative study using semi-structured interviews	Types of substances: cannabis Motives: newly arrived refugees working as cannabis drug dealers responded to limited cultural capital, particularly a lack of language skills and work and education opportunities
Shedlin et al. [51]	Ecuador, 2008–2009	Sending-country violence and receiving-country discrimination: effects on the health of Colombian refugees in Ecuador	-Colombian refugees -Men and women -n = 96	A qualitative study combined semi-structured interviews and focus group discussions, ethnographic observations, and media analysis Snowball sampling was used to recruit participants for individual interviews and focus group discussions Analysis: a thematic analysis	Types of substances: alcohol and other drugs Motives and risk factors: (i) alcohol and drug use was noted among women engaging in sex work; (ii) easy access to drugs in the streets and bars, including cocaine and marijuana
Streel & Schilperood [52]	Kenya and Guinea, 2009	Perspectives on alcohol and substance abuse via two camps	Observing refugees from Côte d'Ivoire and Liberia in 4 camps	A qualitative study including observations and non-	Types of substances: (i) alcohol (home-made and branded) is widely used; (ii) smoking of (Continues)

TABLE 1 (Continued)

Author and reference	Location and year	Phenomena of interest/title	Sample and participant characteristics	Methods for data collection and analysis	Description of main results
Wazaify et al. [53]	Jordan, 2019	assessments among refugees in Kenya and Guinea camps Perspectives of frontline professionals on Palestinian children living with sibling and parental drug use in the UNRWA camps, Jordan	-n = unreported	structured interviews with refugees and field workers Analysis: a thematic analysis	cannabis was reported among teenagers and young adults in both sites; (iii) the chewing of khat is commonly used among Somali refugees in Kenya Reasons: (i) alcohol is widely used and an important source of income; (ii) substance use is linked with psychological trauma, coping capacity and lack of prospects Consequences: (i) physical and psychological problems; (ii) financial problems; (iii) behavioural problems 'sex and violence' Types of substances: alcohol and other drugs Motives/risk factors: (i) the causes of substance/drug use disorder in Palestinian communities living in camps are multifactorial; (ii) access to drugs was perceived to be relatively easy in the camps Consequences: families of drug users are affected by fear, social and economic poverty, with high physical and psychological costs to children Attitudes towards substance use appear to have been desensitized, yet stigma persists Intervention approach: solutions are multi-faceted and indicative of the need for prevention and support for those at risk and affected

IDP, internally displaced populations; IDU, injecting drug use; IPV, intimate partner violence; UNRWA, United Nations Relief and Works Agency.

TABLE 2 The quality assessment for qualitative studies and ranking system of dependability

Studies	Critical appraisal checklist—JBI Database for Systematic Reviews										Rank ^k
	Q1 ^a	Q2 ^b	Q3 ^c	Q4 ^d	Q5 ^e	Q6 ^f	Q7 ^g	Q8 ^h	Q9 ⁱ	Q10 ^j	
Carter [28]	+	+	+	+	+	+	+	+	+	+	(4, 5) 'yes'
Deilamizade et al. [29]	+	+	+	+	+	+/-	+/-	+	+/-	+	(4, 5) 'yes'
Deimel [30]	+/-	+	+/-	+	+	-	-	+/-	+/-	+	(4, 5) 'yes'
Ezard et al. [31]	+	+	+	+	+	-	+/-	+	+/-	+	(4, 5) 'yes'
Ezard et al. [32]	+	+	+	+	+	-	+/-	+	+	+	(4, 5) 'yes'
Ezard [33]	+	+	+	+	+	-	+/-	+	+	+	(4, 5) 'yes'
Furber et al. [34]	+	+	+	+	+	-	+	+	+	+	(4, 5) 'yes'
Horyniak et al. [35]	+/-	+	+	+	+	+/-	+	+	+	+	(4, 5) 'yes'
Horyniak et al. [36]	+	+	+	+	+	+/-	+/-	+	+	+	(4, 5) 'yes'
Horyniak et al. [37]	+	+	+	+	+	+/-	+	+	+	+	(4, 5) 'yes'
Im & George [38]	+	+	+	+	+	+/-	+	+	+	+	(4, 5) 'yes'
Lindert et al. [39]	+	+	+	+	+	+/-	+/-	+	+	+	(4, 5) 'yes'
McCleary et al. [40]	+	+	+	+	+	+/-	+/-	+	+	+	(4, 5) 'yes'
McCleary & Wieling [41]	+	+	+	+	+	+	+	+	+	+	(4, 5) 'yes'
McCleary [42]	+	+	+	+	+	+/-	-	+	+	+	(4, 5) 'yes'
Meyer et al. [43]	+	+	+	+	+	-	+/-	+	+	+	(4, 5) 'yes'
Mirza et al. [44]	+	+	+	+	+	+/-	+/-	+	+	+	(4, 5) 'yes'
Naseh et al. [45]	+	+	+	+	+	+	+/-	+	+	+	(4, 5) 'yes'
Pagano [46]	+	+	+	+	+	+	+/-	+	+	+	(4, 5) 'yes'
Posselt et al. [47]	+	+	+	+	+	-	+	+	+	+	(4, 5) 'yes'
Posselt et al. [48]	+	+	+	+	+	-	+	+	+	+	(4, 5) 'yes'
Power & Pratt [49]	+	+	+	+	+	-	+/-	+	+	+	(4, 5) 'yes'
Sandberg [50]	+	+	+	+	+	+/-	+	+	-	+	(4, 5) 'yes'
Shedlin et al. [51]	+	+	+	+	+	-	+/-	+	+	+	(4, 5) 'yes'
Streel & Schilperoord [52]	+	+	+	+	+	-	+/-	+	-	+	(4, 5) 'yes'
Wazaify et al. [53]	+	+	+	+	+	-	+/-	+	+	+	(4, 5) 'yes'

+ = Yes; - = No; +/- = Unclear

^aIs there congruity between the stated philosophical perspective and the research methodology?

^bIs there congruity between the research methodology and the research question or objectives?

^cIs there congruity between the research methodology and the methods used to collect data?

^dIs there congruity between the research methodology and the representation and analysis of data?

^eIs there congruity between the research methodology and the interpretation of results?

^fIs there a statement locating the researcher culturally or theoretically?

^gIs the influence of the researcher on the research, and vice-versa, addressed?

^hAre participants, and their voices, adequately represented?

ⁱIs the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval?

^jDo the conclusions drawn in the research report flow from the analysis or interpretation of the data?

^kRanking system of dependability by Munn et al [54]: (4, 5) 'yes' responses, the paper remains unchanged; (2, 3) 'yes' responses: move down 1 level; (0-1) 'yes' responses: move down 2 levels

native Arabic speakers and one native English speaker; therefore, studies published in English, German and Arabic were included. All identified citations were collated and duplicates were removed. Articles were excluded if they were not original peer-reviewed studies, were not published in English, Arabic, or German, did not identify the population as refugees or did not provide findings related to substance use.

Screening, selection and data extraction

Following a pilot test, abstract screening against inclusion criteria, full text reviews and data extraction were conducted by three independent reviewers. The citation details were imported into the JBI System for the Unified Management, Assessment and Review of Information (SUMARI) [24].

Measurement

Assign a level of credibility to the findings:

Unequivocal (findings accompanied by an illustration "e.g., quotation, or observation memos" that is beyond reasonable doubt and therefore not open to challenge)

Equivocal (findings accompanied by an illustration lacking clear association with it and therefore open to challenge)

Unsupported (the data do not support findings)

Ranking

The synthesized findings contain only unequivocal findings
No change



A mix of unequivocal/ equivocal findings
Downgrade two-level (-1)



All equivocal findings
Downgrade two levels (-2)



A mix of plausible/ unsupported findings
Downgrade three levels (-3)



No supported findings
Downgrade four levels (-4)

FIGURE 2 Measurement and ranking level of credibility to the qualitative findings. (This figure is cited from a study conducted by Munn et al. [54] to establish confidence in the output of qualitative research synthesis using the ConQual approach.)

The search and the study inclusion process are presented in a Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Systematic Reviews (PRISMA) flow diagram [27]. The flowchart illustrating the process is presented in Figure 1. The extracted data included specific details about the participants, concept, context, study methods and key findings relevant to the review question are illustrated in Table 1.

Quality assessment

In the meta-aggregative approach, all studies included in the review were subjected to a quality assessment process using the Critical Appraisal Skills Programme (CASP). Three independent reviewers answered all CASP items for each study (Table 2). To determine the credibility of the qualitative findings, we evaluated the congruence between the authors' interpretations and the supporting data based on the ranking scale developed by Munn et al. [54], as demonstrated in Figure 2. The credibility assessment results are shown in Table 3, and two articles were excluded accordingly.

Data synthesis

The purpose of data synthesis is to enhance the transferability of the qualitative findings [55] from separate articles on the same topic. In this review, we used a thematic approach, where the qualitative findings from each study were highlighted and coded. The emerged themes and sub-themes were categorized and organized by using the JBI-SUMARI software. The findings related to the contexts and consequences of substance use were collectively analysed and new meta-categories and meta-themes emerged.

RESULTS

Study types and characteristics

A total of 228 citations were identified by systematic search via the databases, and 15 additional studies were identified through the manual search of the reference lists. Twenty-six studies were included and charted. Although three studies applied a mixed-methods design, the other 23 studies used only qualitative methods, among which 15 studies conducted one method (four focus group discussions and 11 semi-structured and in-depth interviews). Eight studies combined multiple qualitative methods (four studies added ethnographic observations, whereas another four studies added focus group discussions). Sixteen qualitative studies were conducted in high-income countries, including Australia, Germany, Norway and the United States. Eight studies were conducted in upper-middle-income countries, including Thailand, Iran and Jordan. In comparison, two studies were conducted in low-income countries, including Liberia and Guinea [56]. The primary emphasis of these studies was substance use among refugees, with eight studies focusing solely on alcohol consumption and two qualitative studies investigating prescription pharmaceuticals. Three studies compared the problem of substance use among refugees in different host communities. Seven studies included counsellors, professionals and service providers' perspectives and experiences regarding this problem. Table 1 summarizes each of these studies, and further characteristics are illustrated in Figures 3 and 4.

Qualitative thematic findings

Four main themes emerged, and the subthemes were supported by quotations gleaned from the results sections of the included studies.

TABLE 3 List of study findings with credibility level based on Munn et al [54] scale

Findings from individual studies		Rank of credibility
1. Carter [28]		
Finding	Barrier to treatment: stigmatized addiction treatment (U)	U (no downgrade)
Illustration	"Uh, it also one of them uh, prestige So if I drink, and if I go to for the treatment, so the people will think that he is demoralized socially Laughs And we have, we call rehab word, if they been there, then they will say. 'Uh, oh Maybe something wrong'" (p102)	
Finding	Motives: cope with different kinds of loss (U)	U (no downgrade)
Illustration	"Uh, they have, they left their country Uh, from their country where had worked a lot, they have their own houses, they have their own land, field, crops, and they were the owner of the big property And when they left the country and they live in new country, they feel like depressed And because of that depression also, people, they drink alcohol" (p 98)	
Finding	Risk factors: unemployment (U)	U (no downgrade)
Illustration	"So first of all, stress because they do not have ability to work And that stress gives the tendency of taking more alcohol And after that, they can sleep. And they'll have, they'll forget about the pain, pressure, tensions That's why people drink" (p 95)	
2. Deilamizade et al. [29]		
Finding	Source of stigma: self-stigma (U)	U (no downgrade)
Illustration	"The addict is not reliable I myself am a typical addict, I myself cannot trust myself" (p 618)	
Finding	Source of stigma: workplace (U)	U (no downgrade)
Illustration	"In order to be able to stay at work and continue my job, I did not say that I was Afghan The employer did not understand, and I continued to work" (p 618)	
Finding	Source of stigma: family and friends (U)	U (no downgrade)
Illustration	"When I became addicted, I came out of the house in order to be able to take drugs easily Drugs destroyed me I left my mother and father I have nothing, I have no reputation" (p617)	
Finding	"My younger brother told me to go out of the house because he thought that due to taking drugs, I was very weak" (p 615)	
Illustration	"After friends of both the same language and homeland realized that I was addicted, they did not care about me and they avoided me whenever they saw me" (p 615)	
Finding	Stigma and treatment failure (U)	U (no downgrade)
Illustration	"I had been in camp for many times, but I relapsed Once, I went to camp and did not take drugs for a while When I went out with my friends and came back home late, my mother became suspicious and questioned me; for this reason and spiting my mom, I relapsed" (p 617)	
Finding	Source of stigma: the treatment centres (U)	U (no downgrade)
Illustration	"I used to get a little bit of care when I was admitted to a center for drug addiction treatment while serving the Iranians for more nutritional, mental and psychological support" (p 617)	
Finding	Source of stigma: neighbourhood (U)	U (no downgrade)
Illustration	"When something was lost in the neighbourhood, my friends told me that Mehdi you did it, I was jailed twice for being suspicious, that was all because of my drug addiction" (p616)	

(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
3. Deimel [30]		
Finding	Lack of documentation and health insurance for undocumented refugees (C)	C (-2 levels)
Illustration	"In the counselling of asylum seekers, problems arise in particular when health insurance cover is missing, and medical benefits are only granted by the municipality and that this procedure is not feasible for the individual client alone"	
Finding	Fear of deportation when substance use accompanied by criminal activity (C)	C (-2 levels)
Illustration	"If the drug use is accompanied by criminal activities, deportation is imminent, which in turn leads to further destabilisation and fear"	
Finding	Psychosocial factors as barriers to treatment (C)	C (-2 levels)
Illustration	"[A] work permit is often missing, which in turn leads to a lack of daily structure in the view of the addiction counsellors, an unsecured residence status also has a negative effect on the addiction dynamic. This insecure situation goes hand in hand with fear, which is combated by drug use"	
4. Ezard et al. [31]		
Finding	Motives: to cope with displacement pressure (U)	U (no downgrade)
Illustration	"Some people stay here and they feel trapped. If they go back to Burma, they will be arrested. Living like that, they do not know what to hope for so they just drink alcohol" (p4)	
Finding	Alcohol and gender: men drink alcohol more than women (U)	U (no downgrade)
Illustration	"women can control themselves if they get upset. Usually, men have no self-control" (p5) "they [women] are afraid that the neighbours will gossip about them" (p5)	
Finding	Alcohol is a social drink despite migration pressure (U)	U (no downgrade)
Illustration	"Alcohol drinking is not unusual for the Karen people, the Karen people drink alcohol based on their customs such as weddings, funerals, and so on they drank alcohol in these situations but had no problems with alcohol drinking" alcohol" (p 5)	
Finding	Alcohol perceived as a medicine (U)	U (no downgrade)
Illustration	"If alcohol is drunk within limits, it is like medicine. If it is over the limit, it is dangerous" (p5)	
5. Ezard et al. [32]		
Finding	Motives: rape drugs and alcohol to facilitate sex work (U)	U (no downgrade)
Illustration	"Several sex workers interviewed reported that it is used in bars as a 'date rape' drug, with men slipping the substance into the drink of women without their knowledge or consent" (p6)	
Finding	Motives: cannabis to forget trauma and family loss (U)	U (no downgrade)
Illustration	"For him, all young people had been affected by the war, either through combat, loss of home and family or social dislocation, and had started cannabis use to be brave and strong to fight or just to meet their everyday difficulties. According to him: (now they take it to stop the bad dreams)" (p6)	
Finding	Low cost and availability of alcohol (U)	U (no downgrade)
Illustration	"Beer is drink like water, assuming that people can afford it" (p6)	
Finding	Motives: to cope with idle life in the refugee's camp (U)	U (no downgrade)
Illustration	"Men have nothing to do, now many even choose not to work in the fields, they have too much time on their hands. Their other responsibilities have been eliminated by camp life and they have become idle" explained one woman camp resident" (p6)	
Finding	Motives: to encourage for robberies (U)	U (no downgrade)
Illustration	"Other men allegedly use pills "to be brave and for courage in order to commit robbery" (p6)	

(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
6. Ezard [33]		
Finding	Harmful consequences: intimate partner violence (C)	C (-2 levels)
Illustration	"I remember one time when he was drunk and came home was unruly, so I and one of my sisters both of us got out of the house and stayed at another friend's house as we were afraid of him" (p 687)	
7. Furber et al. [34]		
Finding	Socially accepted substances: betel quid chewing among Burmese (U)	U (no downgrade)
Illustration	"... if Burmese quit smoking, they chew betel quid" (p1135)	
Finding	False health beliefs about betel quid among Burmese refugees (U)	U (no downgrade)
Illustration	"You never hear about people who chew betel quid going to the hospital, but you hear about people going to hospital from smoking" (p 1135) "... smoking is expensive and easier to get diseases than chewing betel quid" (p 1135) "it [betel quid] keeps teeth strong and help with toothaches" (p 1135)	
8. Horyniak et al. [35]		
Finding	Risk factors: family separation and identity (C)	C (-2 levels)
Illustration	"You know I could say it was because of that lapse that I have with family contact, as well as the status quo that I was in with immigration just a feeling of unease and that " (p416)	
Finding	Negative attitudes toward injecting drugs (U)	U (no downgrade)
Illustration	"I've seen how like the boys after they go high off it [sic], I've seen the reaction of them, you know the people act like a motherf---ing strongman—it just feels like you can take the whole city down, you know? But when you are sober c-t, you look on your left, there's a massive f---ing bodybuilder next to you, you know like and your mate thinks he can take him down because he's on ice! You know what I mean? So that s---t turns me off man because it can put you in a really bad situation" (p412)	
9. Horyniak et al. [36]		
Finding	Motives: socializing (C)	C (-2 levels)
Illustration	"I started drinking honestly at home ... I did not, like, drink every day, cos I was still going to high school and all that stuff, and whenever I did drink it'd be like weekends, Saturday, Friday night, cos you go to the city, to a nightclub ... We got used to that, like every weekend, then somehow it goes to weekdays, it's like ..." Interviewer: "Yep You do not even realise that you are ..." participant: "You're gone far ..." (p287)	
Finding	Motives: to cope with trauma (U)	U (no downgrade)
Illustration	"You're full of information, you do not know how to get rid of it, and you just want to feel stress free So you drink" (p289)	
Finding	Motives: to cope with exclusion and frustration (U)	U (no downgrade)
Illustration	"Being white - everything is easy ... It's just our colour - people judge us with that too much, you know? And it pisses us off, mate You know, some people even give up ... If someone trying [sic] to get a job, trying to get a job, and they keep refusing you, and they look inside himself, 'I'm fucking black man, no one will accept me' Where is he gonna go? He's gonna come, sit down and drink 'Cause fuck man, I tried No one can see I tried, but I know myself I tried" (p 290)	
Finding	Risk factors: homelessness (U)	U (no downgrade)
Illustration	"They see you start drinking - your own mum can kick you out! ... Our community, they are not good They'll go and talk to the parents and say 'Look at your kid! [They're doing it] to protect themselves, to make their name good" (p 291)	

(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
10.	Horyniak et al. [37]	
Finding	Substance use and negative experiences: interactions with police (U)	U (no downgrade)
Illustration	<p>“The police officer, an older man who I'd never seen before parked in front of our van, got out and headed straight towards us [myself and two young men I had been sitting and conversing with] He picked up the bottle the boys had been drinking from and asked if it was ours When we replied no, he picked it up, binned it, got back in the car and drove off “You scare him away” one of the young men told me—if I wasn't there he was sure that he [the officer] would've asked for his name and grilled him When I asked him if he had trouble with the cops he told me he was asked for his name by police “three, four times a day” (p 192–3)</p> <p>A range of behaviours engaged in by police (U)</p> <p>“Coppers come see us drinking, you know, we have not started shit You know we are black—OK, we understand—there's heaps of black boys in Footscray OK, so it does not mean because we are sitting here and we are drinking and we are black—there's robbery happening at the station, it's one of you boys ... Come with us, let us go and identify you and see if it's you or not See they are not even 100 % sure, they are just guessing, you know? They do not have the right to guess” (p194)</p>	U (no downgrade)
11.	Im & George [38]	
Finding	Seeking protection (U)	U (no downgrade)
Illustration	“I joined drug-abuse [gang] members so that I was able to feel secure” (p8)	
Finding	Coping with past and current trauma (U)	U (no downgrade)
Illustration	<p>“It was hard to decide anything, I did not know what is good or bad because I lost both of my parents I started to look somewhere to release my tension and stress, and then I started drugs” (p9)</p> <p>“When my father died, I was young and it did not have much impact But when my mom died, I have diagnosed with a lot of stress I used to fear the death, and I started chewing miraa [khat] to reduce my stress” (p9)</p> <p>“[It [past memory] made me wonder and scared all the time till I started chewing miraa [khat] I wasn't aware what I was doing I was just afraid, and I did not want to sleep and the only thing I was able to do was chew[ing] miraa with some girls At least I was high and happy and it made me forget him [my brother]” (p9)</p>	
Finding	Substance use and gender (U)	U (no downgrade)
Illustration	All the women participants reported use of khat or cigarette despite high stigmatization attached to substance use especially among women “Author's statement” (p6)	
12.	Lindert et al. [39]	
Finding	Risk factors: drugs available everywhere in the host country (U)	
Illustration	“You know, okay, I have now everything behind me, the war, for example, the home, for example, the home country, everything behind me, also the escape, the different countries on the, on the Balkan route, that is now the best known Now I'm finally here And that, yes, and then you are here in a yes, in a foreign country. But, but you can buy drugs any- where, on every corner” (p 4)	U (no downgrade)
Finding	Differences in legalization of substance use: no rules on alcohol consumption in the host community (U)	U (no downgrade)
Illustration	“With us, society sometimes puts pressure on people who are addicted, for example to alcohol, which is not so acceptable, so there are societies with us that are more conservative, and they always make sure that I drink, but the others do not have to get along And we came here young and then there is no control or no one who says, or who sees it, and then you think you can try it” (p5)	

(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
Finding	Motives: to cope with family separation and anxiety (U)	U (no downgrade)
Illustration	"I think the side effects of fleeing are not over yet So far, we have most Syrians, someone has stayed there in Syria and so far we have many problems, they are not safe and we always think of these people And I think if you want to take drugs then I think the family is very important and that's all for me" (p 6)	
Finding	Motives: to escape the past (U)	U (no downgrade)
Illustration	"Where you can quickly find friends who have the same things as him and stuff Then it feels a little better and so Good mood Yes, so it is actually so Escape plays a big role" (p7)	
Finding	Barriers to treatment: stigma (U)	U (no downgrade)
Illustration	"Generally, that when you say I need psychosocial support or treatment for something and then people say, "Oh he's crazy!" Either way, it's such a shame, so you are ashamed to say, "Yeah, I need psychosocial support or treatment"" (p7)	
13. McCleary et al. [40]		
Finding	Barriers to treatment: a lack of culturally and linguistically informed substance use treatment programs for refugees (U)	U (no downgrade)
Illustration	"I consider this referral unsuccessful even though the client did get some treatment because 10 days for the level of severity of his addiction was not sufficient My understanding is that he was placed in the 10-day program because it was hospital based and they had interpreters more easily accessible I was told by the addictions counselor that he could not get him in a halfway house because of the interpreter issue I have since learned that addictions programs receive a block grant for treatment no matter how much it costs and that unlike therapy services where the interpreters are paid separately, in addictions programs, the interpreter cost is included in the flat rate for treatment and so they lose money when they need to have interpreters available" (p4)	
Finding	Intervention approach: coordination of health follow up for successful referrals (U)	U (no downgrade)
Illustration	"I was sent the referral for the patient to get a CD assessment I called to register and make an appointment for the patient I called the interpreter, to give the date and time of the appointment I will either set up a ride for the patient, or the interpreter will set it up" (p5)	
14. McCleary & Wrieling [41]		
Finding	Dimensions of harmful alcohol use (U)	U (no downgrade)
Illustration	"Someone has a bad feeling in their heart, like sadness or hopelessness or a broken heart or fear or something So they drink alcohol to get rid of those feelings They are following what their heart wants and only thinking about themselves They are being selfish because they are not thinking about others, their family, their community Following one's heart is following those bad feelings toward drinking" (p1196)	
Finding	Motives/reasons behind alcohol use (U)	U (no downgrade)
Illustration	"Life changes, everything changes when people leave Karen State It changes a lot, there are many different kinds of people, they are exposed to a different kind of environment The community is so big that it is hard to control the community, it is hard for the community to be strong together because of so much change and different people all together So they use too much" (p1196)	
Finding	Differences in alcohol-related problems between camps and resettlement (U)	U (no downgrade)
Illustration	"Over here there are so many problems if you cannot take care of your responsibility, if you cannot go to work, that is a problem if you get a ticket and you cannot drive anymore, or if it affects your credit, like you have to have good credit or you will lose money All of those problems happen when they drink" (p1198)	
15. McCleary [42]		
Finding	Reasons for harmful alcohol use (U)	U (no downgrade)
Illustration	"Before in Karen State they have culture and village and religion to stop people from using People do not use too much But then the SPDC burn the village down and people lost their family and their land and then they came to the camp There, they have nothing" (p85)	

(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
Finding	Strategies for recovery (U)	U (no downgrade)
Illustration	“So we speak to them so “you should take care of your children if you drink too much it’s not good for our community” or something like that And then “if you going to buy the alcohol to drink I think it is better if you buy the milk or egg or something if you cook and eat with your children and family and neighbors, we will be more healthy and more strong” (p86)	
16. Meyer et al. [43]		
Finding	Alcohol drinking soothes the displacement pressure (U)	U (no downgrade)
Illustration	“Some people are depressed because they do not know whether they are allowed to go to a third country or not Some drink because of their surroundings, for example, they want to drink alcohol when they see the people who are drinking alcohol around them They drink alcohol a lot when they cannot release their mind, in order to be happy” (p1037)	
Finding	Alcoholic parents and their children are self-stigmatized (U)	U (no downgrade)
Illustration	“Some children are shy among their friends because their parents are drinking For example, the people will say to the children that their father drinks alcohol, so the children will be shy and will not be able to go among the people” (p1038)	
Finding	Refugee’s children drink alcohol to cope with neglect and family problems (U)	U (no downgrade)
Illustration	“They drink alcohol because they have some problems in their homes Some are neglected by the community, some stray, some children have bad relations with their lover, some children are persuaded to drink alcohol, and some drink alcohol in groups” (p1039)	
17. Mirza et al. [44]		
Finding	Misconception of substance use related terms (U)	U (no downgrade)
Illustration	“Excessive use does not mean only being very drunk It also means, drinking many times, anytime, during breakfast time, during lunchtime, during dinnertime, anytime, if one uses alcohol then, we say that is excessive use” (Bhutanese Focus Group 1) (p49)	
Finding	“In my opinion, excessive means drinking above the body’s capacity If someone drinks and his body can tolerate, that’s okay but if not and he falls down on the sides of street then that is excessive” (Bhutanese Focus Group 1) (p49)	U (no downgrade)
Illustration	Motives: to cope with family separation during migration (U)	
Finding	“Some of us have family members left out in Nepal and miss them So that gives [us] tension and ... because of too much tension, somebody can drink an excessive amount” (Bhutanese Focus Group 2) (p51)	U (no downgrade)
Illustration	Motives: to cope with unemployment (U)	
Finding	“Excessive drinking is mainly because of no job/work If there is work, people drink once in a week; just for enjoyment but no work means more stress and more drinking” (Bhutanese Focus Group 2) (p51)	U (no downgrade)
Illustration	Motives: to sustain friendship (U)	
Finding	“Some people drink because of friend relationships For example, if my friend is a drunk, if I am involved with him, he or she might force me to drink And you know, I might try [drinking alcohol myself]” (Bhutanese Focus Group 2) (p51)	U (no downgrade)
Illustration	Postmigration changes in the legalization and restriction for substances use (U)	
Finding	“When we were in Bhutan, it was too strict and we could not buy alcohol or drink When we came to Nepal at that time, the local alcohol, they sell anywhere on the street And we can buy [alcohol] anywhere So we used to have habit of drinking ... when we were in Nepal ... [In the US it’s more organized than in Nepal Here we can buy in particular store and we can go into particular restaurant and drink or we can buy and drink at home ...” (Bhutanese Focus Group 3) (p52)	U (no downgrade)
Illustration	“We have to change our cultural beliefs and our thoughts about the medication and how we take it In Iraq it is a different thing and here it is different” (Iraqi Focus Group 1) (p52)	

(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
Finding	Preventive approach: respect (U)	U (no downgrade)
Illustration	“Society should respect the person addicted to the alcohol One should talk with him or her very politely And one should know the root of the cause, why he drinks alcohol too much Then only we can go in a positive way” (Bhutanese Focus Group 1) (p53)	
Finding	Preventive approach: employment (U)	U (no downgrade)
Illustration	“Because he had more doors open for him, more opportunities So he just started making money, buying a car and things like that and then he stopped doing that thing [using pain medication]” (Iraqi interview 2) (p54)	
18. Naseh et al. [45]		
Finding	Risk factors: illiteracy (U)	U (no downgrade)
Illustration	“This [substance use] has different causes, one is illiteracy .. it [the literacy rate] is very low ... around 3% of them [Afghan refugees] are really educated, the rest only have primary education However, one might consider a person with primary education as an educated person” (Interview 5 with the head of an outreach program, a recovered drug user and a refugee with three years of experience in substance use prevention and treatment)” (p12)	
Finding	Risk factors: unemployment (U)	U (no downgrade)
Illustration	“when there is no decent job for a refugee, the only solution is dealing drugs ... therefore, they [Afghan refugees] become involve with drugs and substance use” (p14)	
Finding	Risk factors: low income and long hours working stress (U)	U (no downgrade)
Illustration	or similar fields, and they have to work 15 to 18 hours per day to be able to earn enough money for their families And, since they do not have access to insurance, if they are sick or in pain they use drugs to sustain long hours of work ... And, this [substance use] has different dimensions, and another risk factor [for substance use] is unemployment” (p15)	
Finding	Risk factors: lack of documentation (U)	U (no downgrade)
Illustration	“Renewing Amayesh cards is expensive and if they [Afghan refugees] do not renew them, suddenly their living situation changes and become illegal It means that the risk will increase ... since they are afraid, they will do anything to make the ends meet and this includes selling drugs” (p16)	
19. Pagano [46]		
Finding	Barriers to treatment: language barrier (U)	U (no downgrade)
Illustration	“The language barrier—that’s a lot [of the problem] Most places do not have Spanish-speaking counselors or people who work for them” (p278)	
Finding	Barriers to treatment: legal barriers (U)	U (no downgrade)
Illustration	“We’ve gotten people without papers, and it’s a little difficult with them Only reason why is because you know, they are full of fear There’s walls already built that they think they cannot tear down So it’s definitely a challenge, but they still be here” (p279)	
Finding	Barriers to treatment: gender-based barriers (U)	U (no downgrade)
Illustration	“Women afraid to accept that they are alcoholics Women stay at home to drink, while men drink in the street” (p282)	(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
20. Posselt et al. [47]		
Finding	Risk factors: lack of mental health awareness (U)	U (no downgrade)
Illustration	<p>“there was a lot of hardship there and there was a lot of difficulty in terms of getting food and getting access to the health services Lots of robbery and rapings and those kinds of things” (refugee group) (p133)</p> <p>“When they come to Australia, they have faced lots, lived in refugee camps, and before refugee camps, they come mostly from a war-torn country they do not understand what is MH issues, they do not understand the effect it can have on them most of them would have issues, like symptoms of PTSD they will talk about very traumatic things they have seen, either in refugee camps or on their way to safety When I ask about if they still remember that, have dreams or have flashbacks, they will say, “oh yes” they might have a situation that they come across again long ago and so as a way of normalizing that or self-medicating, they turn to drugs and alcohol” (Service provider, GO) (p133)</p>	U (no downgrade)
Finding	Motives: to cope with loneliness post-migration (U)	U (no downgrade)
Illustration	<p>“Most of the young people I come across who are out of their family environment, they are experiencing isolation, total isolation They will have no one to talk to When they experience that the majority will turn to other self-medicating things, they will turn to drugs, they turn to alcohol, they turn to anything that will comfort them at least which is then of course understandable” (Service provider, GO) (p133)</p>	U (no downgrade)
Finding	Risk factors: lack of education (U)	U (no downgrade)
Illustration	<p>“When they come to Australia a bit later, mid to late adolescence and have not been able to find their niche within the education system or training system that leaves them really vulnerable to those people who like to find others to take drugs with” (Service provider, GO) (p134)</p> <p>“They do not go to school Wagging school- they say it's hard and then they do not understand stuff and say it's all too hard and they just give up or they only go to school sometimes” (Refugee) (p135)</p>	U (no downgrade)
Finding	Risk factors: exposure to and availability of substances (U)	U (no downgrade)
Illustration	<p>“I've seen in the public transport places around here, like train and bus stations, I see different people lingering around with them They can learn, they can see everywhere it can be found and they can buy because they have their own money and they are above 18” (Refugee) (p137)</p>	U (no downgrade)
Finding	Motives: to adapt with family separation postmigration (U)	U (no downgrade)
Illustration	<p>“I have friends who use alcohol and pills One of them is always quiet and hiding in his room and if you want to talk to him he says he is busy, studying or something but he is doing nothing in his bed he tries to sleep and he is getting skinnier He is having a problem with his family He has been here more than four years and he could not bring his family here whereas other boys who have come at same time have their families here but he could not do- so he is very stressed Interviewer: So he is drinking to cope? He drinks, sometimes he uses pills” (Refugee) (p137)</p>	U (no downgrade)
Finding	Risk factors: integrational conflict (U)	U (no downgrade)
Illustration	<p>“they just say that they do not want to live—if they do not understand each other with parents—they say “I do not want to live with you” and they move out of the family home Sometimes you find them on the streets, working and that the son from the family starts the drugs and stuff like that” (Refugee) (p133)</p>	U (no downgrade)
21. Posselt et al. [48]		
Finding	Approach to access the treatment services (U)	U (no downgrade)
Illustration	<p>“If the services are well known or better known in the migration agencies this could increase access So if services worked with settlement support agencies they would know where people can get help and give advice” (p5)</p>	U (no downgrade)
Finding	Barriers to treatment: refugees do not access mental health services (U)	U (no downgrade)
Illustration	<p>“I do not think that this client group readily access mental health services anyway and when you have got mental health in your name it's a real issue” (p7)</p>	(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
Finding	Approach to deliver effective treatment: training and resources for health professionals (U)	U (no downgrade)
Illustration	"I would say to people, like a counsellor or a psychologist, to try to understand different cultures because you never know who you could be working with, so while they are doing their training and education ... I'm sure they might do it but it's still from a Western point of view and you really inhibit people from just accessing those kinds of services and even if they do, they do not feel satisfied" (p10)	
22. Power & Pratt [49]		
Finding	Motives: alcohol for socializing (U)	U (no downgrade)
Illustration	"Yes, [I did drink very heavily] back in Burma and also in the camp in Thailand, also here when I newly arrived in this country I was drunk a month Well, I would say that there are some persons among the Karen, they do drink like I did There might be some [drinking alcohol] among the women but I think the percentage would be less than 20" (Individual interview) (p158)	
23. Sandberg [50]		
Finding	Refugee work as a drug dealer in response to limited cultural capital and work (U)	U (no downgrade)
Illustration	"I used to be a fuc**g hyperactive shithead, man Did so much crap There were these cousins and me We were Pakis in a country we did not belong to Always together and always broke All the others had these wicked pants, so why not me? I ditched school and worked illegally at a takeaway So I earned money there and sold a bit of ganja [cannabis] on the side First we just smoked beans and downed pills (Rohypnol) for the fun of it So we starting thinking if we got a blister pack to sell, and we earned 5000 kroner [625 Euro] in one bleedin' day I was getting famous! I had a couple of chicks from Holmenkollen [the more wealthy part of Oslo] who called my mates, and suddenly half the city was ringing for pills" (p610)	
24. Shedlin et al. [51]		
Finding	Drug use associated with sex workers refugees (U)	U (no downgrade)
Illustration	"it depends on your need for money, then you know you have to work hard, that you have to have at least ten clients, so you have to consume and consume to be ok" (p123)	
25. Streef & Schilperoord [52]		
Finding	Types of substances used (U)	U (no downgrade)
Illustration	Findings from field experiences and observations	
Finding	"Drinking of alcohol (home-made and branded) as well as smoking of cannabis and chewing of khat are widely observed phenomena in these settings" (p1)	U (no downgrade)
Illustration	Alcohol widely used and an important source of income (C)	
Finding	"For some women, alcohol preparation is the main source of income" "According to refugees, alcohol is brewed for sale in the camp, while in the country of origin; alcohol was mostly brewed for community events" (p2)	C (-2 levels)
Illustration	Substance use as a coping mechanism (C)	
Finding	"During discussions with a group of newly arrived young refugees, they explained that when they discovered the camp living conditions and spoke with people who have been there for decades, they feel literally trapped between the dramatic situation in their country of origin and an almost absolute lack of future perspectives" (p3)	
Finding	Physical and psychological consequences (C)	U (no downgrade)
Illustration	"Some refugees did mention that that some individuals may resort to excessive alcohol or drug use, and therefore present problems of uncontrollable violence and 'inexplicable' mental disorders" (p3)	

(Continues)

TABLE 3 (Continued)

Findings from individual studies		Rank of credibility
26. Wazaify et al. [53]		
Finding	The causes of substance use are multifactorial (U)	U (no downgrade)
Illustration	“Poverty is a big factor; it is a cause and a consequence at the same time. There is a percentage of residents in the camp who are originally from Gaza Strip [in Jordan, if you are not a Jordanian citizen you cannot get a license to work, just like the UK and rest of the world], those are unemployed, their conditions are very difficult, they suffer from poverty and need which leads them to try to get money in any possible way” (p10) “Concentrated with unemployed youth”, “bad companions”, “lack of entertainment” (p10)	C (-2 levels)
Finding	Easy access to drugs in refugees' camps (C)	
Illustration	“Sometimes we witness exchange of material in the streets” (p5) “Being sold as a gum, juice ... he [the child] uses the first time like chewing gum which is already a drug then he becomes addict to it” (p5) “intruders who entered the camp, became inhabitants and named themselves residents” (p7)	
Finding	Negative impacts on families of drug users (U)	(U no downgrade)
Illustration	“Families of drug users feel stigmatised and with low awareness of where to seek help” (p6) “Families of drug users breakdown socially and economically, they live in fear and distress and often turn to crime” (p6)	
Finding	Attitudes towards drugs and stigma (U)	U (no downgrade)
Illustration	“In the past when you heard someone is addicted, all the people around him would want to contribute in their treatment and so were their neighbours/family and so on. But nowadays, the situation is so different” (p9) “Some mothers, even if you ask her to discuss something that stigmatizes her son or daughter she refuses, even if they are addicted” (p9)	
Finding	A need for prevention and support (U)	U (no downgrade)
Illustration	“The social worker in school needs to devote herself more precisely” (p12) “Make group therapy in clinics, ... sit together to benefit from the experiences and solutions of each other”; “There is a centre for the treatment of addiction -free and confidential- Unfortunately, there is not enough marketing of this centre” (p12) “Looking for children or asking the residents of the camp and other associations about the people and children at risk” (p12) “Media, educational bulletins on television” (p12) “Absence of jobs are factors, any student gets out tenth grade, even if he studied vocational or whatever, he will end up at home doing nothing, so the economic situation is a major factor” (p12)	

C, credible finding it can be logically inferred from the data. Because the findings are interpretive, they can be challenged; U, unequivocal finding relates to evidence, including findings that are a matter of fact, directly reported/observed and not open to challenge

Theme 1: a considerable susceptibility of refugees to SUDs

Across all the included qualitative studies, this underpinning theme was the most frequently discussed among 23 studies, and we classified the reasons for substance use based on the professionals' and refugees' perspectives shown below.

Risk factors

Illiteracy, a lack of education, unemployment, poverty and a lack of documentation were the most common factors discussed in the three qualitative studies that engaged professionals and service providers in discussing the risk factors for substance use among refugees [31, 45, 47]. Several studies focused on the risk factors for substance use among Afghan refugees in Pakistan and Iran [31, 45] and Afghan and African refugees in Australia [47]. Further risk factors were noted, such as premigration experiences and trauma, integration and cultural conflicts [47]. Exposure to and the availability of substances in the host community, coping strategies and maladaptive self-medication were noted as further important factors in exposing refugees to high risk for substance use [47].

Triggers and motives

Alcohol was the dominant substance of use that was discussed across the whole sample of studies. Motives behind heavy drinking were documented in seven studies [28, 32, 33, 36, 41, 47, 49]. Socializing and coping with sociostructural barriers, trauma and displacement pressure were reported to motivate heavy alcohol consumption among African, Bhutanese, Nepali and Karen refugees [32, 33, 41].

Motives for using substances other than alcohol were discussed in seven studies among six different groups (i.e. African, Bhutanese, Columbian, Iraqi, Karen, Liberian and Syrian refugees) [34, 35, 39, 44, 51, 52]. African refugees in Australia reported that traumatic experiences associated with migration, family separation, integrational conflict and a lack of education and employment were the main motives for using

illicit drugs [35]. Similar motives were reported among Liberian, Karen and Bhutanese refugees [34, 44, 52]. Additionally, Iraqi refugees who use prescription painkillers in the United States reported that many Middle Eastern countries overuse pain medications, including opioid medications, even without prescriptions [44]. In another study, Syrian refugees indicated that taking substances helped them connect with people and feel like a part of their new community. Likewise, the high availability of different substances was recognized as a major trigger for trial and consumption [39]. Similarly, Colombian refugees in Ecuador mentioned that easy access to drugs on the streets and in bars were considered a trigger for substance use [51].

Theme 2: harmful consequences of substance use among refugees

Consequences that resulted from heavy alcohol consumption were present in the findings of five qualitative studies, whereas consequences that resulted from consuming other substances (i.e. illicit

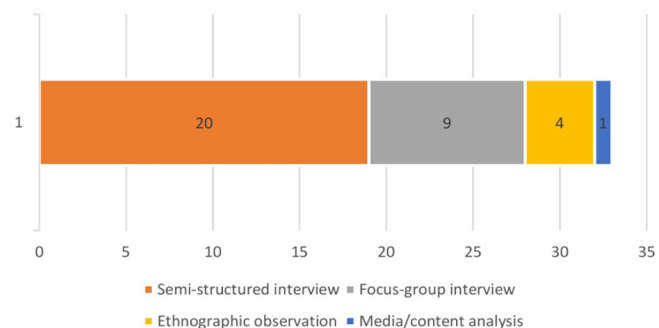
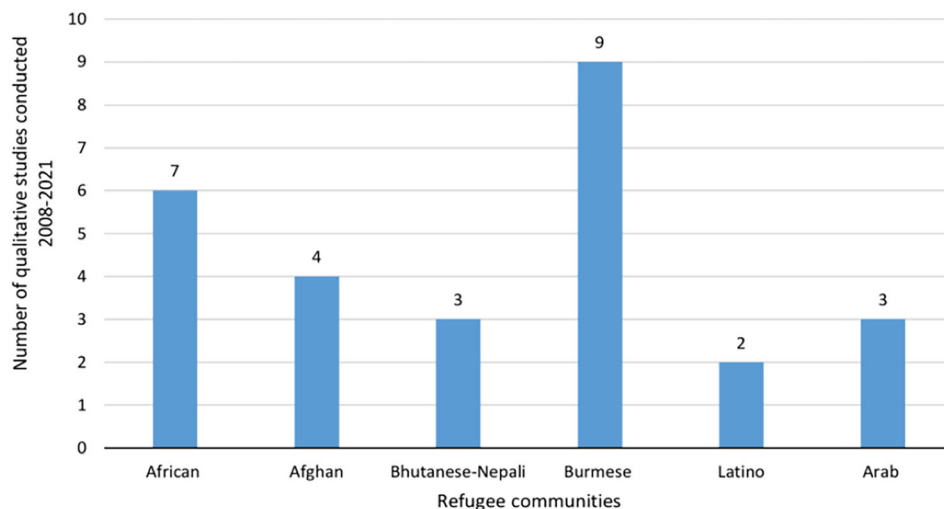


FIGURE 4 Number of studies using different qualitative research techniques. (Many studies used more than one instrument/tool; therefore, the total number of data collection methods exceeds 26)

FIGURE 3 Number of qualitative studies conducted among different refugee communities between 2008 and 2021. (a) The refugee communities mentioned in the included studies of this systematic review came from different nations and ethnic groups: African (Somalian, Eritrean, Sudani, Kenyan and Liberian); Arab (Iraqi, Syrian and Palestinian); Burmese (Karen); and Latino (Colombian, Mexican and Salvadoran). (b) There are two studies that conducted the interview among different refugee groups; therefore, the total number is 28 in this figure based on the cultural background of refugees included in the studies



drugs, prescription drugs, cannabis and khat) were present in the findings of only two qualitative studies. This review categorized the harmful impact of substance use into two subthemes: (i) consequences on refugees' relationships and self-images, and (ii) consequences that emerged through interaction with the host community.

Consequences on the refugees' personal relationships

Partner and interpersonal violence were reported as being the most harmful consequences of heavy alcohol consumption among African refugees in Australia and Karen refugees in the United States and Thailand [33, 36, 41, 43]. A recent study in Jordan conducted among Palestinian refugees in two camps of the United Nations Relief and Works Agency for Palestine Refugees reported a rise in substance use among families and children to cope with political violence, trauma and community stress [53]. Furthermore, refugee children reported consuming substances in response to their parents' substance use problems to escape family problems and neglect [43]. Homelessness was reported as another consequence of substance use, which often results from the breakdown of family relationships [36]. Living on the streets was found to escalate the problem of substance use, as drugs are readily available in this environment. As a result, subjects, therefore, become more susceptible to engaging in illegal work and criminal activities to obtain drugs [37, 50].

Consequences on the refugees' relationships with their host communities

Negative social repercussions experienced by refugees using substances included stigma, racism and negative interpersonal encounters [37, 39, 41, 43]. African refugees in Australia who used injectable substances reported being discriminated against based on their skin colour, in addition to the stigmatizing nature of injecting drug use, which culminated in encounters with the police and incarceration [37]. Similarly, Afghan refugees in Iran reported experiencing limited work opportunities and severe social and integrational conflicts [29]. Refugees are stigmatized and racialized, and the use of substances further limits their prospects of finding suitable employment [29]. As a result, there is a greater chance of them using more substances and engaging in unlawful activities [29, 51].

Theme 3: barriers in connecting refugees with substance use treatment

Organizational and cultural barriers (host country)

Organizational and cultural challenges prevent high-income host communities from facilitating addiction treatment services for refugees, with legal and documentation issues being the most common barriers, according to professionals and service providers in the United States, Australia and Germany [30, 40, 48]. Professionals in the United States acknowledged a lack of culturally and linguistically appropriate substance use treatment options for refugees [40]. A similar barrier was reported in Australia [36, 48]. Obstacles to treating migrants with

addictions were classified in exploratory interviews with German counsellors based on migrants' statuses (i.e. whether they were documented or undocumented) [30]. Although undocumented migrants face additional obstacles in receiving addiction treatment, migrants with temporary permits also experience challenges because of institutional barriers [30].

It was reported that service providers in Australia lack culturally and linguistically diverse resources, such as bicultural consultation workers, which makes it difficult to connect with refugees and provide them with appropriate treatment referrals and effective counselling [48]. Latino refugees in the United States complained about a scarcity of Spanish-speaking therapists and care providers. Fear of deportation was cited as a legal impediment to substance use treatment [46].

Lack of mental health and substance use awareness (refugees)

Refugees with substance use problems in Australia often do not access mental health services, as reported by health professionals and service providers [48]. Among the studies in this review, only two qualitative studies explored the perceptions and awareness of refugees regarding the substance of abuse and treatment. In the United States, Bhutanese and Iraqi refugees reported misconceptions and a lack of awareness regarding substance use terminology. They did not distinguish between the excessive use of alcohol, prescription drug abuse and self-medication [44]. The refugees perceived using some substances as self-medication, and they quoted traditional beliefs regarding the health benefits of these substances [44, 47]. For example, Karen refugees in Thailand perceived alcohol as a medicine and betel quid as a safe, natural social substance [33, 34]. Moreover, service providers in Australia noted the lack of informative resources and further tools to enhance awareness about substance use among refugees [34]. Latino refugees in the United States were unaware of existing treatment centres and lacked access to information and counselling services [46].

Stigma as a psychological and social barrier

Refugees from different cultural backgrounds (African, Afghan, Bhutanese, Latino, Syrian and Iraqi refugees) struggled with different sources of stigma and social isolation because of substance use [28, 29, 36, 37, 39, 44, 46]. Young African refugees in Australia who were marginalized reported having negative experiences with the legal system and being unfairly targeted by the police [37]. In addition to other social-stigma sources, such as family, friends and neighbours, refugees felt stigmatized by the respective treatment centres [29]. Similar levels of stigma were reported among Bhutanese and Iraqi refugees in the United States [44]. Stigma directly impacts sociopsychological problems; self-stigma has been reported among Afghan refugees who use substances in Iran, and it has been associated with frequent treatment failure [29]. Alcohol use among Karen refugee children was reported as a response to self-stigma and an attempt to cope with the stigma of their parents' drinking behaviours [43].

Substance use among refugees is gendered; women who have difficulties with substance use are stigmatized more than men [46]. As

indicated by Latino refugees in the United States, although consuming alcohol is socially acceptable for both men and women, addiction is particularly shameful and internally stigmatized among women. Accordingly, it is difficult for women to accept their addictions, so they avoid social communication. This issue was reported as a gender-based treatment barrier [46].

Theme 4: effective access to treatment, intervention and prevention approaches

Organizational and structural coordination

Two research studies in this review made crucial recommendations on increasing informative and linguistic approaches in therapeutic and counselling services [34, 40]. Health professionals' training and resources play a significant role in effective communication with refugees from different cultural backgrounds that use substances in host communities [48]. Professionals and service providers in the United States reported that coordinating regular health follow-up among refugees is usually successful in providing referrals for refugees with substance use problems [40].

Intervention and prevention

Refugees' perspectives on the intervention and prevention approaches for substance use were discussed in two qualitative studies among different refugee groups in high- and low-income contexts (i.e. the United States and Thailand) [32, 44]. Education and resettlement prevented risky alcohol consumption among Karen refugees in Thailand [32]. In the United States, Bhutanese and Iraqi refugees suggested approaches to treatment that preserve their respect and dignity as an effective intervention, in addition to employment and education resources [44]. The misconception between the use, misuse and abuse of prescription drugs was rarely discussed in the reviewed studies, although this information appears to be a crucial point in the awareness and prevention of the excessive use of similar drugs among refugees. Iraqi refugees in one study mentioned this point, thereby implying the need for a community-wide awareness about used prescription and pain medications in the United States [44].

DISCUSSION

Key findings and implications

Our review revealed four major findings related to the causes and consequences of substance use among refugees: (i) a considerable susceptibility of refugees to substance use; (ii) harmful consequences of substance use among refugees; (iii) barriers in connecting refugees with substance use treatment; and (iv) effective access to treatment, interventions and prevention approaches.

An important finding of our review is the high susceptibility of refugees to substance use. Refugees are already struggling with postmigration challenges and mental health problems because of forced

migration and premigration trauma [30, 47, 57]. The availability and low cost of substances in the host communities, as well as differing legalization, pose further obstacles for refugees [31, 39, 44]. The cultural differences in socially acceptable drugs of use were an important finding in a recently conducted study among Syrian men refugees in Germany [39]. In addition, two separate refugee groups in the United States demonstrated how difficult it was for them to cope with varying levels of substance use legalization [44]. For example, prescription drug use is legal and acceptable in Iraq, whereas prescription drug use is restricted in the United States. This finding is consistent with the results of other studies that documented that alcohol, for example, is the most widespread substance of use among refugees who migrated to communities where alcohol is legal, available and affordable [31, 39].

The second key finding of our review is the harmful consequences of substance use among refugees. The reviewed studies noted that refugees who use substances and live on the streets are trapped in the drug world by engaging in illegal activities [35, 37, 50]. Accordingly, legal consequences imposed by the authorities in host communities and fear of deportation prevent affected refugees from attending treatment services [45, 46].

Shame and stigmatization by the host communities and the refugees' environments were other harmful consequences reported by Afghan, African and Karen refugees in Iran, Australia and the United States [29, 36, 46]. The affected refugees usually struggled with stigma originating from three sources: (i) family and friends, (ii) the host community and (iii) self-stigma. This stigmatization can negatively impact the affected refugees' mental health; according to Afghan refugees in Iran, such stigma exacerbates the problem of substance use, decreases their chances of finding a suitable job and destabilizes their lives [29]. Consequently, the risk factors for substance use are perpetuated. Continued substance use becomes the easiest next step, as long as different substances are widely available and affordable [36, 39, 48].

The third finding of our review consists of the barriers to accessing the treatment for substance use among refugees. The language of interaction in mental health institutions was documented as a significant barrier [58]. It is well known that mental health issues and sensitive topics such as substance use are transcultural [40, 46]. Nevertheless, six studies described a lack of linguistically informative programs, which was the most documented barrier in high-context settings¹ in the United States, Germany and Australia. More linguistically sensitive awareness programs should be focused on high-context settings, as well as refugee camp settings [12]. Another reported significant organizational and structural barrier preventing refugees from receiving effective treatment was that refugees do not have health insurance linked to their residency status in some communities. Furthermore, even if available, health insurance usually does not cover the costs of psychotherapy or substance abuse treatment.

The fourth finding of our review is the need to develop effective treatment strategies. The findings emphasized that effective treatment could be achieved by practical solutions to the previously

¹High context-setting refers to refugees who do not live in the refugees' camps, but live inside the cities of the host countries.

mentioned barriers, such as the communication challenges [59], informative programs and health insurance issues reported by refugees and professionals in these studies [37, 45, 48, 52]. However, significantly improving effective treatment also depends on the affected refugees' awareness and willingness to seek help from professionals; this was discussed in the findings in our review [44, 48]. The studies described that refugees often lack the mental health knowledge to recognize their susceptibility to substance use; hence, they often do not seek treatment. These findings are consistent with the findings of an earlier study [60]. Accordingly, awareness programs should be included in efforts to improve treatment to achieve an effective treatment strategy. Therefore, White [57] suggested that cultural and legally informative interactions about substance use can facilitate counselling and successful referral to treatment. However, the willingness of refugees to seek professional help is only one part of the solution; another significant and essential part is providing certain types of health insurance and language-sensitive treatment options for substance use and mental illnesses [58, 61].

Finally, the evidence from the empirical qualitative studies reviewed in this publication confirms that qualitative research can essentially contribute to the development and provision of conceptual frameworks. Research on SUDs among refugees is a rather new stream of literature; therefore, without enough prior knowledge, testing hypotheses by applying predefined categories in quantitative studies might lead to misinterpretation and generalization bias. Additionally, although refugees are often treated as a universal group, the personal experiences found through qualitative methods enable us to look beyond statistical averages and emphasize the participants' diversity in regard to their living environments, barriers and personal backgrounds. We find the latter aspect crucial to contextualizing our findings and informing service providers.

Limitations of this review

The search strategy that was used explicitly focused on SUDs. Therefore, there might be studies that broadly explored the mental health or general health of refugees and included substance use measures, but did not have the term 'substance use' in their article title, abstract or keywords, which guided our systematic search. Likewise, for the term 'refugees,' it is possible that articles examined substance use among different groups of migrants without including the term 'refugees' in the search parameters. Although this review was conducted on studies published in three languages, English, German and Arabic, there is a tendency for bias introduced by not retrieving studies conducted in other languages. Our review did not provide sufficient data to address the differences between different legal situations of first and second-generation refugees. However, this topic is highly relevant and should be addressed in further studies. Another limitation of our results is the lack of explicit reports on the effects of stigma and racist exclusion on the response rate among refugees in the host country.

Recommendations for future research

Despite the substantial evidence discussed herein, several topics require further elucidation. For example, further research is needed to understand the burdens and risk factors for substance use among groups of refugees in low- and middle-income countries that were not addressed in this review. The study presented here on Somali refugees in Kenya [38] illustrates the importance of this topic.

In addition, it is important to explore refugees' knowledge and experiences of using drugs in their home countries and explanatory models of substance use [15]. Furthermore, local policies regarding illegal and legal drug availability should be systematically assessed and compared with respect to their impacts on drug use in vulnerable populations. For example, one of the studies in our review mentioned benzodiazepines and amphetamines without providing further details on the source of supply and method of consumption [31]. This point is essential, especially in low-income and conflict regions, as prescription drug legalization is often inactive because of war or crises, and pharmacists in such situations often provide drugs without a prescription [62]. Some studies have also reported that some physicians over-prescribe psychotropics to stressed populations [63]. Whether provided by a health professional or obtained from an illegal market, detailed and in-depth interviews are required to understand refugees' access to prescription drugs.

There is a need to understand tobacco use among refugees for further explorative studies, which was under-reported in this context. Among the 26 studies, tobacco use was reported in two studies as being consumed with other substances (e.g. with khat or with betel quid) as reported by Somali refugees in Kenya and Burmese refugees in Australia, respectively [34, 38].

Finally, we feel that the most significant aspect of future studies should be to concentrate on effective interventions and preventive strategies in various host communities, considering the sociocultural backgrounds of refugees. There are insufficient studies on substance use interventions' effectiveness, feasibility or acceptability among refugee populations [64]. The refugees' perspectives and successful treatment experiences could provide a deeper understanding of when and why refugees decide to attend treatment, how and why they relapse and other factors that may effectively facilitate treatment access for refugees.

CONCLUSIONS

This review synthesized the findings of qualitative research on the topic of substance use among refugees. The findings suggest a need to incorporate culturally and linguistically sensitive substance use prevention strategies and treatments into the health and counselling services provided to refugees. Efforts to overcome language barriers and obstacles to accessing health facilities among refugees are needed to effectively integrate affected refugees into treatment centres.

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DECLARATION OF INTERESTS

The authors declare to have no competing interests.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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