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## Barriers to Treatment for Alcohol Dependence

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### Abstract

**Introduction:** Globally, Alcohol Use Disorder (AUD) has a negative impact on health, economy and the quality of life for afflicted individuals, their family and friends. The following study aims to identify barriers to treatment of alcohol dependence, as perceived by individuals suffering from AUD, by means of through a systematic review.

**Material and methods:** PubMed, Scopus and PsycINFO databases were searched for relevant publications the 27<sup>th</sup> of February 2018. 492 articles were initially identified, of which 16 were eligible for inclusion in our analysis. The study quality was assessed using the *Critical Appraised Skills program* (CASP) checklist for qualitative studies, and the *Checklist for systematic reviews (CFR)* for quantitative studies.

**Results and discussion:** This systematic review has investigated and identified barriers to treatment that vary greatly according to personal, cultural, institutional, ethnic and gender-specific factors. Three barriers proved to be prominent: Shame and stigma, lack of perception of treatment need and the paradox of both need for and fear of giving up drinking.

**Conclusion:** A recommendation is to include in-depth questions about barriers in large national surveys. Additionally, to apply special considerations with regards to the aforementioned specific factors, when developing and offering treatment to subgroups with AUD.

**Keywords:** barriers to treatment, alcohol use disorder, shame, stigma, fear, treatment need, knowledge

### 1. Introduction

Alcohol Use Disorder (AUD) is a relapsing disorder characterized by compulsive alcohol use, loss of control over alcohol intake and a negative emotional state when not using [1]. AUD is classified by the Diagnostic and Statistical Manual of Mental Disorders 5<sup>th</sup> edn. (DSM-5) as a maladaptive pattern of drinking, leading to clinically significant impairment or distress, manifested by certain criteria over a period of 12 months [2].

AUD is a global health concern affecting different countries, cultures, economic classes and ethnic groups. Annually, alcohol causes approximately 3.3 million deaths worldwide, and 5.1% of the global burden of

disease is attributable to alcohol consumption [3]. The health impact is most severe amongst young adults, where alcohol attributes to approximately 25% of deaths in the age group 20-39 [3].

WHO divides the causation of AUD into individual vulnerability and societal factors. Individual vulnerability factors include age, gender, familial factors and socio-economic status. Societal factors comprise culture, level of development, drinking context, alcohol production, distribution and regulation [3]. Therefore, this systematic review examines articles written on both user-based and clinical experience, as well as social analysis, to get a broad-based understanding of significant factors causing barriers to treatment.

While some people recover from AUD without treatment, others benefit from alcohol treatment services [4]. Tried and tested social and medical interventions can help individuals overcome their addiction. Ambulatory care is recommended for people suffering from AUD, and evidence-based treatment methods, specifically directed towards substance abuse, are the most effective [5,6].

Although many benefits from treatment, a low occurrence of treatment-seeking is a common denominator for the majority of people suffering from AUD [4,7]. Findings from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) show that in the USA only 14.6% of individuals, who met lifetime criteria for an AUD, reported having received alcohol treatment [7]. This denotes that a large group of individuals fail to seek help, are not offered help, or meet other limitations in accessing treatment to recover from their AUD.

### 2. Aim

By means of a systematic search in the literature, the aim of the present study is to identify barriers to treatment

of alcohol dependence, as perceived by individuals suffering from AUD.

### 3. Methods

This study is a systematic review of the literature in PubMed, Scopus and PsycInfo databases. The search was conducted 27<sup>th</sup> of February 2018.

The search terms were:

- Barrier\*
- “Alcohol use disorder” OR “alcohol problem” OR “alcohol abuse” OR “alcohol dependence”
- Rehabilitation OR treatment OR help seeking

All phrases were combined with AND.

#### 3.1. Inclusion criteria

The inclusion criteria were: 1) Perceived barriers to treatment for alcohol dependency by people suffering from AUD, 2) Alcohol abuse intervention where coinciding barriers were encountered and reflected upon, 3) Being available in full text, 4) Present in PubMed, Scopus or PsycINFO databases, 5) Published during the last ten years, 6) Being available in English.

#### 3.2 Exclusion criteria

The exclusion criteria were: 1) Focusing on other substance abuse, 2) Studies conducted on people with

known mental illnesses, 3) Viewing barriers to treatment from the perspective of health care workers and not by people with AUD.

### 4. Study Selection

Covidence [8], the primary screening and data extraction tool for Cochrane authors, was used to systematically review the selected articles. The PRISMA flow diagram was used to depict the process of article selection through the different phases of the systematic review [9].

The search yielded 723 hits. Duplicates (n=231) were identified and removed, resulting in 492 articles for screening. Further, articles were excluded based on title and abstract (n=339). Abstracts and full-text articles (n=153) were thoroughly assessed for eligibility, whereby 137 articles were excluded due to wrong indication (n=94), health care workers point of view (n=16), other main substance abuse (n=6), full text not available (=5), wrong patient population (n=5), wrong study design (n=3), wrong intervention (n=2), wrong setting (n=2), other mental illness (n=2), wrong comparator (n=1), and full text not available in English (n=1), Resulting in 16 included articles complying with the inclusion criteria. For a detailed overview of study selection check with the Figure 1.

All quantitative articles were reviewed using the *Checklist for systematics reviews (CFR)* [10] to ensure a critical and standardized assessment of the quality and analysis

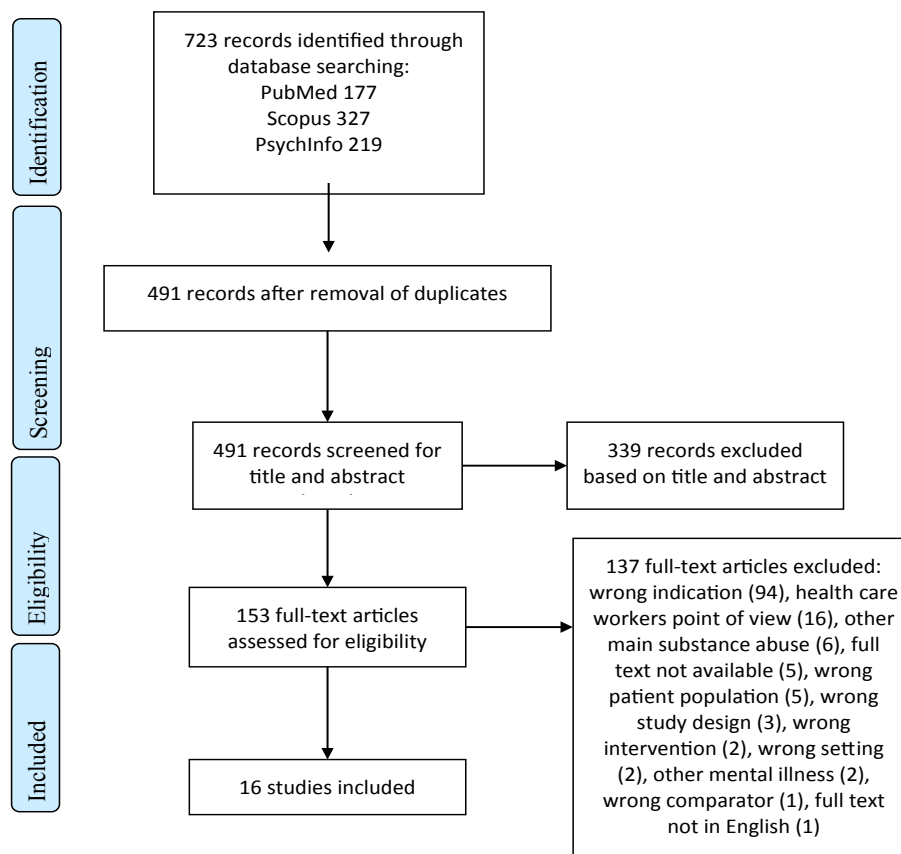


Figure 1: Flow chart for selection of studies

of the study. The articles were analyzed using a rating system of Excellent (5), Very Good (4), Good (3), Fair (2) or Poor (1), with a possible maximum rating of 65. Three evaluation criteria were unsuitable for the articles included in this systematic review, as they focused on outcome and exposure. Therefore, the following were excluded from the checklist: Is it possible that some participants already had the disease (outcome) that was discussed. Is the evaluation of the goals (outcomes) blinded in regard to exposure status? Is the degree of exposure or prognostic factors evaluated more than once?

For qualitative studies the *Critical Appraised Skills program* (CASP) [11] was used. The CASP assesses the articles rigour; has thorough and appropriate approach been applied to key research methods in this study, credibility; are the findings well-presented and meaningful, and *relevance*; how useful are the findings to you and your organization.

## 5. Results

### 5.1. Quality of the included studies

A series of the identified quantitative studies extracted data from the same epidemiological studies [12-15]. The seven quantitative studies receive a CFR mean score of 54.5 (43, 61) out of a possible 65. The external validity is rated as high in four studies, moderate in three and low in one of the quantitative studies.

Among the eight qualitative studies, there is great variation regarding the rigour, credibility and relevance. Two studies stood out as poorly executed, receiving the lowest evaluation in each category. Seven out of eight were considered to have low external validity. The majority were classified as having moderate internal validity. For a detailed review of quality evaluation given in the Tables 1 and 2.

### 5.2. Factors contributing to help-seeking

Several of the identified studies emphasize prior life disturbances to have had an impact on help seeking [16-18]. Gilbert et al. [17], recognizes life events like loss (both actual and feared of relationships), custody of children and identity as the breaking point for help-seeking. The decision to seek help is characterized by reaching a feeling of being out of control, referring to a perceived loss of agency, often concerning health. Naughton [16], concur with this notion, describing the primary motivator to seek treatment for alcohol abuse being disruption of health, psychosocial and situational domains, including access to children, relationships and legal consequences. Seemingly, resolving life disruption is presented to carry more weight than wanting to stop drinking. The goals of prolonging life and rebuilding family relationships are reported as defining incentives to change [19].

The severity of alcohol abuse is also described to influence the degree of help-seeking [12, 18, 20]. Barrio

et al. (2016) state that the amount of consumption is considerably higher in the treatment seeking group. Those who receive treatment have reached a serious level of dependency, thus more negative consequences of their addiction and supposedly a poorer diagnosis.

### 5.3. Barriers to treatment for alcohol dependence

The identified barriers to treatment in the studies vary according to the studies' design, size and data collection and the subpopulation being investigated. Some studies interview smaller subgroups, for example rural women in Mexico [21], whereas others use data from large Epidemiologic Surveys [13, 15, 18]. The data collected varies from small interview groups to large generalized questionnaires. Thus, there is no objective truth to or standard of the identified barriers. Albeit, there are common denominators describing the barriers. Shame, fear of stigma, lack of perception of treatment need and wanting to keep drinking are the most prevalent barriers described throughout the studies. Also impactful are barriers to access and lack of knowledge about treatment, financial barriers, cultural, ethnic and language barriers and barriers specific to gender, age and sexuality. Barriers may be grouped into individual barriers: *Shame and Stigma, Perception of Need for Treatment, Wanting to keep drinking*, and structural barriers like *Access, lack of knowledge, financial barriers, and cultural, ethnic and language barriers*. The barriers may be perceived differently due to subjective interpretation.

**5.3.1. Shame and stigma:** Being afraid of what people think and the shame and stigma related to having an AUD are the largest barriers to seeking treatment in numerous studies [12, 16, 18, 20-24]. In some studies, where data was collect by means of focus groups, the participants in the focus groups discuss the importance of keeping up appearances and the need to hide their problematic drinking behavior [13, 20]. Realizing the need for- and seeking treatment is viewed negatively by the participants and seen as both shameful and a sign of failure [20].

In a study by Schuler et al. [13] participants report being too embarrassed to disclose their addiction and being afraid of what their boss, friends and family would think. Similarly, Wiczorek [24] reveals that patients suffering from AUD are frequently ashamed of their illness and the risk of being associated with the treatment facility. In Naughton et al. [16], participants mention shame and stigma as a barrier to seeking help. In contrast, the study also reported that for one participant, feeling shame encouraged help-seeking.

**5.3.2. Perception of treatment need:** Lack of perceived treatment need was mentioned as the most profound barrier in several of the studies [13, 15, 18, 19, 23, 25], and was further discussed in both Gomez et al. [21] and Wiczorek [24]. The participants in the studies claimed

**Table 1:** Quality evaluation of the quantitative articles.

Author, year, country	Study design and aim	Population	Method and material	Outcome and results	Quality of the study
Barrio et al. 2016 Spain	Cross-sectional study Aim: to describe the differential characteristics of AD patients in primary care, distinguishing between those who receive treatment and those who do not and reviewing barriers to treatment.	n=1994 (total interviewed) n=1372 (completed questionnaire from doctor) n=118 (diagnosed with AD) Patients visiting a GP either diagnosed with AD or not. And patients with an AD receiving treatment or not. Conducted in Catalonia, Spain	Pt. (n=1372) were evaluated by their GP and interviewed by a member of the research team.  Sociodemographic, diagnostic and clinical data were collected to compare pt. with an alcohol abuse disorder to those without and to evaluate differentiating factors between those who receive treatment or not. And to research barriers to seeking treatment.	The patients with an AUD where younger (37.4 vs. 43.7), had lower socioeconomic status (48.3% vs. 33.3%), higher rates of unemployment (33.3% vs. 19.2%) and more psychiatric and physical comorbidities  Barriers to AD treatment (n=94): Fear of giving up drinking (11), Barriers to access of proper treatment (11) and shame (18) are mentioned as the most prominent barriers to treatment.	<u>Internal validity: High</u> All patients attending GP's office on a given day were asked to participate. Comparing checking GPs diagnosis of alcohol abuse to AUD scoring system  <u>External validity: Moderate</u> Large group of total interviewed, but small group of patients with AUD.  <b>Score: 58</b>
Chartier et al. 2016 USA	Cross-sectional study Aim: identify changes in perceived barriers to alcohol treatment and predictors of treatment use between 1991-92 and 2001-02, to potentially help understand reported reductions in treatment use at this time.	Subjects were selected who self-identified as White, Black and Hispanic. NLAES (1991-92) n=40707 NESARC (2001-02) n=41060 Respondents reporting barriers to treatment: (NLAES n=1072 (4.13%); NESARC n=1012 (4.11%)) AUD subsample: (NLAES n=2860; NESARC n=3168)	The data used were from the National Longitudinal Alcohol Epidemiologic Survey (NLAES) and the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC).  The surveys were compared in regard to: Perceived treatment barriers. Subgroups of topics were; Need, Enabling/restricting factors and Predisposing factors.	Barriers were ranked according to rate of endorsement in the combined NLAES-NESARC sample (1-21): Thought they should be strong enough to handle it alone (1), thought the problem would get better by itself (2), thought the problem wasn't serious enough (3), wanting to keep drinking (5).  Predisposing factors perceived as barriers were; Too embarrassed to discuss it (4), didn't think anyone could help (7), hated answering personal questions (9) and afraid of what other people would think (11).	<u>Internal Validity: High</u> Large sample size Participants included form a national survey, with variation in nationality and gender  <u>External Validity: High</u> Large group of subjects in both comparators  <b>Score: 61</b>
Schuler et al. 2015 USA	Cross-sectional study Aim: using data from a population-based sample of adults with alcohol abuse and dependence to: describe latent classes of perceived barriers to seeking alcohol treatment and identify characteristics associated with class membership.	Treatment-naïve adults with alcohol abuse or dependence with a perceived treatment need: n=1053  Mean age 43,8 years, 68% were male, 76% Non-Hispanic White, 9% Hispanic, 8% Black and 7% from other racial/ethnic groups.	Data are from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC 2001-02), a nationally representative survey of U.S. adults conducted by the National Institute in Alcohol Abuse and Alcoholism.  Using 15 NESARC items addressing specific barriers to treatment, a Latent Class Analysis was performed to identify subgroups of individuals with similar barrier patterns.  Latent class regression (LCR) was performed to estimate the associations between covariates and latent class membership.	Two subgroups emerged: The low barrier class (87%), characterized primarily by attitudinal barriers and the high barrier class (13%), characterized by significant attitudinal, financial, stigma and readiness for change barriers.  In both classes, the most frequently endorsed barrier was the attitudinal belief that they should be strong enough to handle their own.	<u>Internal Validity: High</u> Large sample size Participants included form a national survey, with variation in nationality and gender. Thorough description on how the themes where deduced from the data. Analysis may be subject to misclassification bias.  <u>External Validity: High</u> The study may be transferable to other national surveys. All NESARC data are self-reported and thus may be subject to recall bias or social desirability bias. Limited to barriers from the participants perspective.  <b>Score: 56</b>

		Interviewed sample of patients n=9098 (men: 3715; women: 5383)			<u>Internal validity: High</u>
		Hungary (n=2306) Spain (n=1994) Germany (n=1356)			GP interview with both structured and open-ended questions.
		Latvia (n=1302)			Large population
		Poland (n=1197)			Good refusal rate <20% on the individual level.
	Cross-sectional study	Italy (n=943)	The Alcohol Dependence in Primary Care study (APC study) collected data between Jan. 2013 and Jan. 2014.		
Probst et al. 2015	Aim: examine self-reported reasons for not seeking treatment and their association with AUD severity among primary health care patients diagnosed with an AUD.	Mean age: 44,3 years (SD 13,3 years)	Interviews with regionally representative samples of primary care patients from 6 European countries n=9098.	The most frequent reason for not seeking treatment was "lack of problem awareness" (55.3%). The second most common response was "Stigma and shame" (28.6%) followed by "encounter barriers" (22.8%) NS "cope alone" (20.9%).	<u>External validity: High</u>
Italy, Germany, Hungary, Latvia, Poland and Spain		Patients diagnosed with an AUD (via general practitioner or patient interview) n=1008.	Additionally, GPs had to fill in questionnaires assessing their patients' alcohol use and AUD and patients were interviewed independently by trained study personnel.	The results indicated lower probabilities of reporting denial "denial" and higher probabilities to report "encounter barriers" as AUD severity increases.	A literature review was identifying key reasons for not seeking treatment was performed to generate the basic coding scheme.
		Pt. not receiving treatment n=810			Comparison of AUDs within the last 12 months and lifetime AUD made it possible to be less prone to memory bias.
		Pt. giving a reason for not seeking treatment n=251			
		Patients with a lifetime AUD diagnosis; 77% did not receive treatment and n=664 reported a reason for not seeking treatment.			Main limitation: Cross-sectional design, not allowing any causal interpretation.
					<b>Score: 61</b>
			The data used were pooled from the National Alcohol Survey (NAS) collected by the Alcohol Research Group, from the 3 most recent waves; 1995, 2000 and 2005.		<u>Internal Validity: Moderate</u>
		All 3 NAS surveys include samples of US adults aged 18 and over.		The Latino sample has overall low utilization rate of services, but significantly higher utilization for men (vs. women) and English- (vs. Spanish-) interview respondents.	Subjects were given a list of 7 barriers to choose from, which could possibly eliminate personal experience.
	Cross-sectional study	n=4204 Latinos (men: 2024, women:2178)	The article reviewed utilization of treatment services based on gender, acculturation, social pressures amongst others.	Overall 61.2% of respondents did not seek treatment because they did not believe they had a problem. 19.1% of respondents considered treatment but did not go.	The cross-sectional study design is associated with a demand on the recollection of subjects. Inaccurate recall could affect reported rates of both alcohol problems and treatment utilization.
Zemore et al. 2009, USA & Mexico	Aim: to examine lifetime alcohol treatment utilization and perceived treatment barriers among Latinos.	1995: n=1598 2000: n=994 2005: n=1610	Perceived barriers to treatment were also examined; all drinkers reporting that they had never received treatment were divided into those who agreed or disagreed with the statement "I didn't think I had a problem".	For those who acknowledge a drinking problem, reported barriers to treatment were: "I thought it wouldn't help or that there wouldn't be anyone there that who understood me" (7.1%). "I didn't know where to go for help" (5.8%). "I was too afraid of people like my friends, people at work, or my doctor finding out" (5.5%).	<u>External Validity: High</u>
		The current analysis is restricted to Latinos, including all individuals self-identifying as Mexican American, Puerto Rican, Cuban American, Central/South American, or other Spanish cultural heritage	Those who disagreed were read a list of 7 barriers and indicated for each if this was a reason for not seeking help.		Large population.
					3 national studies were compared, and surveys used comparable instruments. Methodological studies suggest that the data are generalizable to the general population.
					<b>Score: 52</b>

Allen and Mowbray. 2016 USA	<p>Cross-sectional study</p> <p>Aim: to examine whether or not GLB (gay, lesbian, bisexual) individuals encounter unique barriers when pursuing treatment for alcohol related problems. This from a large and national representative sample, across multiple treatment sectors for alcohol related problems.</p>	<p>n=11182</p> <p>Analytical sample included respondents who participated in the Wave 2 follow-up interview and had a lifetime DSM-IV AUD diagnosis. These were further divided by sexuality;</p> <p>Heterosexual (n=10874), gay/lesbian (n=182) and bisexual (n=126).</p> <p>Those respondents reporting their sexual identity as either "not sure" or "unknown" (n=121) were removed from study</p> <p>Participants responding to barriers to treatment: n=1086</p>	<p>Using data from the National Epidemiologic Survey on Alcohol Related Conditions (NESARC) to examine service sector specific factors such as; utilization rates, self-reported treatment barriers and whether or not there were emergent differences among GLB individuals, after controlling for socio-demographic and clinical characteristics.</p> <p>This is done combining Wave 1 (2001-02) and Wave 2 (2004-05) NESARC.</p> <p>NESARC is a population representative survey of united states adults with ages 18 or older living in non-institutionalized settings.</p>	<p>GLB individuals report higher severity rates for AUD compared to heterosexual individuals</p> <p>Significantly more likely to utilize treatment services; Lifetime treatment utilization for alcohol related problems: gay/lesbian (24.1%) or bisexuals (29.3%) vs. heterosexual individuals (13.9%)</p> <p>Bisexual individuals reported significantly more barriers than heterosexual and gay/lesbian individuals.</p>	<p><u>Internal validity:</u> <u>Moderate</u></p> <p>Large population, but small subpopulation of GLB.</p> <p>Self-reported barriers from a collection of 26 options.</p> <p><u>External Validity:</u> <u>Moderate</u></p> <p>Large population, Comparison of 2 national samples over years</p> <p>NESARC did not include assessment of whether GLB individuals had access to facilities specializing in GLB treatment, which could increase likelihood of treatment utilization and outcome.</p>
Small et al. 2010 USA	<p>Cross-sectional regional study</p> <p>Aim: describe the barriers/facilitators and need for treatment among a community sample of rural and urban women at-risk drinkers.</p>	<p>n=733, male (n=494) and female(n=239) at risk drinkers.</p> <p>An at-risk drinker was defined as an individual who had evidence of lifetime alcohol abuse or dependence and exhibited problematic drinking behaviors such as episodic or regular heavy drinking in the past year</p> <p>The female group was divided into rural (n=113) and urban (n=126).</p> <p>Subject where selected from six Southern states: Alabama, Arkansas, Georgia, Louisiana, Mississippi and Tennessee.</p>	<p>Using a conceptual framework developed by Aday and Andersen (1974; Andersen, 1995), the data for this study were assembled from the baseline sample of individuals who participated in a large probability sample of rural and urban at-risk drinkers (n=733)</p> <p>In this dataset, the definition of rural was defined as living outside a Metropolitan Statistical Area</p> <p>The study compares differences between at risk drinkers on the basis of gender differences and the analysis of women only (rural and urban).</p>	<p>Gender differences in regard to barriers:</p> <p>Women identified two major barriers: treatment affordability and availability.</p> <p>Financial cost was a more prominent barrier for women than men, with some exemptions in regard to residential treatment.</p> <p>Women reported higher expected waiting times, (in days) to see a physician for alcohol problems than their male counterparts and higher expected wait days to see a mental health professional for alcohol problems than their male counterparts.</p> <p>A greater proportion of women, when compared to men, reported that they were less willing to participate in self-help groups and that they perceived a greater level of community stigma for those who consume alcohol</p> <p>Differences between urban and rural women:</p> <p>Rural women expected to travel longer distances (measured in minutes) when visiting a mental health professional or attending self-help groups for an alcohol problem.</p> <p>There were no measurable differences between rural and urban women on measures of acceptability, willingness, social support, or attitude toward seeking help for alcohol problems.</p>	<p><u>Internal Validity:</u> <u>Moderate</u></p> <p>A limitation in this study was the smaller number of women, particularly rural women, relative to men. Thorough description of how the themes were deduced from the data.</p> <p><u>External Validity: Low</u></p> <p>This is a cross-sectional regional study and our findings may not generalize to non-Southern U.S. populations.</p>
<b>Score: 53</b>					
<b>Score: 43</b>					

Venner et al. 2012 USA	Qualitative and quantitative mixed study  Aim: to examine barriers to help-seeking among urban-dwelling American Indians with alcohol dependence.	n=56  Subjects were divided into 2 groups: Those who were still struggling with alcohol dependence (n=16) and those who had resolved their dependence (n=40).  To be eligible for the study, individuals had to meet criteria for lifetime alcohol dependence and be American Indian.  The majority of participants reported belonging to only one tribe (n=45). Those who reported affiliation with one tribe were from a Southwest tribe (n=41) or Plains tribe (n=4). Other participants reported affiliation with more than one tribe (n=10) or being AI and some other ethnicity (n=1). Nearly all of the participants (95.8%) reported living away from reservations for more than one year.	The participants filled out a "Barrier questionnaire" where they could choose from a list of 50 well-recognized barriers to help-seeking for individuals with AUD.  Participants also completed an hour-long semi-structured interview focusing on attempts to resolve their alcohol use.  To facilitate the mixed method analysis, the authors coded each item from the barrier questionnaire into one of the four barrier themes of the structured interview.	Results for qualitative interviews: Personal barriers were most commonly cited (64%). 16 participants mentioned that they did not need outside help, 11 participants cited not wanting to stop drinking and 9 said that they were afraid to seek help.  Stigma related to help-seeking was at the root of many participants' fears regarding pursuing help. Seeking help meant being seen as weak, or permanently marked with a negative label.  Pragmatic barriers were the second most frequently mentioned (n=27). Difficulty funding treatment was mentioned more frequently than time constraints. Lack of finances also impeded access to traditional healing ceremonies.  Also mentioned were concerns about type of available help (n=23)  Results for quantitative interviews: The highest endorsement (94.6%) of any of the 50 barrier items, and also the highest of the 20 personal barrier items, was for liking to drink and not wanting to give it up. This was followed by thinking one could handle it on his/her own (87.7%), too much trouble to seek help (80.4%) and not thinking the alcohol problem was serious (75%).	<u>Internal validity:</u> <u>Moderate</u> Participants were recruited through mailed letters, flyers, newspaper advertisements and by word of mouth. This may cause bias in regard to the type of subject who contacted researchers.  Personal interviews combined with quantitative questionnaire allowed for an in-depth analysis of personal barriers.  <u>External validity:</u> <u>Moderate</u> The study approach can be used to examine other native American/minority communities. Small no. of participants. There was considerable agreement across the qualitative and quantitative results in terms of the types of barriers experienced. The coding manual was developed based in part on the Barriers Questionnaire and this may have artificially inflated the correspondence between the qualitative and quantitative data.  <b>Score: 52</b>
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**Table 2:** Quality evaluation of the qualitative articles.

Author, year, country	Study design and aim	Population	Method and material	Outcome and results	Quality of the study
Naughton et al. 2013 UK	Qualitative study  Aim: to explore what motivated problem drinkers with varying treatment experience to seek help in order to understand why there is typically a long delay (9 years average) between problem recognition and treatment access.	n=19  14 men and 5 women aged 25-67 with self-reported primary dependence concerns with alcohol.  All white British. 53% were using or had previously used drugs. Participants were recruited from a mixture of housing organizations and alcohol services in the South-West of England.  Conducted in Gloucester, UK	In depth semi-structures interviews with problem drinkers with varying levels of treatment experience (n=19)  A purposive sampling strategy was adopted to identify individuals with varying levels of treatment experience, categorized into tiers 1-4.	No gender difference was found.  Barriers to AD treatment was described as a lack of life disruption. Whereas those who experienced life disruption thought of this as motivation to seek help. Most common factors of concern were health, access to children, relationships and legal consequences.  Living in shelters and associating with other alcoholics worked as barriers to some, but as motivation to seek help for others.  The study suggests an alternative approach to offering treatment, not only focusing on the desire to stop drinking but other more motivating factors. It also emphasizes that there is a disparity in factors acting as barriers to treatment for some and motivating factors to others.	Rigour: Excellent Credibility: Excellent Relevance: Good  <u>Internal Validity: High</u> A combination of loose themes and open questions allowed the participants to describe own experiences in own terms.  <u>External validity: Low</u> Small population where recruitment process resulted in little variation in terms of socio-economic status and ethnicity. The participants themselves reached out to be interviewed, which possibly reflects the subject's resources.



Gilbert et al. 2015 UK	Qualitative study  Aim: to explore how the alcohol treatment system is experienced by service users, identifying barriers and facilitators that influence treatment outcomes.	n=20  11 men and 9 women. Age over 18, having had contact with the participating NHS community addiction services in the past 5 years; and with a diagnosis of alcohol dependence.  All but one was White British.  Conducted in London, UK.	Patients were recruited as part of a pilot randomized control trial of assertive community treatment for alcohol dependence compared with treatment as usual. Only the treatment as usual group were eligible to take part in this study.  A sampling framework was used to recruit a maximum variation sample.	The study focused on experiences of alcohol treatment services, comprising seven themes. Among them: Recognizing tipping points, treating alcoholism and working with drinking.  Factors contributing to help-seeking where identified as:  Fear of loss; of job, relations, children.  Embodied experience of alcohol dependence such as sickness, tiredness, diarrhea.  The role of the family was highly influential in help-seeking; however, this alone was necessarily conducive to treatment.  Barriers to help-seeking were not directly discussed.	Rigour: Good Credibility: Good Relevance: Fair  <u>Internal Validity: Moderate</u>  Open-ended questions allowed participants to share their experiences with treatment freely. Prompts helped guide participants to certain topics.  <u>External Validity: Low</u>  Identified measures were taken to insure a range of perspectives. Small population where all participants were allocated from the same treatment program.  Rigour: Excellent Credibility: Excellent Relevance: Excellent
Wallhed Finn et al. 2014 Sweden	Qualitative study with focus groups and in-depth interviews  Aim: to describe how people with alcohol dependence perceive and discuss treatment for AUD and their reasons for seeking and not seeking treatment.	n=16895 (had earlier responded to questionnaires about drinking and smoking habits) were randomly selected by age and gender.  n=3648 completed the questionnaire  n=812 met the inclusion criteria (age 18-65, resident of Stockholm county, having a hazardous alcohol consumption and meeting DSM-IV criteria for AUD).  n=248 agreed to be contacted regarding study.  n=32 participated in the study between December 2011 and May 2012.	Alcohol dependent adults from the general population (n=32) participated and were divided into 7 focus groups and individual interviews in Stockholm during 2011-2012.  Data were analyzed in relation to the participants grade of alcohol dependence, age and occupational status.  14 individual interviews were conducted, were 2 participants from each focus group were randomly selected.	A dominant theme throughout focus groups as well as in the individual interviews was how problematic drinking, alcohol dependence and seeking treatment are closely related to shame and stigma!  Desire to deal with alcohol problems on one's own was mentioned by several as a barrier to treatment.  The view, that seeking treatment required total abstinence; a common view, especially in the age group 18-34, was that seeking treatment required total abstinence. This was seen as a barrier to treatment, as participants were more open to cutting down or drinking in moderation, rather than total abstinence.  Limited knowledge about the consequences of heavy drinking on health could also be considered a barrier.  Furthermore, limited knowledge about intervention and treatment possibilities could also act as barriers.	<u>Internal Validity: Moderate</u>  Focus group discussions between strangers may not always generate personal accounts.  Personal interviews were conducted to enrich the data. The open ended-semi structured questions endorsed sharing of personal experience and point of view.  The selection process had a considerable number of non-responders, which is a significant limitation of the study.  The participants were recruited in a nonclinical setting and therefore included both participants who had gone through the treatment seeking process and participants who had not.  <u>External Validity: Moderate</u>  Despite of the qualitative study design, participants were selected from a large population at random, with a selection of age and gender group, giving a varied population.

Haighton et al. 2016 UK	<p>Qualitative study, interviews and focus groups</p> <p>Aims: to gain an in-depth understanding of experiences of and attitudes towards, support for alcohol related health issues in people aged 50 and over.</p>	<p>n=24 (interviews) 12 men, 12 women, ages 51-90 years</p> <p>n=27 (focus groups) 6 men, 21 women, ages 50-95.</p>	<p>Qualitative interviews (n=24) and focus groups (n=27) were carried out with a purposive sample of participants who consumed alcohol or had been dependent.</p> <p>Purposive sampling aimed to recruit both genders and represent a broad range of ages and self-reported drinking practices and was intended to reflect those who might request help or support from the UK's leading charity for older people.</p>	<p>Reasons for delayed help-seeking:</p> <ul style="list-style-type: none"> <li>Perceived it as something to be dealt with by themselves.</li> <li>They felt able to function while drinking</li> <li>Perceived a strong stigma attached to being a dependent drinker.</li> <li>Had been unaware or uncertain of what help was available.</li> </ul>	<p>Rigour: Good Credibility: Fair Relevance: Good</p>
Gómez et al. 2015 Mexico	<p>Case study with qualitative methodology: ethnography, focus groups and semi-structured interviews</p> <p>Aim: to analyze the metaphors and dilemmas used by people who consume alcohol and their family members, in terms of their healthcare needs, pursuit of treatment, application of regulations and obstacles faced.</p>	<p>The study took place in a rural community with 768 inhabitants. The study population was made up of 9 alcohol consumers (3 men and 6 women) and 4 relatives of consumers.</p> <p>The selection of participants was based on the following criteria: being a consumer of excessive alcohol or having a family member who was.</p> <p>Conducted in a rural community in Morelos State, Mexico.</p>	<p>Field diaries, semi-structured interviews and focus groups were carried out.</p> <p>The interviews (n=7) and focus groups (n=2) with six underage women were recorded and later transcribed in Word along with the field diary notes and incorporated into the <i>Atlas.ti v.5</i> program for the information to be categorized, ordered and analyzed.</p>	<p>Barriers to treatment for alcohol abuse:</p> <ul style="list-style-type: none"> <li>Lack of definition about the limit to control alcohol abuse.</li> <li>Lack of knowledge around treatment options</li> <li>The stigma that exists of accepting that one has no control over their drinking causes them shame, which impedes them in attending self-help groups, therapy, or another type of treatment.</li> </ul> <p>Alcoholics Anonymous as a stigmatized group: Consumers of alcohol mentioned that AA was not an option for them, due to the dynamic it creates of everyone talking about their problems and dealing with personal situations. Confidentiality is not guaranteed, and they could even be laughed at because of their experiences.</p> <p>The barriers to seeking treatment are centered around the contradictions the subjects have in their understanding of problem drinking. At first, families tolerate consumption, which is culturally normalized, and they do not seek treatment until consumption increases or is out of control.</p> <p>For the women of the community there was a conflicting idea of either; Not to drink, due to the shame and risk of mockery or sexual abuse it could cause. And drinking: to prove a point of not being under the control of a man and acting more civilized and not rural.</p>	<p>Rigour: Poor Credibility: Fair Relevance: Poor</p> <p><u>Internal Validity: Low</u> No systematic recruitment, small population. Topics were not structured in the text.</p> <p><u>External validity: Low</u> Small population within small rural community. No information about content of the semi-structured interviews.</p>

Jacobs & Jacobs 2014 South Africa	Qualitative study with a life-story narrative interview method.  Aim: to explore mother's AUD with the intention of answering the main research question: How does women's alcohol use disorder affect their child rearing abilities?	Participants women (n=10, age range=30-65, ethnicity=30% lack and 70% White) were volunteers recruited through collaboration with the Alcoholic Anonymous organization.	Narrative interviewing was used to construct women's perspectives on their AUD.	The participants experienced internal, external and structural barriers to recovery from their heavy drinking episodes.  They believed physicians did not ask them about drinking, because they were afraid to and didn't want to shame the patient.  Shaming from husband enforced secretive drinking and not seeking help.  Other services than AA where either for people with more severe abuse or considered too expensive.	Rigour: Poor Credibility: Poor Relevance: Poor  <u>Internal Validity: Low</u> No description of recruitment. No systematic description of  <u>External Validity: Low</u> Low no. of interview subjects
Wieczorek 2017 Poland	Qualitative study with semi-structured interviews  Aim: to identify the barriers making it notably more challenging to access clinics in urban and rural communities.  Two main research questions were formulated: 1. What treatment-preventing barriers are identified by the addicted individuals and therapists? 2. What are the differences between limitations in urban and rural areas?	64 interviews; whereof 50 patients (25 per locality) and 14 therapists (7 per locality)  Patients were chosen from the following criteria; having had an alcohol dependence, received therapy in one of the chosen clinics.  Therapist were from the clinics and had treated their patients actively.  The survey was conducted in two clinics, one in Warsaw's biggest district and one in a county town (20K inhabitants). The clinic, being the only one in the district, served the surrounding areas (total 80K inhabitants).	The interviews contained semi-structured questions with a standardized list of desired information.  While conducting the research, two interviewing patters were utilized: one for the patients and one for the therapists	Respondents from Warsaw and in the rural community had some of the same barriers to seeking help: Shame associated with seeking help, waiting time for stationary support, meeting intensity and general clinic condition  Barriers for respondents from Warsaw: Long waiting time for outpatient treatment and individual appointments, deaf and mentally ill individuals were excluded from receiving therapy and unattractive programs requiring complete abstinence.  Barriers for respondents from rural communities: Lack of anonymity of treatment associated with too low number of clinics in the district, lack of choice in terms of preferred facility, commuting time and costs, as well as no inter-institutional cooperation  Structural barriers were mainly noticed by the patients in the rural clinic.  The group of structural barriers incorporates: geographical location of the facility, duration and costs of commutation to the facility, therapy organization, treatment offer as well as waiting time.	Rigour: Good Credibility: Good Relevance: Excellent  <u>Internal Validity: Moderate</u> The examined sample included addicted individuals who have been treated in outpatient clinics. The alcohol dependent persons who had not decided to start therapy were not included.  Recruitment of patients, where they themselves sign up to be interviewed can cause bias.  The semi-structured interview allows the participants to speak freely which reduces bias  <u>External Validity: Low</u> Study design and low number of participants makes this study difficult to transfer to larger populations.

to be strong enough to handle it themselves, they thought the problem would resolve and that the AUD was not severe enough to require treatment [18, 25].

In Probst et al. [25] patients considered "lack of problem awareness" to be the most prominent reason for not seeking treatment. Repeated in Zemore et al. [15], 61.2% of respondents did not seek treatment because they did not believe they had a problem, in Haighton et al. [19] the majority perceived their drinking as something to

be dealt with by themselves, and in Venner et al. [23], subjects said they did not need outside help.

In Naughton et al. [16] participants described the path to seeking help as non-linear, and how each encounter with a treatment facility added to recognizing and accepting a need for treatment. There appears to be considerable distance in both time and attitude between problem recognition and acceptance of the need for treatment.

**5.3.3. Fear of giving up drinking or wanting to keep drinking:** Venner et al. [23], who investigated barriers specifically for Native-Americans in rural communities in the US, found the highest endorsement (94.6%) of any of the 50 barrier items, were ‘enjoying drinking’ and ‘not wanting to give it up’. Similar findings were reported in Probst et al. [25] (72.9%), in Chartier et al. [18] (no.5) and in Barrio et al. [12].

Wieczorek [24] examined a different angle. Traditional treatment options often require total abstinence, where patients under the influence were not offered treatment. Wieczorek found that these requirements disqualify people with alcohol dependence who are not ready to stop drinking completely at the start of the treatment.

**5.3.4. Access to treatment:** “I didn’t have any way to get to a treatment facility” and “I didn’t have the time” were reasons mentioned by less than 10% of participants in Chartier et al. [18] and Schuler et al. [13]. However, in Wieczorek [24] and Venner et al. [23], structural barriers were predominant in the rural community, where lack of transport, distance, and long waiting list are all reported as profound barriers to treatment.

Barriers to access can also be understood from a financial angle. In Schuler et al. [13], 7.9% of respondents reported wanting treatment, but their health insurance did not cover the cost and 14.2% of respondents stated that they could not afford to cover treatment costs. Similarly, in Small et al. [22], when asked about their perception of the cost of going into a residential treatment program, 33.7% of the women reported that the cost of treatment was greater than what they could afford.

Not seconding that motion, Chartier et al. [18] examined the relationship between income and treatment, finding that the correlation was invariant and non-significant in predicting treatment use. Barrio et al. [12] found that unemployment rates were higher in the treatment seeking group (65% vs. 25.5%).

Venner et al. [23] highlight that the health services available to Native-Americans compared to other public health services, are underfunded. In these communities, the lack of insurance or disposable income was the second most common barrier.

Participants from rural areas report encountering structural barriers, such as lack of transport or treatment facilities as more prominent barriers compared to participants from larger cities [23, 24]. In countries with privatized health sectors, a lesser utilization of treatment correlated with a lower rate of income and/or lack of health insurance [18, 23]. Another issue that has been raised is the lack of anonymity when seeking treatment in smaller communities [23, 24].

**5.3.5. Lack of knowledge about treatment options:** In Haighton et al. [19], being unaware or uncertain of what help is available was reported as the third most mentioned

barrier. In Gomez et al. [21] respondents described how “*I just don’t know what to do and there are no good options for treatment*”.

According to Chartier et al. [18] respondents were uncertain about the treatment system, fearful of hospitalization and unaware of available treatment options. Comparably, in Wallhed et al. [20], participants’ knowledge of interventions for alcohol dependence was limited to treatment with having heard about Disulfiram, residential treatment and lifelong abstinence. These options were considered unappealing, resulting in reluctance towards treatment seeking. Additionally, Venner et al. [23] reported that some participants were simply unaware that treatment was a possibility, did not know where to go, or thought that treatment was not available for Native-Americans.

**5.3.6. Cultural, ethnic and language barriers:** Chartier et al. [18] report that the higher the fear of stigma, the less the likelihood to seeking treatment, and that Blacks and Hispanics compared to Whites, were particularly concerned about stigma.

Zemore et al. [15] studied the Latino population in the US and found that English speaking (vs. Spanish speaking) respondents were significantly more likely to report receiving some forms of institutionalized treatment, including services at a hospital/clinic and social services/other professional treatment.

Differences between English vs. Spanish speaking subgroups were most profound for issues surrounding communication, providers and perceived lack of a shared racial/ethnic background. This was also noted in Venner et al. [23], where a participant stated, “The AA (Alcoholics Anonymous) I went to, there was just a bunch of old white men drinking coffee and smoking cigarettes. So, I thought, nah, *‘I’m not one of them’*”.

In the studies researching minority groups and rural communities, lack of anonymity in treatment facilities was of great concern. In Gomez et al. [21], AA is seen as a stigmatized group. Consumers of alcohol mentioned that AA was not an option for them, due to the dynamic it creates of everyone talking about their problems and dealing with personal situations. Confidentiality is not guaranteed, and they could even be laughed at because of their experiences [20]. Lack of anonymity is also emphasized in Wieczorek [24] associated with a low number of clinics in the district, and lack of choice in terms of preferred facility.

**5.3.7. Gender specific barriers:** Zemore et al. [15] discuss gender-specific barriers to treatment utilization and find that among those with a lifetime dependence of alcohol, the utilization of AA was twice as high among men, compared to women. The study also finds that among women classified with an AUD, 69.3% (vs. men 59.4%) reported that they did not believe they had a problem. Small et al. [22] states that women perceived

a greater level of community stigma for those who consume alcohol, and concurrently Jacobs et al. touch on how women feel more pressured to hide their drinking [25].

In Gomez et al. [21], the young women shared experiences ranging from feelings of shame to feelings of superiority to other young women who did not drink. This was related to the duality of appearing like a woman from the town or the city. There is the “*small town girl*” who is afraid of the punishing “gossip” related to drinking and there is the “*woman of the city*” who seems unconcerned with “chitchat” and is free to make her own decisions about her body.

Small et al. [22] reveal that women seem to have other predisposing factors of AUD than men. On the question of accessibility of health services, women reported higher expected wait times (in days) to see a physician for alcohol problems than their male counterparts, and higher expected wait days to see a mental health professional for alcohol problems than their male counterparts.

**5.3.8. Age specific barriers:** In Barrio et al. [12], patients seeking treatment are older (44 vs. 36 years of age) than those not. This is also noted by Zemore et al. [15], who found that greater use of any service was predicted by older age. Haighton et al. [19] note that the older age group (50-95 years) may perceive distinct barriers and incentives for seeking help for alcohol. In their study, the elderly subjects described feeling ashamed of being seen as an alcoholic, feeling that services regarded them as “on the shelf” and perceiving themselves as too late in life to change or benefit from treatment. They were concerned how to cope with boredom, isolation and other health problems without alcohol. One participant thought that many general practitioners (GPs) did not understand problems that middle aged and older people faced with drinking, but simply referred them on without necessarily knowing the most appropriate service. Among the oldest group of interviewees (aged 70+) all but one said their GP no longer asked about alcohol.

**5.3.9. Sexuality:** Allen et al. [14] found that individuals identifying as gay/ lesbian or bisexual (GLB) had a significantly higher prevalence of AUD, compared to individuals who identified themselves as heterosexual (62% vs. 42%). The GLB population also had a higher prevalence of anxiety disorders, lifetime drug use disorders, and mood disorders compared to the heterosexual population. When examining the barriers associated with treatment utilization, GLB individuals were significantly more likely to report more barriers as shame, waiting time for treatment, that their drinking problems were not serious enough, and they want to keep on drinking, compared to heterosexual individuals.

## 6. Discussion

The systematic review revealed a series of barriers to treatment seeking, experienced by the individuals who

suffer from AUD. In particular, individual barriers like *Shame and Stigma*, *Perception of Treatment need*, *wanting to keep drinking* and structural barriers like *Access*, *lack of knowledge*, *financial barriers*, and *Cultural, ethnic, and language barriers* were described in the literature.

### 6.1. Quality of the studies

Only a small number of articles were available concerning barriers from a user’s perspective. The studies complying with the inclusion and exclusion criteria vary in location, field of interest and study-design, whereby the populations can be considered incomparable.

The *Checklist for systematic reviews* is not completely compatible with the studies being examined in this review. Many questions refer to exposed vs. non-exposed group, diseased vs healthy population, and intervention and outcome. Three questions were removed, resulting in a lesser quality assessment.

The quality of the quantitative studies was moderate to high for internal validity and high to low at the external validity. The study of Small et al. [22] had the lowest quality score, due to a small population of women in the study. The highest quality is presented by Chartier et al. [18] with a population of 2,084 participants enrolled from a large national sample size. The overall mean score for this study was 54.5 out of 65, and this study is one of three American cross-sectional quantitative studies that extracted data from the following national surveys: NESARC, NAS and NLAES [13, 15, 18]. Although the studies use the same source of data, they have extracted and investigated material differently pertaining to their field of interest.

Similarly, the quality of the qualitative studies was moderate, ranging from good to fair and low. Among the diminishing factors were the formats of having open focus groups that weakened participant’s sense of anonymity and thereby could affect how they choose to answer. Additionally, several studies have a disproportionate gender, representation of female participants.

Among the qualitative studies, the greater percentage used a mixed approach with semi-structured and open-ended questions. Three studies opted for non-structured in-depth interviews, which resulted in a less concrete analysis of barriers, but yielded barriers not discovered in the structured interviews [19, 20, 23]. The qualitative study design limits the external validity but gives a descriptive insight to personal barriers which can inspire future studies. Overall, the quality of the studies is moderate. Our recommendation to future studies is to include in-depth questions regarding barriers to treatment for alcohol dependence in large national surveys. Our recommendation to service providers is to apply special consideration to subgroups differentiation factors when developing and offering treatment.

## 6.2. Shame and stigma

Shame is defined as an effective reaction that follows public exposure (and disapproval) of some impropriety or shortcoming [25, 26]. Stigmatization occurs when a person possesses (or is believed to possess) a certain attribute or characteristic that conveys a social identity devalued in a particular social context [27].

Shame and stigma are often used interchangeably and are relationship- and context specific [27-34]. This can be demonstrated by comparing different studies. In Gomez et al. [21], some female interview subjects viewed excessive drinking as positive, showing they were not controlled by a man. Whereas, in Jacobs et al. [35] female drinking was frowned upon and hidden. Further exemplified in Gomez et al. [21], interviewing women in a rural Mexican village, alcohol consumption among minors is both culturally encouraged and morally rejected. During public holidays, it is noticed that alcohol consumption by minors, including children, is socially accepted and encouraged. When interviewed in other contexts, most agreed that underage drinking is bad and should be restricted.

Stigma can also vary in the context of power and social status. Zemore et al. [15] stated that the less acculturated US Latino population experienced greater stigma and were less likely to seek help. Shame and stigma exist where labeling, negative stereotyping, exclusion, discrimination and low status co-occur in a power situation. By admitting to having problems with alcohol and seeking treatment, a change of identity takes place, gravitating toward the stereotype of "the alcoholic" [27]. Being labeled an alcoholic rather than as a person suffering from AUD can increase shame and stigma, lack of willingness to admit to one's addiction and thereby lack of perception of treatment need.

To reduce these barriers, it has been suggested to introduce quantitative parameters like development in amount of alcohol consumed over time, rather than focusing on dependence and addiction [28]. Allowing problems derived from alcohol to be described in a continuum could counteract labels such as "alcoholic vs. non-alcoholic" [12, 25]. Similarly, monitoring patients' blood pressure has been suggested to serve as a model for routinely assessing alcohol use in primary care, instead of solely focusing on addiction [29].

## 6.3. Lack of perception of treatment need

Lack of perception of the need for treatment is one of the most recognized barriers. There may be different reasons why subjects do not feel a need for treatment: They can be in an early stage of addiction, where the alcohol use does not cause a disturbance to their life or think that only people with severe alcohol problems require treatment and they should be able to handle it on their own [16, 18, 25].

Instigating universal screening for alcohol abuse in primary care settings has been suggested to reduce the impact of this barrier. Rehm et al. [28] propose the idea of implementing universal strategies for identifying and intervening in relation to AUD. One such strategy is the SBIRT: Screening, Brief Intervention and Referral to Treatment [30]. The SBIRT screening component may help identify non-treatment seeking individuals and be beneficial to individuals with no perceived treatment need, which makes up most individuals with alcohol problems. Given that attitudinal barriers may be the most modifiable, interventions such as SBIRT may be effective in reducing stigma and increasing motivation for behavioral change [13].

## 6.4. Fear of giving up drinking

Fear of giving up drinking can accompany the shame and stigma associated with utilization of treatment. Additionally, it can be attributed to alcohol being strongly connected with one's social-life, being used to mask other issues or that one is not experiencing alcohol as harmful [19, 21, 23].

In several studies, patients thought total abstinence was a requirement to receive treatment [14, 19, 20, 24]. Participants believed their GP had high expectations of abstinence or drastic reductions, which they were unable to meet [19].

For patients not ready to give up drinking, treatment approaches, emphasizing goals other than abstinence, may be considered. One such approach is Guided Self-Change (GSC), which is a brief cognitive-behavioral motivational intervention, designed to assist problem drinkers in recognizing and using their own personal strengths to resolve drinking problems [31, 32]. GSC and the implementation of strategies as SBIRT, for instance, in general practice, hospitals etc., may be helpful to increase awareness in the population of problem drinkers [20, 33]. The strategy may contribute to making the treatment service available to a larger population and reducing barriers to treatment.

## 6.5. Access to treatment

Lack of resources such as health insurance, financial constraints, and transportation are aspects of inadequate access to treatment. Additionally, structural barriers include treatment wait time and geographical proximity to the treatment facility [13, 22-24]. These barriers vary greatly depending on the research setting, cultural and ethnic subgroups, and the financial situation of the interviewees [18-21, 23, 24].

Several studies recommend making screening for AUD and subsequent treatment part of primary care, rather than segregated specialty care [19, 23, 24]. Such change could potentially lower treatment costs and waiting time, in addition to increasing accessibility in rural communities [24]. Haighton et al. [19] concur, stating that primary

health care has emerged as being important in both the identification of AUD and the provision of treatment.

Another suggestion on how to improve access to health care in rural areas and address the issue of anonymity, is by increasing access to treatment *via* telemedicine [23]. WHO reports that using Information systems and Communication Technologies (ICTs) has great potential to provide accessible, cost-effective, high-quality health care services. Telemedicine uses ICTs to overcome geographical barriers and increase access to health care services [34].

Albeit being a viable option in rural communities, telemedicine could be less trusted as an effective treatment option in urban cities [20]. In the study of Wallhed et al. [20], the participants from Stockholm were generally negative toward internet-based treatment or telephone helplines, as they did not believe these types of treatment had any effect on drinking.

### 6.6. Lack of knowledge about treatment options

Lack of knowledge about available treatment options or where to find them, or even being miseducated about what the treatment entails are all significant barriers to treatment seeking [18-21, 23]. These barriers might be associated with the aforementioned barriers of shame and stigma associated with AUD. Followingly, this may result in reluctance in asking health personnel or next of kin about the options available and what the treatment comprises [20].

According to Schomerus & Angermeyer [29] increasing the knowledge about alcohol dependence and treatment may be equally as important as reducing stigma.

Thus, there is a need for increased public education, not only on the consequences of alcohol abuse, but also the range of successful interventions [18]. By improving public health literacy on alcohol use, dependence, and treatment options, barriers to treatment could be lowered [19, 20]. Wallhed et al. [20], presents two significant issues regarding treatment that need to be clarified to the public. Firstly, seeking treatment does not necessarily mean lifelong abstinence from alcohol. This is important to note due to findings showing that controlled drinking is more feasible for people with mild to moderate dependence. Secondly, there is a need to increase the knowledge about pharmacotherapy, as Acamprosate and Naltrexone were unknown to most participants but were attractive treatments when presented.

Possible ways to better inform the public could be *via* the internet and telephone helplines, as they are seen as attractive first steps for assessment of alcohol use and guidance to treatment [20]. As previously mentioned, primary care facilities and general practitioners may play an important role in alcohol treatment. It is essential to better communicate their ability to treat people with AUD, as their expertise in this field is often questioned [19, 20, 23, 24]. Another way to lower the threshold

could be to offer a wide range of treatment options, which would increase the level of autonomy in treatment, thereby making it more desirable for patients [20].

### 6.7. Cultural, ethnic and language barriers

When examining the studies focusing on disparities between ethnic groups within a country and those who researched rural vs. urban barriers, it becomes apparent that cultural, ethnic and language differences can reinforce barriers to treatment [15, 18, 21, 23, 24].

The fact that minorities often have a higher self-perception of stigma needs to be taken into consideration by service providers [15, 18, 23]. Individuals with higher perceptions of stigma are less likely to use alcohol services, thus special measures must be taken in lowering the barriers to treatment for these groups [18].

Some minorities might find it challenging to fit into a Eurocentric treatment model. Venner et al. [23], discovered unique barriers for Native Americans associated with a lack of cultural consideration. Treatment providers, having another culture, who did not include alternative forms of traditional healing, and exposed prejudice regarding native American drinking habits, made treatment less appealing. The perceived lack of a shared racial/ethnic background between providers and receivers of treatment proved a significant barrier for the Latino population in the US [15].

Utilization of alternative forms of help, like traditional tribal healing, could help lower barriers to treatment among the native American population. The extent to which treatment programs can facilitate connections with cultural educators or traditional healers could be extremely valuable in reaching native American populations and other minorities [23]. Similarly, high levels of cultural barriers among Latinos in the US underline the need for treatment agencies serving Latino populations to employ Latino staff, to offer cultural and Spanish-language training for existing staff, and to generate community awareness around their use of such practices [15].

In Zemore et al. [14], Spanish speaking respondents were more likely than English speaking respondents to report treatment barriers of every kind. For instance, knowing where to go for treatment was a particularly prominent barrier for Latinos. By giving greater attention to community education and optimizing referrals from e.g. primary care and social service agencies, treatment utilization among minorities could be optimized [15].

The number of articles that focus on culture, ethnic and language specific barriers are, however, very limited. Nevertheless, it can be assumed that providing culturally sensitive treatment options compatible with philosophical, religious, or cultural beliefs may help reduce barriers to treatment among minorities or different ethnic groups [23].

### 6.8. Barriers specific to gender, age and sexuality

Women, elderly and individuals identifying as gay/lesbian or bisexual all reported higher barriers to treatment compared to straight young/middle-aged men [14, 15, 19, 22, 35]. Corresponding with the discussion regarding minorities, these subgroups require special consideration when developing and offering treatment.

Women experience several distinct barriers to seeking treatment. Amongst them, having other predisposing factors to AUD than men, including having experienced higher levels of sexual abuse and violence, may increase the need for other concurrent treatment. Additionally, they endure lower accessibility to treatment, higher levels of stigma and lower acceptance of own addiction [15, 21, 22, 35].

There are several important areas of concern that must be addressed to enhance treatment seeking and provision of service among “at risk” women. Small et al. [22], suggests that interventions at the policy level rewarding pregnant and women with children for seeking treatment would work as a step toward eliminating treatment barriers among women. Moreover, specialized treatment services that address psychiatric comorbidity, economic disparities, and parenting/childcare must also be considered.

Jacobs et al. [35] discovered that primary health care professionals are reluctant to offering brief interventions to women who appear with symptoms of AUD due to the stigma of being a women/mother who drinks. This exemplifies the need for further training amongst health care professionals to overcome personal barriers and provide the necessary information and intervention.

The elderly are often more isolated (not part of the labor market and not responsible for upbringing of children), and their alcohol consumption may, therefore, be easier to conceal. Haighton et al. [19] suggest that primary health care is important in the identification of problems and provision of advice, given that this is where middle aged and older people first seek help for their alcohol problems. Problematically, GPs and nurses underdeliver health-promoting advice to senior citizens or avoid discussing alcohol habits altogether, as they worry about depriving them of the social benefits of drinking [19]. To solve this there is a need for training of community nurses and other health care professionals to improve the detection and treatment of alcohol problems among older people [19].

Allen and Mowbray [14], aimed to examine whether GLB (gay, lesbian, bisexual) individuals encounter unique barriers when pursuing treatment for alcohol related problems. The barriers examined were assessed through the NESARC data collection team and were not meant to be exhaustive, thereby limiting the generalizability [14].

Other studies show that within the health care system, sexual orientation-based discrimination, including the presumption of heterosexual orientation among clients,

often lead to poor communication, the incorrect framing of social relationships, and incorrect clinical judgments on treatment planning [14]. Allen and Mowbray [14] found that the GLB population encounter more barriers to treatment than the heterosexual population, showing that there is a need for further investigation and deliberation.

### 6.9. Strengths and limitations

Only a small number of articles were available surrounding barriers from a user’s perspective. The studies complying with the inclusion and exclusion criteria vary in location, field of interest and study-design, thereby the populations can be considered incomparable. The Checklist for systematics reviews [10] is not completely compatible to the barriers being examined in this review. Many questions refer to exposed vs. non-exposed group, diseased vs healthy population, and intervention and outcome. Four questions were removed, resulting in a lesser quality assessment. Among the qualitative studies, the greater percentage used a mixed approach with semi-structured and open-ended questions. Three studies opted for non-structured in-depth interviews, which resulted in a less concrete analysis of barriers, but yielded barriers not discovered in the structured interviews [18, 19, 22]. The qualitative study design limits the external validity but gives a descriptive insight to personal barriers which can inspire future studies.

Articles being available in English language was one of the inclusion criteria. Reading and using only English language research could provide a biased assessment of the topic. The systematical reviewing of the selected articles and assessment of the methodological quality was done by one of author under the supervision of the other two authors. This inevitably causes risk of bias in the study selection.

By a comprehensive database search, this review examines all articles concerning barriers from a user’s perspective, comparing both qualitative and quantitative studies. By this, demonstrating how barriers are highly personable and vary in different contexts such as culture, gender, ethnicity and sexuality. Future studies may be inspired to take these ideas into consideration when examining barriers to treatment for alcohol abuse.

### 7. Conclusion

Although AUD is a global health issue, the prevalence of treatment-seeking is low. This systematic review has investigated and identified a multitude of barriers to treatment for alcohol dependence. The barriers vary greatly according to personal, cultural, institutional, ethnic and gender specific factors, amongst others. Through analysis of the chosen articles, three barriers proved to be prominent. Shame and stigma, lack of perception of treatment need and fear of giving up drinking, are complex but highly interconnected barriers. Also proving impactful to barriers were age, sexuality, gender, cultural and economic differences.



There is a need for change in the discussion concerning alcohol abuse in primary care, with a low degree of treatment seeking and a high prevalence of barriers to treatment, the present methods may be ineffective. By implementing universal screening tools, such as SBIRT or GSC, asking all patients about alcohol consumption and raising awareness around the different degrees of AUD, the associated shame and stigma could be reduced. Additionally, as patients are more willing to cut down or drink in moderation, offering treatment concerning self-improvement rather than total abstinence, could be beneficial. Furthermore, the differentiating factors such as gender, culture, cultural and economic differences need to be considered both when investigating barriers to treatment and when providing the therapy, optimistically yielding more inclusive and wider reaching treatment programs.

## 8. Declaration

We have no conflicts of interest to disclose.

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