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## PSYCHOSOCIAL STRATEGIES FOR MITIGATING HARMFUL ALCOHOL USE IN INDIA: A REVIEW

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### ABSTRACT:

**Background:** Over the past decade, there has been a substantial advancement and evolution in India in terms of establishing evidence-based psychosocial interventions for alcohol use and dependence. This narrative review is aimed to comprehensively examine psychosocial interventions designed to reduce risky/harmful drinking and symptoms associated with alcohol use in India and to consolidate the research evidence supporting their efficacy.

**Methods:** A review of the available literature (post the year 2016) was carried out utilising numerous digital databases (Scopus, PubMed, Cochrane Library, Medline Plus and EMBASE). A total of seven research papers were selected for review.

**Conclusion:** The review highlighted that psychosocial therapies have been proven to be effective in general. Some therapies, including brief intervention, motivational interviewing, cognitive behaviour therapy and recurrence mitigation, appear to be successful across a wide range of Indian population consuming alcohol at harmful levels. Brief interventions as a psychosocial therapy may be utilised as the initial phase of therapy for alcohol users and also their affordability and cost-effectiveness align with the national goal of strengthening harm reduction treatment approach for substance use disorders.

**Future Directions:** The body of research supporting for psychosocial treatment should be boosted to include investigations on optimum pairings of psychosocial therapies as well as any specific matching effects, if available. Psychosocial therapies are indispensable component of treatment and attempts should be made to integrate evidence-based therapies into all addiction treatment programmes and across all age groups especially adolescents.

**Keywords:** psychosocial, intervention, alcohol, drinking, harmful use, Indian setting.

## 1. INTRODUCTION

Even before the British territorial expansion, which transformed the cultural significance of drinking almost everywhere, alcohol-based drinks were manufactured and consumed nearly everywhere on globe. Numerous revamped versions of alcohol were introduced and a domestic and communal good gradually evolved into an industrial commodity that was ubiquitous and available perpetually (Esser et al., 2017). This trend continued to emerge in developing economies in the current era of globalisation. Since the time of the mediaeval Vedic civilization, alcoholic beverages have been consumed in India as a reverence and in ayurvedic medicinal products (Avasthi et al., 2018). According to a report issued in the medical journal "The Lancet" by GBD Alcohol Collaborators (2022), alcohol use has decreased during the previous three decades in several western European states while rising in numerous Asian nations, most noticeably India. Between 1990 and 2017, there was a global rise of 70% in total alcohol consumption from twenty-one billion litres to thirty-five billion litres. This growth is being driven by low or middle income economies with Southeast Asia's consumption rising upto 34% amid 2010 to 2017. Since 2010, there has been a 37% increase in alcohol use in India. India's per capita alcohol consumption was 2.8 litres in 1990; by 2017, it had doubled upto approximately 6 litres. According to a report by the Public Health Foundation of India (PHFI) titled "Alcohol Marketing and Regulatory Policy Environment in India," there are roughly 62.5 million occasional drinkers in India. In India, teens have also begun drinking alcohol as soon as 13 to 15 years old (Gururaj et al., 2016). Less regulation of bars and restaurants offering alcohol across the nation and the area in general, as well as increasing wages, are factors contributing to this trend (Midgley et al., 2018). While the majority of Indian states allow the consumption of alcohol, some, including Gujarat and Manipur, have a tight ban on it. Given that India represents the third-largest market for alcoholic products globally, international producers of hard liquor are more concentrating on this market. India is one of the major producers of alcohol, accounting for 65% of the region's alcoholic drinks in Southeast Asia (Ambekar et al., 2019).

Early adulthood corresponds to a critical time for increased alcohol consumption (Delker et al., 2016), which is distinguished by higher prevalence rates of binge and heavy episodic drinking (Patrick & Azar, 2018), as well as lower intervention acceptance (Kaufmann et al., 2014). According to the most recent national survey on licit and illicit drug use in India, 1.3% of people aged 10 to 17 reported to have current alcohol use (Ambekar et al., 2019). According to Anandi et al. (2018), among medical students (18–23 years old) who consumed alcohol, hazardous drinking was prevalent at 19.3%, alcohol dependence was at 4–10% and binge drinking was at 14–30% (Haorongbam et al., 2018). Over 230 illnesses and harms have been causally related to harmful alcohol use, which is the seventh most prevalent factor for mortality and morbidity worldwide. It has been linked to an array of adverse social, physical and psychological consequences (Rehm et al., 2017) as well as once accompanied with different transdiagnostic indicators of risk at the onset of development, prolonged periods of alcohol consumption are actually precursor to the emergence of Alcohol Use Disorder (Squeglia et al., 2017), resulting in major implications of developing effective strategies (Lui et al., 2019). A potential strategy for lowering alcohol use and associated consequences in young adults is psychosocial intervention. The ideal definition of psychosocial interventions is "psychologically-based interventions aimed at reducing consumption behaviour or alcohol-related problems, which excludes any pharmaceutical treatments" (Kaner et al., 2018). This term corresponds to a diverse range of actions that differ depending on (i) philosophical foundations (for instance, behaviour-related, psychodynamic or motivational) (ii) length or magnitude (such as brief or extended); (iii) setting (including community based or hospital based) (iv) how they are delivered (for example, individualized, in group or online based) and

(v) therapy objectives (e.g., abstaining focused or harm reduction). There have been numerous psychosocial therapies documented up to this point that are aimed especially at problem alcohol use. Motivational interviewing, FRAMES (Feedback, Responsibility, Advice, Menu, Empathic, and Self-efficacy) based brief interventions, cognitive-behavioural therapy and various web-based alcohol prevention programmes are among the interventions that are most commonly utilised.

The body of research on the effectiveness of alcohol interventions provided in high-income countries is quite large, with several research studies assessing different intervention programs involving organised screening followed by planned interventions. But there is a dearth of thorough evidence evaluating the efficacy of alcohol interventions in low or middle income countries like India despite the issue's obvious importance for global health. Due to a variety of variables including context-dependent medical issues, fundamental disparities in the accessibility of resources, deviations in consumption patterns and varieties of alcoholic beverages and the degree of severity for alcohol-associated symptoms and repercussions, observations from western countries may not be transferable to Indian settings.

Therefore, this review is aimed to comprehensively examine psychosocial interventions designed to reduce risky and harmful drinking and symptoms associated with alcohol use in India and to consolidate the research evidence supporting their efficacy.

## 2. METHODS

A narrative review was conducted. The objective of review was determined as to examine the efficacy of psychosocial interventions aimed to reduce harmful alcohol use among Indian population.

**Keywords:** The search keywords included psychosocial intervention, alcohol, drinking, harmful use, Indian setting.

### Inclusion Criteria

1. Papers based on original research on the subject.
2. The full-text document that is readily available online.
3. English-language studies.
4. Research papers published in Scopus-indexed journals commencing 2016 onwards.

### Exclusion Criteria

1. Journal papers of low quality.
2. Research studies that have not been indexed in a journal database.
3. Research studies that are only available in abstract form.
4. Studies that have been published in the local dialect.

A preliminary search of the electronic databases generated 22 papers, six papers were disregarded as they belonged to years prior to the studied time frame (before 2016). Similarly, six papers were excluded because it targeted a different population group (outside Indian settings), and another three as psychosocial interventions were not directed for alcohol use. These findings are based on a total of seven research papers.

## 3. RESULTS

The effectiveness of nurse-administered, campus-wide “Screening and Brief intervention (SBI)” for harmful alcohol consumption among university students was evaluated in a double-blinded randomised controlled study from Chandigarh by Kamal et al. (2020). A total of 793 undergraduates were screened and 130 of them fulfilled the inclusion criteria for harmful

alcohol consumption as identified using “Alcohol Use Disorder Identification Test (AUDIT)” scores ranging from 8 to 19. Respondents were randomly assigned to either the general advice group or the SBI. Interventions were administered by a specially certified nurse. Three months afterwards, the final findings were assessed. Primary outcome was changes in overall AUDIT score. A secondary outcome was the percentage of kids who transformed from higher to lower risk category in AUDIT. The majority of the participants (80.7%) were male students. A significant but modest impact of SBI on the average AUDIT scores was revealed by intention to treat analysis. Gender had no influence on the effect. The intervention was found to significantly affect the students' transformation from a higher to lower risk AUDIT category. The study concluded that in nations like India, despite the rising prevalence of risky drinking, SBI may be helpful for pupils where there is no formal structure in place to address the issue. In yet another study to determine the efficacy of psychosocial intervention in terms of sustained effectiveness of counselling therapy and its production costs by Nadkarni et al. (2017), 380 adult male healthcare recipients with hazardous drinking were randomly allocated to receive either "Counselling for Alcohol Problems" or the regular care. Participants assigned to counselling underwent therapy for two months. Over a 12-month period, participants who were given counselling sustained the progress they had made at the end of therapy, with higher rates of abstinence than those who got regular care alone. Cost modelling also showed that "Counselling for Alcohol Problems" was price-effective and might possibly result in a financial gain if expenses related to productivity were considered.

Kumar et al. (2021) carried out a study in Banaras Hindu University, Varanasi to evaluate and compare the impact of "Motivational Enhancement Therapy" directed towards lessening ambivalence around alcohol use and increasing the subject's self-efficacy using a control group design. A total of forty participants were selected from OPD and IPD departments of Psychiatry who satisfied the ICD-10 criteria for alcohol dependence and randomly allocated into experimental and control groups. Twenty patients of experimental group received 10 sessions of motivational enhancement therapy alongwith usual care, whilst control group received usual care. The self-efficacy scale was used to gauge post-interventional self-efficacy levels. The self-efficacy mean for the experimental group before intervention was  $57 \pm 2.9$ , which raised to  $60.8 \pm 2.7$  post intervention, indicating a significant difference in self-efficacy.

A randomised control trial was undertaken by Lakshmana (2016) among 120 male street children aging 13 to 18 years who reported substance use including alcohol in the last thirty days using WHO ASSIST questionnaire. The participants were subjected to a 4-month programme that combined cognitive behaviour therapy and motivational interviewing using experimental design. For the evaluation of the intervention programme, tools such as the "Adolescent Relapse Coping Questionnaire" and the "Readiness to Change Questionnaire" were employed. Most responders in both groups were in the precontemplation stage of motivation at the outset. There was a notable difference between the experimental and control groups on the levels of motivation at the conclusion of the intervention's third month.

An internationally accessible online self-help programme was tested in a randomised controlled trial to see if it can help Low to middle Income country's harmful drinkers by Schaub et al. (2021). In India, Belarus, Mexico and Brazil, participants were extensively sourced from community samples between 2016 to 2019. A total of 1400 participants were recruited from all four countries including 212 from India. The "Alcohol e-Health programme" was presented to participants in the active trial arm, while controls were placed on a "waiting list" and generic information about alcohol & its impact on health. Six months later, access to the programme was allowed. The "Alcohol Use Disorders Identification Test (AUDIT)" score change over the course of a 6-month period spanning baseline and follow-up was the primary outcome. Self-reported standard drink consumption over the preceding seven days and the cessation of

problematic drinking (AUDIT score less than 8) were considered secondary outcomes. The group receiving treatment experienced higher changes in AUDIT Score in general, which were echoed by changes in the number of standard drinks consumed each week and the abstinence rate for harmful drinking.

Sinha et al. (2022) evaluated the effectiveness of individualized “Screening and Brief intervention (SBI)” for risky alcohol consumption among patients with bipolar affective disorders who are seeking treatment on outpatient basis. 84 individuals that met the eligibility criteria for risky alcohol use, as determined by the AUDIT score of 8 to 19, participated in a single-blind, parallel-group, randomised controlled experiment. Experimental group received SBI and control group was provided with general advice. For mood problems, both groups had received normal care. SBI had a minor but significant effect on average AUDIT score as established by “intention to treat analysis”. The effect was not moderated by baseline AUDIT, motivation or age. The study concluded that SBI was linked to a considerable reduction in the incidence of binge drinking and an upgrading in motivational stages.

Ruben et al. (2021) conducted a prospective study with a goal to see if a "Nurse-Conducted Brief Intervention" (NCBI) could help people with alcohol use disorders achieve alcohol abstinence in gastroenterology department of Bengaluru hospital. A total of 430 out of 460 participants accepted to participate in the NCBI's remunerated service, that indicated high acceptance rate of 93%, demonstrating the feasibility of the NCBI. Participants were assessed, attended intervention sessions and experienced greater rates of phone follow-up. The mean abstinence rate vary from 91.8% to 46.7% after 7 to 195 days of observation. According to “Kaplan-Meier” evaluation, the median number of abstinence days were 188. Lower AUDIT scores at trial commencement were associated with abstinence for more than 180 days.

#### 4. DISCUSSION

One of the most significant contributors to risk for disease initiation is alcoholism. Every year, a large portion of our country's budget is devoted to addressing health issues associated with alcohol misuse. This review highlighted that when it comes to addressing harmful alcohol consumption, psychosocial therapies have proven their forte. They had small yet significant effect sizes and appear to work better among risky alcohol users than dependent users. These interventions are identified to be cost effective, potential and cognitively oriented efficacious counselling treatments for high-risk alcohol users. The present review included studies involving male and female individuals who were classified as harmful or moderately dependent consumers. The vast majority of the therapies involved were brief interventions delivered by trained professionals in community and health care settings. Apart from Screening and brief interventions, other psychosocial treatments employed were Cognitive behaviour therapy and Motivational enhancement therapy. Amongst all, the benefit of a brief intervention is that it is relatively easy to implement. Although a packed schedule and an inadequate level of personal space are issues, if implemented, this kind of approach may result in a health-promoting chain reaction, contributing to enhanced wellness results for both oneself and others.

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