

A SYSTEMATIC REVIEW ON THE IMPACT OF ALCOHOL DEPENDENCY: IMPLICATIONS FOR FUTURE RESEARCH AND PRACTICE

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ABSTRACT: *Alcohol abuse has significant individual, familial and social costs. Long term and/or chronic alcohol use has been associated with liver cirrhosis, liver disease, lip, oral cavity and pharynx cancers and heart disease (WHO, 2004). Additionally, intoxication increases risk for road traffic accidents, poisoning and intentional and unintentional injury. Globally alcohol causes 3.2% of all deaths or 1.8 million deaths annually and accounts for 4.0% of disease burden (WHO 2007). This review examines what is known about the impact of alcohol on the health and lives of individuals and families in India. The present study was conducted to examine the prevalence and impacts of alcohol dependency. The study reviewed different studies that are conducted in re relation to alcohol prevalence and impacts. For this purpose, the researcher employed a qualitative approach mainly conventional content analysis. The researcher also used for basic themes that are thought to take the lion share in analyzing the review. Based on the present review, the conclusion made was alcohol greatly impacts in individuals specifically in affecting their health in general and injuries and violence in particular. Based on the conclusion, the recommendation forwarded were raising awareness through education regarding the problem and capacity building for action. Preventive efforts not only create awareness but can also help to de-stigmatize the problem and individuals affected by alcohol misuse,*

Key Words: : alcohol, dependency, health

Introduction

Alcohol consumption is a culturally defined activity, impacted by the economics and polity of a society at a given point in time. In the year 2000-2001 the recorded alcohol per capita consumption in India was a low 0.82 liters of pure alcohol as compared to the per capita consumption in US (8.51 liters), Canada (8.26 liters) and UK (10.39 liters) for the same period (WHO, 2004). Post 1995, the unrecorded alcohol per capita consumption in India is an estimated 1.7 liters (WHO, 2004). While these figures give the impression that India is largely a dry culture, considerable variations exist in the prevalence of alcohol use and misuse within the country. Class, caste, religion and gender are significant factors that define the patterns and nature of alcohol consumption across India. Further, increasingly, globalization and economic liberalization are affecting changes in the social fabric and organization of the Indian society and is likely to have an impact on drinking patterns and cultures in the country as well. This article reviews literature on alcohol use in India to identify impact of alcohol use in India.

Objective

The major objective of the present paper is to review relevant literature regarding the impact of alcohol dependency, specifically the current review aimed at examining the prevalence alcohol use and providing implication for further research and practice.

Review of literature

Types and prevalence of alcohol use in India

India is a very diverse country with considerable variation in climate, vegetation, natural resources, cultures and traditions. This diversity is also reflected in the types of alcoholic beverages consumed and the cultural meaning associated with alcohol use

Types of Alcoholic Beverages

The most common forms of alcoholic beverages are arrack (made from paddy or wheat), toddy (palm wine), country liquor, illicit liquor, Indian Made Foreign Liquor (IMFL), beer and imported liquor (Bennett, Campillo, Chandrashekar, Gureje, 1998; Navchoo&Buth, 1990; Mohan, Chopra, Ray, Sethi, 2001). Alcohol

content in traditional alcoholic beverages such as arrack, toddy, country liquor ranges from 20 to 40 % (WHO, 2004). Alcohol content in illicit liquor is much higher (up to 56%). Illicit liquor production is a serious problem in India. Raw materials used in production of illicit liquor are similar to those used for country liquor, however, illicit liquor is often adulterated using adulterants such as industrial methylated spirit (WHO 2004). Illicit liquor is cheaper than licensed country liquor and therefore popular among the rural and urban poor. In many parts of India, illicit production of liquor and its sale is a cottage industry with each village having one or two units operating illegally (WHO, 2004).

Home production and self- consumption of some alcoholic beverages is also common in certain regions and ethnic communities in India. For instance, in Ladakh, a mountainous region set in the northernmost State in India, certain alcohol (chhang, phaph, gurgur cha) and narcotic (berzeatsink, staspakchek, zimpating) preparations are part of the local diet (Navchoo&Buth, 1990). Arunachal Pradesh, a Northeastern state in India boasts a rice wine called Apong (WHO 2004). Zu and Rohi are locally brewed alcoholic beverages found in the state of Nagaland (WHO 2004). In the Sundarban region in West Bengal, Handia (rice beer) is a traditional drink regarded as food as well as intoxicants by the local adivasis (tribal/indigenous) communities (Chowdhury, Ramakrishna, Chakraborty, Weiss, 2006).

Prevalence of alcohol use in India

Business news reports claim that the Indian market for IMFL is growing at the rate of 8%- 10% a year (Thottam& Hannon, 2009). Sales of IMFL is however likely to account for only a section of the population consumption, namely the middle and the upper middle class consumption. It does not account for traditional or country made liquors consumed primarily by the lower middle class and the urban and rural poor. Further, illicit liquor production, sale and consumption remain unaccounted for.

The dearth of systematic national level epidemiological survey makes it difficult to estimate the prevalence and patterns of alcohol consumption and/or misuse at a country level.

The 2003 National Survey for Alcohol and Drug Abuse found that of the 40697 male respondents (across 25 states, covering rural and urban populations) aged 12-60 years, 74.1% reported life-time abstinence and 21.4% reported being current users (used in last 30 days) of alcohol. Of the total-users, 17% were classified as dependant users (based on the International Classification of Diseases 10) (WHO, 2004). The prevalence rate reported in this study is higher than that in the following secondary two national studies as well as in other regional or community specific epidemiological studies that have been conducted so far. Neufeld, Peters, Rani, Bonu&Brooner (2005) analyzed data from the nationally representative survey (National Sample Survey) of 471,143 people across the country. They reported that the national prevalence of alcohol use was 4.5%. Men were found to be 9.7 times more likely to report regular use of alcohol than women. Further, members of Scheduled Castes and Scheduled Tribes (historically marginalized communities in India) were significantly more likely to report regular use of alcohol as well as tobacco smoking and chewing.

Similar results were reported by Subramaniam, Nandy, Irving, Gordon & Smith (2005) who analyzed the Indian National Family Health Survey for the period 1998-1999. They too reported that members of the schedule castes, schedule tribes and other backward classes were more likely to consume alcohol than members of other caste groups. Further they found that men with no education were more likely to report alcohol use than those with post-graduate education. These studies hint at class, caste and gender variations in alcohol consumption but reveal little in terms of alcohol related problems.

With the exception of studies mentioned above, almost all other epidemiological studies on alcohol use in India have been very region or community specific and their generalizability to the entire country is questionable (Bennett, Campillo, Chandrashekar, Gureje, 1998).

Nonetheless, these studies provide insights into factors determining nature and patterns of alcohol use in India.

Factors determining nature and patterns of Alcohol Use in India

Class, Caste and Ethnicity.

Chowdhury, Ramakrishna, Chakraborty& Weiss (2006) conducted an ethnographic study to identify alcohol consumption patterns and norms in 2 ethnically and economically diverse Development Blocks⁵ in West Bengal, India. One of the development blocks, Sagar, is inhabited mainly of Hindu migrant workers from another state while Gosaba is home to the adivasis i.e. local tribal (indigenous forest people) communities. Sagar is relatively better developed and has a ferry connection to the mainland. Comparatively, Gosaba is close to a tiger reserve with only country boats to connect them with the mainland.

The researchers found that popular alcoholic beverages in both these blocks were country liquor and toddy (palm wine). The consumption of IMFL was restricted to tourists and 'high status male'. Differences were observed in the culture and pattern of drinking among the tribal community and the migrant community.

Handia (rice beer) was a household brew among the tribal and mainly made for private consumption as part of the diet. Handia was not considered a hard drink and did not have negative connotations associated with alcohol drinking. Like other tribal communities, alcohol consumption by women was not taboo. Handia was also popular among lower caste men and laborers in Sagar. Among the members of low caste and tribal communities country liquor could be used to barter services (boat/ferry ride) or goods (soil beds, betel leaves). Additionally, consumption of alcohol at religious, funeral, marriage ceremonies are reportedly common. Unlike Gosaba, in Sagar consumption of alcohol was not allowed at home or within the immediate community. Alcohol related problems were identified in both these sites and punitive community actions were targeted towards those perceived as alcoholic or engaging in disruptive public behavior (brawls, eve teasing etc.).

Mohan, Chopra, Ray, Sethi (1997) who surveyed 12,157 men and women aged 15 + years from three districts (Mandsaur, Barabanki&Thoubal) in Madhya Pradesh a state in Central India also found significant differences in drinking patterns and attitudes among specific castes and ethnic groups. They reported that men from certain land and cattle owning castes groups (Rajputs, Yadavs and Meghvar) had a culture of alcohol consumption and a reputation for entertaining guests. Drinking was reportedly generally done at home by members of these caste groups. This cultural acceptance of alcohol was limited to the men and complete abstinence from alcohol was expected of women among these Hindu castes groups. In contrast the tribal groups in Thoubal district viewed alcohol as a natural product, a gift of god to be utilized for dietary as well as medicinal purposes by men and women.

Religion.

Religion plays an important spiritual and regulatory role in individual and community life in India. The Census of India identifies Hinduism, Islam, Christianity, Sikhism, Buddhism and Jainism as the five major religions in India. In the 2001 Census, 6,639,626 Indians identified themselves as following religions and persuasions other than the five mentioned above. Of the five major religions three, namely, Islam, Buddhism and Jainism explicitly prohibit alcohol consumption. Across studies, Indian Muslims report the highest abstinence rates (Chowdhury, Ramakrishna, Chakraborty & Weiss, 2006; Gupta, Saxena, Pednekar, & Maulik, 2003; Mohan, Chopra, Ray, Sethi 1997; Subramaniam, Nandy, Irving, Gordon, Smith, 2005). Despite the stronghold of religion in the lives of people in India, its role in alcohol consumption had not been adequately explored.

Gender.

With the exception of tribal societies, abstinence from alcohol consumption by women is a cultural norm in India. General population studies have consistently found a low consumption rate among Indian women - ranging from 2-5%. Cultural and religious norms, limited accessibility and gendered nature of drinking spaces are likely to explain the low rates of alcohol consumption among women in India (Benegal, Nayak, Murthy, Chandra & Gururaj, 2005). Not much is known about women who do drink.

One study examined patterns and context of alcohol consumption among women in urban and rural Karnataka. Benegal, Nayak, Murthy, Chandra & Gururaj (2005) interviewed 1517 males and 1464 women across eight urban and rural centers in the southern state of Karnataka. Of the women interviewed, 84% reported being life time abstainers and 5.8% reported having at least one drink in the last 12 months. Of the 5.8% women, urban working class women and rural women drinkers comprised 2% while affluent urban women comprised the remaining 4%.

This study highlights the differences in drinking patterns amongst women reporting alcohol consumption. Of the 5.8% women, 46.5% women drinkers reported heavy drinking (6 or more drinks per typical occasion). Further it was reported that a larger proportion of rural women than urban women reported drinking weekly or more often as well as drinking more 5+ drinks per occasion. These researchers also found that poor women in rural and urban communities mainly consumed Arrack (country liquor) or moonshine (illicit liquor) and were more likely to drink at home or at off-license retail outlets. These women also reported that they consumed alcohol for tension reduction and stress relief rather than for pleasure. In comparison, alcohol consumption was significantly lower among women from upper and middle socio-economic groups. These women were younger; more educated and reported drinking less per typical drinking occasion.

Impact of alcohol use

Health, Injury and Violence.

Cancela, Ramdas, Fayette, Thomas, Muwonge, Chapuis, Tharaet. al. (2009) interviewed 32,347 participants to evaluate the role of alcohol drinking and patterns of consumption in oral cancer incidence and mortality in 13 panchayats⁶ in Trivandrum district in Kerela. They found that incidence of oral cancer increased by

49% among current drinkers and 90% among past drinkers than among never drinkers. Current and past drinkers in this study were also more likely to be tobacco smokers and betel- quid chewers than never drinkers. Further, it was reported that the risk of dying from oral cavity cancer was significantly increased among alcoholics in this study. Other studies in Indian have found alcohol consumption to be a risk factor in for cardiovascular diseases (Kusuma, Babu& Naidu 2009) and oral submucousbibrosis (Hashibe, Sankaranarayanan, Thomas, Kuruvilla& Matthews 2002).

Alcohol use has also significantly associated with injury. India has one of the most stringent Blood Alcohol Content (BAC) count allowed for drivers yet in a study by the National Institute of Mental Health and Neurosciences, India it was found that in the city of Bangalore alone, 18-25% of the road injuries are attributable to driving under the influence of alcohol (NIMHANS, 2007).

Benegal, Gururaj, Murthy, Taly, Kiran, Chandrashekar., R &Chandrashekar, H. (2007) sampled 658 injury cases reported to the Emergency Department (ED) of the largest and most reputed general hospital in Bangalore. The injuries represented more than half (54.5%) of all cases seen at the ED during the study period. A high proportion of injuries were found to be alcohol related. It was found that 23.7% of all subjects presenting for treatment of injuries had consumed alcohol prior to the injury occurrence. Of these, 17.9% had BAC readings of .03 and over, which is the legal limit for driving in India. 77.5% patients who reported alcohol use prior to the current injury were also significantly more likely to have had repeated admissions to the ED in the past. Further, subjects who had drunk prior to injury were significantly more likely to drink five or more drinks per sitting, more than 3-4 times a week than subjects without alcohol use prior to injury. An important gender difference related to indirect alcohol related injury was observed in this study. Of those reported injuries indirectly related to alcohol (use by others) 57% were female and 59% male. Injuries indirectly related to alcohol among women included injuries due to burns, hanging, poisoning and assault. The researchers point out that in the Indian context, a large proportion of burn injuries are not accidental burns but assault and homicidal attempts on women by male relatives. In a family where a woman is already being harassed for dowry, birth of a girl child or lack of male children, alcohol abuse by the husband is likely to intensify physical, emotional and financial abuse (Benegal, Gururaj, Murthy, Taly, Kiran, Chandrashekar., R &Chandrashekar, H. 2007)

A number of studies on domestic violence suggest that while alcohol abuse by the spouse may not be the primary cause of domestic violence, it increases women's vulnerability to violence perpetrated by her spouse or partner. Varma, Chandra, Thomas & Carey (2007) interviewed 203 women attending an antenatal clinic in a public hospital in Bangalore to assess the prevalence of intimate partner violence and sexual coercion and its mental health consequences among pregnant women. 30 of 203 women in this study reported experiencing physical and psychological violence. Further, of these 30 women 15 reported ongoing violence during pregnancy. Prevalence of alcohol use was found to be much higher among spouses of abused women (82%) compared to spouses of non-abused women (18%). This study found that harmful use of alcohol use was a significant predictor of the presence as well as severity of violence.

Parker, Fernandes& Weiss (2003) conducted focus group discussions with women, men, youth and community leaders in a slum in Mumbai to identify the needs of the community for a community based mental health program. Alcoholism emerged as a major problem in the community. Participants reported that alcohol was distilled locally, was readily available and imbibed by 60% to 70% of the male population in the community. Domestic violence was identified as a rampant problem and closely associated with alcohol abuse by men. In addition to physical abuse women reported that their husbands regularly harassed them for money to repay credit taken for alcohol or for further alcohol consumption.

Similar findings were reported by Stanley (2008) who interviewed 75 wives of men enrolled in a de-addiction center in the city of Tiruchirappalli in South India. Like the previous studies, women in this study reported regular psychological, physical and financial abuse. 43.3% women reported that alcohol was consumed by their spouse at all times of the day. 30 % reported that their husbands had borrowed money and 13.3% reported that property was sold to meet the drinking expenditure. Of the sample 96.7% reported being verbally abused and 90% reported being physically abused. 50% of these women also reported physical abuse of children.

These studies indicate that alcohol abuse and woman and child abuse co-occur but do not explore the role of alcohol in domestic violence perpetuation or the nature of injuries caused by violence involving alcohol abuse. While it is unclear whether alcohol use triggers or intensifies violence, the studies suggest that women with alcoholic husbands are at increased risk for injury, victimization and impoverishment.

Recommendations for Social Work Practice

A multifaceted problem such as alcohol abuse requires a multi-pronged and multi-system approach to intervention (Benegal, 2005). As with most social problems, prevention, detection and treatment are key

areas for intervention in addressing alcohol abuse. Social work professionals can make significant contributions by initiating and testing best practice options in each of these areas.

Preventive initiatives usually involve raising awareness through education regarding the problem and capacity building for action. Preventive efforts not only create awareness but can also help to de-stigmatize the problem and individuals affected by alcohol misuse. Schools, colleges, religious organizations, community based and development organizations (such as youth and women's organization) are key community institutions that need to be enrolled in the efforts to address alcohol problems within a given community. Social workers can be instrumental in community mobilization for social change. As change agents social workers can identify, motivate, train and assist stakeholders to draw on community assets for initiating, planning and implementing community specific preventive and treatment strategies.

Educational and awareness raising initiatives must be complimented by adequate detection and treatment efforts. Professionals likely to come in contact with those affected by alcohol abuse including health care providers, development workers, women's organizations, police and traffic police require capacity building to ensure detection and appropriate referrals are made. A review of websites of organizations⁷ offering alcohol treatment and de-addiction services indicate that some have adopted the Alcohol Use Disorders Identification Test (AUDIT) for screening and assessment. However the extent of its usage in assessment and screening across treatment facilities in India is unknown. Training of health care professionals and social service providers in the use of standardized assessment measures is essential for practice as well as research. Social work professionals are an integral part of many systems including schools, hospitals and law enforcement and can be instrumental in facilitating networking and collaborations between various stakeholders in the community. Additionally social workers can significantly contribute to planning, co-ordinating and implementation of training and capacity building of professionals.

Literature on treatment approaches currently in use in India is sparse. A review of websites of organizations reflect a variety of approaches including detoxification units, yoga, psychotherapy, counseling, brief therapies, residential and non-residential programs, community based rehabilitations camps and programs involving one or more family members. However the efficacy of these treatment approaches for the particular client population remains to be demonstrated. The current situation warrants the urgent need for social workers to conduct practice evaluation research in order to identify best practices in addressing alcohol related problems.

Implications for Research and Policy

Presently it appears that while the majority of the Indian populace is abstinent, among those who do drink there are high rates of problematic and harmful drinking (Benegal, Nayak, Murthy, Chandra & Gururaj, 2005; D' Costa, Nazareth, Naik, Vaidya, Levy, Patel, & King, 2007; Rahman, 2003). Systematic and streamlined research on countrywide prevalence, context and impact of alcohol abuse is needed in order to formulate effective policies and implement appropriate interventions. Further, a thorough investigation of the nature, type and effectiveness of alcohol interventions currently in use is essential.

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