

Initiation of Alcohol Abuse amongst Youths: A Review of Various Risk Factors

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ABSTRACT: Consumption of large amount of alcohol has negative effects. The pattern of use, quantity and resultant problem have undergone sustainable changes over the past 20 years and these type of development have raised concerns about the public health and social consequence of excessive drinking. Various studies reveal that in majority of youth it signifies nothing more than healthy physiological experimentation. The present paper has critically reviewed, the empirical association between alcohol use and risk factors. A structural literature review was performed to identify the risk factors of alcohol abuse among youth and found the classes of risk factors which include family, peer, personality and other factors. Regular heavy drinking has become a regular pattern amongst youth. Suicide is found to be one of major risk factor among youth for alcohol abuse.

INTRODUCTION

The world's third largest risk factor for disease and disability is alcohol and it is one of the commonest illicit psychoactive substances consumed globally. It causes multiple effects on the hypothalamo-pituitary-thyroid axis and the functioning of the thyroid gland (Balhara and Deb, 2013). Breast cancer comprises 60% of alcohol-attributable cancer among women (Boffetta, *et al.*, 2006). High drinking levels more than doubled risk of breast cancer with 2% increase risk for each additional drink per week consumed and binge drinking of 4-5 drinks increases the risk by 55 % (Morch *et al.*, 2007). Moderate alcohol consumption has also been found to increase the breast cancer risk (Zhang *et al.*, 2007). First use of alcohol at ages 11-14 years greatly heightens the risk of progression to the development of alcohol disorders (Dewit *et al.*, 2000). Early drinkers were more likely to report subsequent alcohol problem, multiple partners,

unprotected sexual intercourse, being drunk and high during sexual intercourse and pregnancy, it was also related to sexual initiation and recent sexual intercourse (Stueve and O'Donnell, 2005).

Ministry of Social Justice and Empowerment, Government of India, conducted a national survey and it was estimated that about 73.2 million persons were found to be addicted and the number is increasing. The national survey also revealed that 80% of people had ever used alcohol, continued to use it and the same was true for 70% of cannabis users and 65% opiate users indicating that experimenting could lead to drug abuse and alcoholism (National Survey, 2008). The objective of the paper is to recognized the empirical association between alcohol use and risk factors like hopelessness, sexual behavior, anxiety sensitivity, sensation seeking and other risk factors among the youths. We performed a structured literature review identifying the studies focusing on the cognitive and

others risk factors of alcohol abuse among the youths.

ALCOHOL AND RISK FACTORS

A risk factor is a variable associated with an increased risk of disease or infection. Sometimes, determinant is also used, being a variable associated with either increased or decreased risks.

Socio-Demographic Risk Factors

Significant associations was found between some baseline socio-demographic variables like young age, low education, non-white ethnicity, occupational status but not others (sex, number of children, residential area) and the subsequent onset of alcohol or drug dependence; however, conditional models showed that these risk factors were limited to specific stages of baseline use (Swendsen, Conway *et al.*, 2009). Lifetime prevalence estimates were 91.7% for lifetime alcohol use, 72.9% for regular use, 13.2% for abuse, and 5.4% for dependence with abuse. Male sex, young age, non-hispanic white race/ethnicity, low education, student status, and never being married predicted the onset of alcohol use, the transition from use to regular use, and from regular use to abuse. An early age of onset of alcohol use also predicted the latter transition. The transition from abuse to dependence was associated with an early age of onset of regular alcohol use, being previously married, and student status (Kalaydjian, Swendsen *et al.*, 2009). A review study reported that most young people reported drinking for social motives, some indicated enhancement motives, and only a few reported coping motives (Kuntsche, *et al.*, 2005). Two specific personality factors, patterns can be distinguished: extraversion and sensation-seeking correlate with enhancement motives, while neuroticism and anxiety correlate most strongly with coping motives. For contextual factors, drinking motives were found to vary across countries but not among different ethnic groups in the same culture (Kuntsche *et al.*, 2006).

Family Domain Risk Factors

If children are raised in a family with a history of addiction to alcohol and other drugs, their risk of having alcohol or other drug problems themselves

increases. The family variables that have been found to predict starting to drink fall into three general categories: family composition; parental or sibling modeling and approval of drinking; and parenting and parent child relationship (Glynn, '81). Family structure has been examined as a risk factor in only a single longitudinal study of 12-14 year-olds, in which it was found that there is a greater risk of alcohol use initiation for adolescents living with a stepparent than for those living in intact families (Flewelling and Bauman, '90; Kuntsche, Rehm and Gmal, 2004). The hierarchical regression revealed that level of response (LR) and family history (FH) remained significant when considered in the context of the five remaining domains. Both trait-like characteristics (behavior under control, alcohol expectancies and ways of coping) and state-like domains (nurturance in the social support system and the amount of drinking in the environment) added significantly to the analyses (Schuckit and Smith, 2000).

Peer Domain Risk Factors

Young people who feel they are not part of society or are not bound by rules, who don't believe in trying to be successful or responsible, or who take an actively rebellious stance toward society are at higher risk of alcohol abuse, delinquency, and school dropout. The risk and protective factor scales in the Peer-Individual domain showed correlations of higher magnitude with problem behaviors than scale in the other domains (Arthur, *et al.*, 2002; Botvin and Griffin, 2007). Peer risk factors and later students' substance use were similar in the 8th- to 10th-grade cohort to those found in the 6th- to 8th-grade cohort (Egan *et al.*, 2012). Experimental studies have found neuro-cognitive deficits for frontal lobe processing and working memory operations in binge-drinking compared with non-binge alcohol drinkers (Courtney and Polich, 2009). Peer pressure was positively associated with drinking for girls but not for boys. Associating with deviant peers promotes and that authoritative parenting protects against smoking and drinking (Mortan *et al.*, 2001). Self-efficacy to resist peer pressure was negatively associated with both smoking and drinking among both boys and girls and provided both direct and indirect effects through deviant peer influence (Ando *et al.*, 2007). Peer

influence informs the consistent finding of gender differences in college student drinking (Brian and Carey, 2006).

Personality Domain Risk Factors

Sex differences would be most pronounced in risky activities with men demonstrating greater sensation seeking, greater reward sensitivity and lower punishment sensitivity (Cross, Copping and Campbell, 2011; Ham and Hope, 2003). Personality domain risk factors are related with depression, anxiety, internalizing disorders, temperament factors, sensation seeking, novelty seeking, self control etc. Studies of student personality are among the most common with respect to alcohol use; personality typically refers to characteristic ways of thinking, feeling and acting that show some consistency when measured across situations and over time (Baer, 2002). Using structural equation modeling, family history was found to have direct effects on number of drinks per day and on the number of alcohol problems, as well as indirect effects mediated through neuroticism (Locastro, *et al.*, 2006).

Behavioral Domain Risk Factors

Behavioral domain includes any particular behavior or behavioral pattern which strongly yet adversely affects health. It increases the chances of developing a disease, disability, or syndrome. Examples of these factors include tobacco use, alcohol consumption, smoking, obesity, physical activity, and sexual activity. Study show that alcohol-use increases the probability of sexual intercourse, even after accounting for the potential endogeneity. However, there is less evidence that heavy drinking has a significant effect on sexual intercourse (Sen, 2002). Among people who drink, greater quantities of alcohol consumption predict greater sexual risks than does frequency of drinking (Kalichman *et al.*, 2007). Study said that early drinkers were more likely to subsequent alcohol problems, unprotected sexual intercourse, multiple partners, being drunk or high during sexual intercourse, and pregnancy. Among females, early drinking was also related to sexual initiation and recent sexual intercourse (Stueve *et al.*, 2005; Hingson *et al.*, 2005).

Psychological factors attempt to distinguish characteristics of drunk drivers relative to the general

driving population or controls matched on driving risk variables (Turrisi *et al.*, 2006). Study indicated that at least a minimum level of drinking and driving, as well as smoking marijuana and driving, is engaged in at least once for the majority of youth. Teenage drivers, especially males, have higher rates of motor vehicle crashes and engage in riskier driving behavior than adults. Motor vehicle deaths disproportionately impact youth from poor and minority communities and in many communities there are higher rates of risky behaviors among minority youth (Juarez *et al.*, 2008).

Risk factors in alcoholics are generally consistent with reports based on general samples of suicide and medically serious suicide attempts. It was found that suicide prevention efforts in alcoholics, if they are to be successful, must include a focus on depression as well as interpersonal factors, including partner-relationship difficulties (Conner *et al.*, 2003). Many out-of-school youths reported the habit of substance abuse in terms of drinking alcohol, this was significantly associated with risky sexual practices (Alemu, Mariam and Davey, 2007).

Community Domain Risk Factors

The more easily available alcohols are in a community, there is a greater the risk that alcohol abuse will occur in that community. Perceived availability of alcohol and drugs in school is also associated with increased risk. After controlling for confounding variables (gender, age, parent education, race, neighborhood poverty, and perceived neighborhood violence), higher levels of collective efficacy significantly reduced the risk of dating violence victimization for males only; it was not a significant risk factor for male or female perpetration or female victimization (Capaldi, Knoble and Kim, 2012). Twenty of 25 constructs measured at age 14 years and 19 of 21 constructs measured at age 16 years were significantly predictive of later violence. Many constructs predicted violence from more than one developmental point. Hyperactivity (parent rating), low academic performance, peer delinquency, and availability of drugs in the neighborhood predicted violence from ages 10, 14, and 16 years (Herrenkohl *et al.*, 2000). Even normal school transitions can predict increases in problem behaviors. When children

move from elementary school to middle school or from middle school to high school, significant increases in the rate of alcohol use, school dropout, and anti-social behavior may occur. Communities characterized by high rates of mobility appear to be at an increased risk of drug and crime problems. The more people in a community move, the greater is the risk of criminal behavior. Youth were assessed on substance use (cigarette, alcohol, and marijuana use), external risk factors including family, school, peer and neighborhood influences, and individual risk and protective factors including self-control, family connectedness, and school connectedness (Sale, 2003). In adolescence, the highest rates of alcohol use are generally found among American Indians, followed in decreasing order by whites, Hispanics, African-Americans, and Asian-Americans. The role of socio-cultural factors in alcohol use as found in the literature is discussed, including level of acculturation, generational status, culturally specific values and beliefs and peer influence (Edwards, Thurman and Beauvais, '95). Alcohol consumption declined with increasing age, and individual consumption mirrored national consumption. Higher consumption was associated with male gender, being White, being married, having a higher educational level, having a higher income, being employed, and being a smoker (Moore, Gould and Karlamangla, 2005).

CONCLUSION

The classes of risk factors include socio-demographic, family, peer, personality, and behavioral variables. Regular heavy drinking has become a sustainable pattern. The factors which have substantially affected patterns of drinking in developing countries include urbanization, changes in gender and age roles, and high intensity mass marketing and promotion of alcoholic beverages by mass multinational corporations. Suicide is one of the major risk factor among the youths of alcohol abuse.

Understanding the various risk factors for alcohol abuse it is suggested to provide alcoholic some dialectical behavior therapy, cognitive-behavioral therapy, and treatments with anti-depressants have been identified as promising treatments. Knowledge

of risk and protective factors can serve to guide intervention and prevention efforts, particularly as they apply across ethnicity. There is also a need for more effective prevention programmes and treatments facilities.

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