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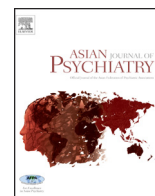
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## The explanatory models and coping strategies for alcohol use disorders: An exploratory qualitative study from India<sup>☆</sup>



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### ABSTRACT

**Purpose:** The explanatory models (EM) and coping strategies for mental health problems influence treatment seeking and the subsequent patient journey. The goal of this study was to explore the EMs and coping strategies for alcohol use disorders (AUD).

**Methods:** We conducted semi structured interviews with 29 men with AUD and 10 significant others (SO) in two sites in India. Thematic analysis was used to analyse data.

**Results:** The former were predominantly married, literate and employed; the latter were predominantly wives, literate and employed. Alcohol consumption and AUDs are seen to be mainly associated with psychosocial stress, with other factors being peer influences, availability of disposable income and drinking for pleasure. They are perceived to result in a range of adverse impacts on social life, family life, personal health and family finances. Various coping strategies were deployed by men with AUD and their significant others, for example avoidance, substitution, distraction, religious activities, support from AA/friends/family, restricting means to buy alcohol and anger management. Reduction/cessation in drinking, improved family relationships, improved emotional/physical wellbeing and better occupational functioning were the most desired treatment outcomes.

**Conclusion:** There are considerable similarities, as well as some key differences, observed between the EMs for AUD in India and those reported from other cultures which have implications for the global applicability and contextual adaptations of evidence based interventions for AUD.

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## 1. Introduction

AUDs are second only to depressive disorders as the leading neuropsychiatric cause of the global burden of disease (WHO, 2008). The epidemiological picture in India is characterised by relatively high abstinence rates coupled with high rates of alcohol-attributable mortality and prevalence of AUDs relative to the volume of alcohol consumed per capita (Rehm et al., 2009). Another key epidemiological finding is that the vast majority of persons with AUD in the region are men (Prasad, 2009).

Explanatory models (EMs) are described as the ‘notions about an episode of sickness and its treatment that are employed by all those engaged in the clinical process’ (Kleinman, 1980). It is important to take EMs into account in clinical practice as beliefs and behaviours influence help seeking behaviour, acceptability of the treatment, subsequent concordance and eventual patient satisfaction. An accurate understanding of the patients’ and significant others’ (SO) EMs will enable a clinician to appreciate the patient’s response to illness, to develop an empathic relationship and to communicate his explanation and recommendations for treatment more effectively (Sumathipala et al., 2008). The socio-cultural history of alcohol consumption differs significantly across the world (Bennett et al., 1998) and understanding EMs of and coping strategies for AUD are an important step of the clinical process (Callan and Littlewood, 1998). The objective of the exploratory research described in this paper was to describe the EMs of and coping strategies for AUD in India. The key research questions were: what are the causal beliefs for AUD, what is the

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impact of AUD, what are the coping strategies for AUD, and what are the desired outcomes of interventions for AUD. Ultimately, we aimed to use these findings to inform the development of contextually appropriate psychological treatments for AUD.

## 2. Methods

### 2.1. Setting and sample

The study was carried out in AUD treatment settings and primary care clinics in the states of Goa and Maharashtra, India. Maximum variation sampling was used to obtain broad coverage of persons accessing a range of available treatments for AUD. Participants were men with AUD and significant others (SO), who were defined as someone who was living with person having AUD and playing an active role in his care. The diagnosis of AUD was made by a trained healthcare provider, viz. psychiatrists or de-addiction counsellors.

### 2.2. Data collection

Data collection was done through semi structured interviews, carried out by trained research workers. All participants were interviewed face to face either at their homes or at the care provider's premises. Interviews with patients and SOs were carried out separately. All interview sessions were audio recorded and the research workers also made field-notes about the content of the interview and non-verbal behaviour. The semi-structured interview guides were developed in English and translated into the local languages (Konkani and Marathi). The questions in the interview guide explored issues such as the participant's perceptions of what had caused their problems, how these had affected their lives, how they coped with it and what outcomes they desired from treatment. Interim analyses of the initial interview data were used to refine the guide themes and probes. Data collection was stopped once a point of data saturation was reached and no new themes emerged.

### 2.3. Analysis

Data from the semi structured interviews were entered into and coded in Nvivo 8. The analysis was a combination of deductive and subsequently inductive (through thematic analyses) strategies. Initially, a set of pre-determined codes, namely 'causal beliefs', 'perceived impact' and 'desired outcomes' were developed based on some of Kleinman's Eight Questions, a well established theory of explanatory models (Kleinman et al., 1978), and were deductively applied to the data. Subsequent analysis involved inductive generation of new codes from raw data (e.g. 'coping strategies'). These codes were used to generate a new coding template, which was then applied to the remaining interviews. Codes were then compared with each other for similarity in meaning. Similar codes were collapsed into inclusive categories and clusters of related codes were organised under other codes, forming hierarchies. Themes were derived by retrieving pieces of data pertaining to codes and by examining their meaning in relation to the research questions. Patterns were derived by eliciting similarities and differences between themes generated from interviews of men with AUD and SOs to get a better understanding of where they converged or diverged. In the final stage, simple frequencies were tallied for all the major themes that were derived (Neuendorf, 2002, Chapter 3).

### 2.4. Ethical issues

The Institutional Review Boards at the London School of Hygiene and Tropical Medicine and Sangath reviewed and

approved the proposal. The study was also approved by the Indian Council for Medical Research. Written informed consent was taken individually from all participants.

## 3. Results

Semi structured interviews were conducted with 29 men having AUD and 10 significant others (SO). Of the 29 men with AUD, 22 (75.9%) had alcohol dependence and the rest had non-dependent AUD. This pattern is representative of men who receive an AUD diagnosis in these settings. The mean age of the men with AUD was 42.8 years (range 25–65 years). 27 (93.1%) were married. All participants were literate with either primary ( $n = 4$ ; 13.8%), secondary ( $n = 16$ ; 55.2%) or college/university education ( $n = 9$ ; 31%). The majority were employed ( $n = 24$ ; 82.8%). They were referred by AA members ( $n = 6$ ; 20.7%), residential de-addiction centre ( $n = 4$ ; 13.8%), psychiatrists ( $n = 11$ ; 37.9%), non formal care providers ( $n = 5$ ; 17.2%) and GPs ( $n = 3$ ; 10.3%). A large proportion of the family SO's was female (90%), married (90%), educated to secondary level and above (70%) and employed (70%). Their mean age was 38.8 years (range 28–62 years) and all except one were spouses of persons with AUD.

### 3.1. Causal beliefs

Four broad themes emerged as causal attributions for alcohol use: psychosocial causes, peer influences, availability of disposable income and drinking for pleasure.

#### 3.1.1. Psychosocial stresses

The semi structured interviews confirmed the perceived role of psychological stressors, attributed primarily to financial problems and family disturbances, leading to AUD. 9 (31%) of the men with AUD and all SOs ( $n = 10$ , 100%) reported a psychosocial stressor as contributing to the onset of the AUD. The impact of financial loss in a business venture was described thus: "So I had to wind up that business also. . . It was more out of frustration that I took to drink" (M, 36). Problems in the family environment were also identified by those with AUD and SO's as a major factor leading to drinking problems. One participant attributed his drinking to the stress caused by his wife's extramarital affair. "I came to know [about wife's extra marital affair]. From that time my mind was upset and I did not know that alcohol is a disease, which it is like a sickness. I thought you just drink it and then forget about it. But it gives only temporary relief" (M, 45).

#### 3.1.2. Peer influences

Peer pressure was reported as one of the key reasons for sustained alcohol use or dependence by a third of the men with AUD ( $n = 9$ , 31%) and SOs ( $n = 3$ , 30%). Participants described their drinking starting in social situations and acknowledged the role of peer influences on both drinking and the evolution of drinking problems. A farmer described a routine of drinking after work as follows, "After farming work is over, things like alcohol-meat [consumption] begin. In this, even if we are not willing, we have to participate on the insistence of others" (M, 40). SO's also acknowledged the role of peer influences in the development of AUD. A wife describing her husband's drinking said, "Yes, I asked him [husband]. . . Why do you drink? Is there any tension related to wife or children? Why? And he told me, 'No I drink with my friends circle'" (F, 30, Spouse).

#### 3.1.3. Availability of disposable income

Alcohol consumption is often seen as a symbol of economic status and availability of disposable income was perceived as leading to drinking and AUD by a minority of men with AUD ( $n = 3$ ,

10.3%) and SOs ( $n = 2$ , 20%). This emerged in the SO narratives in the study. *"If a person gets more money than necessary in his hands, then the person starts getting inclined in such direction. ...using money this way [to buy alcohol]. He then falls prey to addiction"* (F, 43, Spouse). Another SO added that, *"There can be a lot of different reasons. When someone has a lot of money, he doesn't understand when and how to spend it?"* (F, 28, Spouse).

### 3.1.4. Drinking for pleasure

Drinking for personal enjoyment was not a commonly reported motive for drinking and was reported by none of the SOs and approximately a quarter of the men with AUD ( $n = 8$ , 27.6%). One participant in the study described the evolution of his drinking in the following manner, *"I started drinking when I started working. I used to get tired after working for whole day so I would take a drink; or I would drink for the sake of enjoyment after getting my salary. It started in that fashion and gradually it became a habit. From enjoyment it got transformed to addiction"* (M, 37)

To summarise, both internal as well as external factors were perceived as playing a role in the onset of drinking behaviours. The internal factors most commonly reported included stress due to a variety of reasons and, less commonly, drinking for pleasure. Among the external factors, the commonly reported were the availability and access to means to buy alcohol and peer pressure.

## 3.2. Perceived impact

The impact of AUD was primarily seen to be on social life, family life, health and family finances.

### 3.2.1. Social life

The perceived impact of AUD on social life was commonly reported both by the men with AUD ( $n = 18$ , 62.1%) and the SOs ( $n = 7$ , 70%). The overwhelming hold of alcohol on a person's life to the exclusion of all other activities and obligations was described by a participant as *"They (other people) used to keep me away from themselves. Even I used to not go to them. ... I wanted only alcohol. ... I was in my own world. When we crossed paths they would not greet me and I would not greet them either. I was not bothered about my neighbours or what was happening around me"* (M, 36). The breakdown of social relationships due to drinking was also described as follows; *"I may have broken off with a few people! After drinking alcohol I must have said something to them and they may have become upset"* (M, 37). The impact of their husbands' drinking on their social life was acknowledged by their spouses. One woman said, *"It has become difficult for me to call my friends home. They call me a lot to their houses but if I go to their house then I will also have to invite them to our house. If they come home and he (husband) is drunk. ... it is not something that I would want them to see"* (F, 43, Spouse).

### 3.2.2. Family life

A deep sense of sorrow and regret about the negative impact of alcohol on family life was reported by most men with AUD ( $n = 28$ , 96.6%) and all SOs ( $n = 10$ , 100%). One said, *"For some reason or the other I would argue with her (mother). I would beat her and sometimes abuse her. That was my main tragedy that I did that (argue and beat) even to my mother"* (M, 48). Another participant compared his family life when he was sober and when he was drinking in the following manner; *"Now service [job] is gone, money is over, there is no happiness at home, no peace at home and my family is keeping me away from them. When I was sober for 9 months, my family used to be close with me. Now they are keeping me away from them"* (M, 49). The disruptive effect of drinking on marital life was described thus *"My wife used to get angry when I would come home drunk and then we would argue. Everyone started going away from*

*me. My wife left me and has gone to stay with her parents"* (M, 42). Drinking also affected how a person perceived his own parenting skills as seen in the following quote *"I used to drink in the evenings; they (family) would express their discontent about it. I could not become an ideal father; I could not give good values to my children"* (M, 65).

### 3.2.3. Health impact

The negative effect of drinking on either mental or physical health was reported by a majority of the men with AUD ( $n = 24$ , 82.8%) and SOs ( $n = 9$ , 90%). This was described by a participant in the following way *"My head used to get. ...like mental and I would find it difficult to recognise people. I used to feel irritated and angry with everybody. I used to get unwanted thoughts. ... I keep getting unwanted thoughts out of nowhere. Thoughts like, she [wife] is not there today, maybe she has left me and has gone"* (M, 37). Impact on physical health was rarely reported. One man reported *"A couple of days after drinking I suffer from heavy headache and I need to see a doctor. Also I have become slightly obese. I used to be fit before but due to alcohol my fitness has reduced. Due to this addiction I also experience a few stomach problems"* (M, 37).

### 3.2.4. Financial impact

Most of the SOs ( $n = 8$ , 80%) and a majority of men with AUD ( $n = 17$ , 58.6%) reported at least some degree of impact on their finances because of diversion of household funds to drinking. One man reported the following, *"Yes there is financial impact. ...because we spend some amount of whatever we earn on drinks. Sometimes people offer us drinks for the help we give them. ....instead of money"* (M, 37). Another man reported that alcohol affected only his finances and no other domain of his life. He said, *"Only my expenditure has increased (due to alcohol). ... there are no other problems due to drinking. ... I have only experienced some difference in the family expenditure."* (M, 52)

To summarise, the wider impact of the drinking was felt not just by the person with drinking problems but also by the family. It led to the breakdown of social relationships not just of the drinker but also his family, disrupted their relationships with their spouses, children and parents, adversely impacted their physical/mental health and led to financial problems.

## 3.3. Coping strategies

Men with AUD and family members described a range of coping strategies to deal with their drinking problems.

### 3.3.1. Avoidance behaviours

Avoiding situations and people which led to drinking were reported by a small number of men with AUD ( $n = 5$ , 17.2%) but none of the SOs. These included avoiding friends and social situations that encouraged drinking. *"I used to be at home; not going out of the house. Even if someone called me I would not go out. I used to avoid going to those friends [friends who, drink]. After completing my work I used to come directly home"* (M, 37). One participant would ask family members to accompany him whenever he attended social functions where alcohol could potentially be served. *"Even if I have to go to the market or function [social occasion] I would go with my wife..."* (M, 48). Although men with AUD found these avoidance strategies helpful, they saw them as "short-term" solutions which were not always practical. Some of them also felt that such strategies would lead to them losing their friends.

### 3.3.2. Distraction

Involvement in a range of recreational activities was frequently used to take one's mind off alcohol and was commonly reported by men with AUD ( $n = 20$ , 69%) and, less commonly, by SOs ( $n = 3$ ,

30%). "I do other things...keep myself busy...like watching TV and playing with my children..." (M, 37). "When I want to go away from alcohol I used to go out with my family...for a family picnic or something" (M, 34). One care-giver reported that "We give him some work which he is interested in...try to keep him engaged during his usual time [of drinking]...we don't give him any outside work in the evening" (F, 62, Parent).

### 3.3.3. Substitution

Men with AUD ( $n = 6$ , 20.7%) but none of the SOs, referred to using aerated or other non-alcoholic beverages as a substitute for alcohol to overcome cravings. "I have to drink lot of soda, water, black tea...in a day I have to drink around 7 to 8 lime sodas or simple soda so that I don't feel any craving [for alcohol]" (M, 60).

### 3.3.4. Religious and spiritual strategies

Faith in religious rituals and spirituality was also found to be helpful by many men with AUD ( $n = 20$ , 69%) and care-givers ( $n = 7$ , 70%). Chanting, reading religious texts and attending religious activities in the temple like listening to discourses and participating in singing of bhajans [religious songs] were described. "Yes I used to continuously utter God's name till that feeling [craving] goes" (M, 65). "And for keeping the thoughts of drinking away, I read Bhagvad Gita [Religious text of Hindus]" (M, 52). Irrespective of religious background, prayer and religious rituals were seen by care-givers to give hope and as a way of changing the drinking habits of their family members. "I have tried a lot of religious things...I pray to all the gods for him to improve...someone told me to keep a fast on Saturday. I did that...but it didn't work. Someone told me to keep fast and give offerings to God on Thursdays during Margashirsh [holy month in Hindu calendar]. I did that and I found some difference (reduction in drinking)" (F, 30, Spouse).

### 3.3.5. Support from AA and from friends and family

Support from formal groups and friends and family was perceived to be helpful by a small number of men with AUD ( $n = 3$ , 10.3%). Alcoholic Anonymous (AA) was seen to be beneficial as they allowed the affected person to become aware of other people having similar problems and to learn from the experiences of others who had recovered from their problems. "[AA] sponsor is the one who gives you support...he could be your close friend...you can tell him your difficulty. If it suddenly came in your mind to go and drink alcohol, you can phone him [sponsor], and he will give you guidance" (M, 49). Confiding relationships were frequently seen as helpful. One participant said, "My brother is very understanding...I go to him or call him each time I feel like drinking or have any other problem...he never says anything bad to me...he gives me right advice" (M, 44).

### 3.3.6. Restricting access to alcohol

Restricting access to money to the family member with AUD was seen as an effective strategy by SOs ( $n = 4$ , 40%) and by a very small number of men with AUD ( $n = 2$ , 6.9%). "If he has excess money he spends it all on liquor...so we give him exact money required for the thing to be bought" (F, 62, Parent). Reducing access to alcohol by changing geographical location was seen as a temporary measure to reduce alcohol consumption. "He comes and stays at sister's place for 2 days, and he is totally sober, stays away from it [alcohol] and after coming here [home] he even swears that he won't take it from tomorrow...but here it is a friendly place, and he has enough access to alcohol so he starts drinking again...but we can't keep him permanently at our sister's or other relative's house" (F, 37, Spouse).

### 3.3.7. Anger management

Anger management was occasionally reported as a key strategy by two men with AUD (6.9%). One man said "I started writing a

daily diary about what I did in a whole day. If I feel bad or get angry, I write in that diary and tear that page and throw it in a dustbin. It helps me remove bad thoughts from my mind" (M, 38). Another man said: "when I used to get angry, I counted numbers in mind up to 10 but not as 1, 2, 3 but from last to one, meaning 10, 9, 8 to reduce anger" (M, 38).

Men with AUD and their family members used a range of strategies to help cope with the problems related to their drinking. Men with AUD employed coping strategies like getting involved in activities which distract from drinking, getting involved in religious/spiritual activities, substitution with non alcoholic drinks, avoiding people and situations which could potentially lead to drinking, getting support from formal groups like the AA and informal social networks, restricting access to the means of buying access and effectively manage negative emotions which lead to drinking. SOs employed strategies like getting involved in religious/spiritual activities, restriction of access to alcohol and getting the drinker involved in activities which distracted him from alcohol. Religious/spiritual activities were strongly endorsed by men with AUD as well as SOs. However, understandably, coping strategies which required initiative directly from the men with AUD were strongly endorsed only by the men with AUD, e.g. substitution with non alcoholic drinks and anger management. On the other hand, a strategy like restricting access to alcohol was strongly endorsed by SOs but not the men with AUD.

## 3.4. Desired outcomes

Four major outcomes were desired from interventions.

### 3.4.1. Abstinence/reduced intake of alcohol

Most SOs ( $n = 8$ , 80%) and some men with AUD ( $n = 9$ , 31%) expressed a desire to either quit or reduce their alcohol intake and this was perceived as one of their major goals the treatment. A man wanting to abstain from drinking said, "I want to stop drinking completely. If I drink a little then I will continue to drink and I will become addicted. So it is better to stop it completely" (M, 53). Another man wanting to gradually reduce his drinking over a period of time said, "I want to further reduce (drinking). I'm not saying that I am going to stop completely. I might drink once in a week and then once in a month; sometimes only at parties or some other special occasions", (M, 36). On the other hand, SOs desired complete cessation of drinking and expressed it in the following manner: "I want him to leave the alcohol and then he should start working. There will be peace at home if he leaves alcohol" (F, 38, Spouse). "He (husband) should completely leave it (alcohol). Even if someone is taking drinks in front of him then he should be able to say 'you drink, I have stopped drinking'" (F, 30, Spouse).

### 3.4.2. Improved family relationships

A quarter of men with AUD ( $n = 8$ , 27.6%) and half of the SOs ( $n = 5$ , 50%) mentioned improving their family relationships and securing a better future for their family were the most important outcomes. One man said, "If I am good (not drinking) then everything is fine. She (wife) is facing problems because of my drinking. My children should not suffer. I should give them good education" (M, 49). Another participant said, "First and foremost is serenity; both, for myself and my family. I want to have a good relationship with my family members" (M, 36). A participant spoke of wanting to change his ways to bring happiness in the lives of his family members, "I want to change to a better person. I have a son and a daughter...I want to change their future. I am not thinking about myself, I am thinking about them" (M, 48). Similar sentiments were echoed by SOs who said, "We don't have many relatives but he (son) should maintain contact at least with whatever relatives we have! We want him to improve relationships with all family members"



(F, 62, Parent). Another SO said, “*The treatment should make him (husband) behave well with all*” (F, 31, Spouse).

#### 3.4.3. Improved emotional and physical wellbeing

Improved health was reported as a desired outcome by a few men with AUD ( $n = 5$ , 17.2%) and only one SOs (10%). Participants recalled how their physical and emotional conditions improved once they started treatment and reduced their alcohol intake. Some participants recounted how attending AA helped them emotionally. One participant said, “*After joining AA I feel no tension at all. I feel nice now*” (M, 53). Another participant, describing how AA had helped him to manage his anger, said, “*They (AA) talk about anger management and how to be gentle. It was just the first meeting and it made me change and to stop drinking*” (M, 36). Another participant spoke of how his affiliation to a spiritual group had a very positive effect on him, “*I joined Brahmakumaris (spiritual organisation) and did their seven day course. I found meaning in my life and started reducing my drinking. My life is completely changed. Now I experience happiness and peace*” (M, 53). SOs spoke of the positive effect of treatment on the physical health of their alcohol dependent relative thus, “*Treatment helped him a lot. His physical problems like giddiness, lack of appetite, lethargy and frequent falling sick have all stopped*” (F, 28, Spouse).

#### 3.4.4. Improved occupational functioning

Improved occupational functioning was desired by a few men with AUD ( $n = 4$ , 13.8) and a majority of the SOs ( $n = 6$ , 60%). Some participants alluded to their improved occupational functioning which had brought happiness both to themselves and to their families, “*I took the advice of the counsellor and worked towards reducing my intake. After two years without a job, I got the job. Now I am not ashamed to go out with my son as I am able to buy things for him when he asks me to. My wife has also reduced her nagging*” (M, 36). Family members too stressed on the importance of having a good job, “*I wish him (husband) to leave this (alcohol). And the other thing is that he should get nice job. If he gets job then things will be fine*” (F, 30, Spouse).

There were differences observed in the desired drinking outcomes. Men with AUD aspired to either reduce or stop their drinking while their spouses desired complete cessation of drinking. Other outcomes related to improvement in the negative impacts that were attributed to the drinking. Thus, both men with AUD and family members desired improvement in family relationships, improved work output and improvement in both physical and mental health.

## 4. Discussion

We report the findings of an exploratory qualitative study aimed at understanding the explanatory models (EM) of alcohol use disorders (AUD) in India. Internal as well as external factors were perceived as playing a role in drinking behaviours. Stress due to a host of reasons was very commonly reported while drinking for pleasure less commonly so. External factors like availability and access to means to buy alcohol and peer pressure were also reported. Biomedical disease models were never entertained for AUD. Unsurprisingly, the impact of the drinking was felt not just by the person with drinking problems but also by the family and led to the breakdown of social relationships, disrupted family relationships, adversely impacted their physical/mental health and led to financial problems. Men with AUD and their family members used a range of strategies to help cope with the problems related to their drinking. These included strategies like getting involved in activities which distract from drinking, getting involved in religious/spiritual activities and restricting access to the means of buying alcohol. Men with AUD aspired to either reduce or stop

their drinking while their spouses desired complete cessation of drinking. Other outcomes that were desired corresponded with improvement in the negative outcomes that were attributed to the drinking e.g. improvement in family relationships. Although there was a convergence between the men with AUD and SO's on many themes, there were others in which they diverged, e.g. drinking for pleasure was reported by none of the SOs but by a quarter of the men with AUD.

Similar EMs for drinking have been reported in studies from High Income Countries (HIC) and other parts of India and South Asia. However, we could not find any comparable studies from LMIC outside of South Asia. Peer pressure (Kuntsche et al., 2005; Yan et al., 2008) and psychological stress due to a host of reasons (Brady and Sonne, 1999) have all been observed to be associated with the onset of AUDs in HIC. In South Asia, reducing stress also emerged as an important cause of drinking. Perera and Torabi (2009) reported that reduction of stress was a prevalent motive for alcohol consumption in a sample of young male alcohol users in Sri Lanka. A survey of medical students in Pakistan observed a significant association between the presence of stress in their peers and alcohol use as coping strategy to reduce this stress (Yousafzai et al., 2009). In alcohol dependent patients in a specialist setting in India, alcohol consumption was seen as a way to numb the stress of holding a responsible job involving lot of decision making (Nimmagadda, 1999). The causes of such psychological stressors could be varied and included lack of job opportunities, financial problems and family disputes (Chowdhury et al., 2006; Girish et al., 2010). Psychological stressors were commonly seen as precipitants of relapse by men with alcohol dependence treated in specialist mental health setting in India and also by their relatives (Malhotra et al., 1999). With regards to peer pressure as a precursor to drinking problems, our findings were consistent with other studies done in alcohol users in the community in India (Girish et al., 2010; Gururaj, 2006). Our finding that the availability of disposable income led to drinking problems is consistent with a study of patients with AUD treated in a specialist hospital in India (Nimmagadda, 1999) who described how serving alcohol in a home was a potent means of letting the world know “*that I have made it*”. Similarly, in a study from a village in India, it was reported that drinking had increased because of increasing wages and disposable income (Chowdhury et al., 2006).

Such precursors of drinking behaviour can inform contextualised prevention as well as treatment strategies. The critical nature of peer influence on initiation to and sustained drinking amongst young people informs the development of an effective prevention programme, e.g. school-community prevention and early intervention to reduce alcohol and drug use among adolescents (James et al., 1996). Similarly, as social difficulties are important causes for initiation of and relapse of AUD, specific treatment approaches targeting such difficulties (e.g. problem-solving strategies) may play an important role in treatment of AUD. The uncommon mention of seeking pleasure as a causal attribution may reflect the nature of the sample, i.e. people with AUD, and it is possible that studies with non-clinical samples may generate different findings. However, it could also be finding peculiar to historically abstinent cultures like India. This is evidenced by findings from a study in Sri Lanka, where personal enjoyment was found to be a weaker motive of alcohol use compared to the tension-reduction motive (Perera and Torabi, 2009). A study from India reported that only 10% of drinkers in the community consumed alcohol as a pleasure seeking activity (Girish et al., 2010). The finding that biomedical models were never entertained is consistent with ethnographic evidence from non-industrial societies around the world which shows that the most prevalent attribution of illness is to psycho-social causes (Murdock, 1980).

Our findings on the impact of AUDs on various domains of a person's life are consistent with studies from HIC (Gual et al., 2009; Room et al., 2005) and from India. In a qualitative study from West Bengal, India, heavy drinking was reported to result in disturbance of social peace through unruly behaviour. It also affected family life through marital conflict, domestic violence and economic distress (Chowdhury et al., 2006). Other studies replicated these findings and reported diverse areas of difficulties faced by persons with AUD including physical and psychological health, employment, family domain, finances and marital life (Babu, 1997; Gaunekar et al., 2004; Gururaj, 2006; Rajendran, 1992). A study in industrial workers and their wives in India reported problems in the workplace, domestic violence and economic difficulties as a result of the spouse's drinking behaviours (Gaunekar et al., 2004).

We could not find any comparable studies on coping strategies and desired outcomes from treatment for AUDs in LMIC. It is interesting to note that many of the strategies reported by men with AUD and family SOs in the study are consistent with techniques described in evidence based psychological treatments (PTs), for e.g. avoiding people who drink. It might well be that such strategies were influenced by exposure of some of the participants to at least some type of PT (although access to formal PT is extremely limited in the study settings). Nevertheless, the fact that these strategies were being used by the participants provides important evidence of their acceptability in the event that they are delivered as a component of an intervention by a clinician. Participants and family members use culture specific coping strategies like religious and spiritual strategies which need to be considered by clinicians when delivering an intervention to make it contextually appropriate and acceptable. Notably, despite the sample being selected from healthcare settings, none of the coping strategies involved utilisation of health services. One reason for this could be our finding that biomedical models are not considered as causing AUD but health problems are seen as outcome of AUD for which help was sought from such settings. These findings are consistent with observations in both LMIC and ethnic minorities in HIC with regards to mental illness in general. Such studies demonstrate reliance on self-help, spirituality and religion to cope with adversity and symptoms of mental illness and seeking support from family/friends (Edman and Teh Yik, 2000; Alem et al., 1999; Hussain and Cochrane, 2003; Pereira et al., 2007). The findings about expected outcomes from treatment are important to take into consideration during the treatment planning process as it will help to determine realistic treatment goals. Thus psychosocial interventions need to address not only reduced alcohol consumption or abstinence, but also their impacts on personal, family and occupational well-being. Although it is beyond the scope of this paper to draw such a conclusion, it is important that such psychosocial interventions should be well integrated with biological interventions for those who have physiological symptoms of AUD.

The primary limitation of this study is that the semi structured interviews were carried out with participants with a clinically diagnosed AUD which represents a relatively small proportion of men with AUD in the population. Thus, the majority of participants had alcohol dependence. Furthermore, our sample of participants with AUD was exclusively men thus limiting the generalisability of our findings. However, this has to be seen against the epidemiological picture of predominantly male drinking in India (Prasad, 2009). EMs are not fixed and immutable but tend to be idiosyncratic, changeable and influenced by both personality and cultural factors (Weiss, 1997) and as such it would be erroneous to generalise these findings to all individuals and/or contexts in the region. Other limitations of this study are that the findings might be unique to the participants of this study and might not generalise to other people or other settings and the

results could be influenced by the researcher's personal biases and idiosyncrasies. There is evidence in support of effectiveness of culturally adapted interventions (Griner and Smith, 2006) and experience has shown that such "adaptations" to evidence based interventions must take into account the cultural context and indigenous practices to lead to an acceptable and effective treatment (Koss-Chioino and Vargas, 1999). A better understanding of the patient's and SO's conceptualisation of AUDs, their impact, coping strategies and expected outcomes from treatment can form an important component of the negotiation between patient and clinician which in turn could enhance compliance with treatment and eventually better outcomes. In this context, our findings have implications for clinical practice and intervention development for AUD in India.

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### Conflict of interest

None.

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