Risk factors in alcoholism: The role of family environment

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The present investigation was done to examine the role of family environment in the determination of alcohol abusers. For accomplishing these objectives, a sample of 180 alcoholics from urban and rural areas (90 each) belonging to upper, middle and lower class (60 each) from two districts of Himachal Pradesh (Shimla & Kinnaur) was taken. The age range of the sample was 25-45 years. Step-wise regression analysis was done to find out the main predictors of alcoholism. The main findings point to the following facts: In urban sample, cohesion (-) expressiveness (+) and control (+) have significantly contributed 20% of variance in alcoholism, whereas, in rural area, cohesion (-), expressiveness (-) and organisation (+) have emerged on the significant predictors contributing 31% of variance in alcoholism. In middle class sample, cohesion (-) and control (+) have significantly contributed 30% of variance in alcoholism, in lower class sample, conflict (+) and achievement orientation (-) have significantly contributed 20% of variance in alcoholism. Thus, it can be concluded that family environment plays a vital role in alcoholism.

Keywords: family environment, alcoholism, urban and rural area

Alcoholism is characterized by an increased tolerance and physical dependence on alcohol affecting an individual's ability to control alcohol consumption safely and can't stop drinking (Hoffman & Tabakoff, 1996). Alcohol use disorder is actually a combination of alcohol-related medical conditions characterized by alcohol dependence or alcohol abuse (American Psychiatric Association, 2013). It is more commonly referred to as alcoholism. According to the DSM-5, the symptoms of alcohol use disorder include a combination of craving, physical dependence, an increasing tolerance for alcohol and loss of control. Considered individually; craving refers to the driving need for alcohol intake; and those who suffer from alcohol use disorder will have withdrawal symptoms without it. The individual who is alcoholic may be anxious, exhibit tremors or shaking, sweat effusively and be nauseous when he does not have alcohol. As well, the more the person with alcohol use disorder drinks; the greater amounts of alcohol he need in order to have the same effect (Farren, Hill, & Weiss, 2012). The alcohol abuser also lacks self-control and is unable to curb or restrain his drinking. The alcoholic individual will also spend as much time as possible in the act of drinking. This includes associated activities such of having they have alcohol available; suffering the throes of being drunk or recovering from its side effects. Alcohol use disorder is linked to high rates of medical and psychiatric co-morbidity; and early mortality (Kendler & Myers, 2012). It is a chronic condition that is treatable but not curable. Addiction is the repeated involvement with a substance or activity, despite the substantial harm it causes, because that involvement was and may continue to be pleasurable and/or valuable. Alcoholism has no one single cause. There are various causes of alcoholism i.e. genetic, psychological (stress, anxiety, depression, impulsive behaviour & low self-esteem), social (peer pressure, family environment & parent-child relationship) and cultural factors and host of other socio-cultural factors. Social and cultural forces can cause entire groups of people to be more vulnerable to alcohol use. Home environment is one of the leading factors of a child's developing this habit. Family history, family income, inadequate living conditions, unemployment, negative family environment, poor parent-child relationship, peer influences, society and availability of alcohol are often recognized as contributing social factors to an individual's decision to engage in drinking and smoking.

Family is “a group of persons united by ties of marriage, blood or adoption, constituting a single household; interacting and communicating with each other in respective social roles of husband and wife, mother and father, son and daughter, brother and sister; and creating and maintaining a common culture. The family is the basic unit of society. It is the first and the most immediate social environment to which a child is exposed. It is in the family a child learns language, the behavioral patterns and social norms in his childhood. In some way or the other the family is a universal group. It exists in tribal, rural and urban communities and among the followers of all religions and cultures (Burgess & Locke, 1953). Family is an institution which provides the mental or emotional satisfaction and security to its individual members. It is the family which provides the most intimate and the dearest relationship for all its members. The individual first experiences affection in his parental family as parents and siblings offer him love, sympathy and affection. Lack of affection actually damages an infant's ability to thrive. A person who has never been loved is seldom happy (Kumar, 2016). Family members often play an important role in the lives of those who abuse alcohol (Berry & Sellman, 2001; Rossov, 2001; Stanton, 1985; Velleman, 1992-2005; Vimpani, 2005).

Family environment is a protector or risk factor for alcohol use. Family environment plays a vital role in alcoholism. The use of drugs by family members, both parents and siblings, is a reliable risk factor for adolescent drug usage (Denton & Kampfe, 1994). Parents serve as a role model for their children to drink. Those children may have started as they have grown up in an environment where their parents and older siblings drink and so they drink in order to look and act like them. According to Bandura, people fall into alcohol addiction due to modeling. If an individual grows up in an environment where others appear to be rewarded for drinking...
alcohol, there will be a strong motivation to copy the behaviour. If an individual has a parent or other relative who is an alcoholic, there greater risk of person to become alcoholic, because spending time around people who drink heavily or abuse alcohol can influence individual to do the same (Van der Vorst, Engels, Meeus, Dekovic, & Van Leeuwe, 2005). Children of alcoholics are more susceptible to alcoholism and other drug abuse than children of non-alcoholics. Children of alcoholics are four times more likely than children of non-alcoholics to develop alcoholism. Both genetic and environmental factors influence the development of alcoholism in children of alcoholics (Windle, 1997; Ellis, Zucker, & Fitzgerald, 1997). In general, environmental factor is likely to be more influential factor in initiation of alcoholism. Poor relationship with the family members, family conflict and family control are associated with an increased risk for alcohol use, whereas, family cohesion, expressiveness, organisation, independence, active recreational emphasis and achievement orientation are protective factors for alcohol use. Supportive and cohesive families help protect adolescents with problem-drinking. A lack of family support, sense of rejection, detachment from parents, extra parental control, supervision and over monitoring have been associated with adolescent substance use and are turned as risk factors (Turner, Irwin, Tschann, & Millstein, 1993).

Poor family environment in terms of parental hostility, rejection and inconsistencies can all contribute to psychological problems viz., anxiety, stress, neuroticism, depression and many others (Sharma, Verma, & Malhotra, 2008). The family is the backdrop in which the child learns to deal with emotions, drives and to handle problems in a socially acceptable manner. When the family does not help the youngsters to adjust to the environment, they lose effective agent of socialization and hence create stress and anxiety among its members especially the adolescents as in adolescence, the development of independence from the family and adjustment to various social and environmental demands is vital, as the young people have to learn to meet everyday challenges of social relationships, educational attainment and employment (Sud & Sethi, 2008).

The family interactions play an important role in the development of an individual. These interactions and interpersonal relationships are seen between parents, parent and child, siblings, and other family members. The healthy functioning of these interaction patterns enhances mental health of the individual. Children need a happy and stable family environment and a conductive social network for their overall growth and development. Family system functioning and parental behaviors are positively related to adolescents’ well-being and protected from addiction (Karavasilis, Doyle, & Markiewicz, 2003). Eiden, Leonard, Hoyle, and Chavez (2004) found that long-term alcohol intake was predictive of negative parental behavior. Low parental support or monitoring is associated with high rates of adolescent substance use (Steinberg, Lamborn, Darling, Mounts, & Dornbusch, 1994; Chilcoat & Anthony, 1996; Piko, 2000). Closeness or a positive relationship with parents reduces the risk of adolescent substance use (Kandel et al., 1978). Individuals with less parental control consume more alcohol. In general, environmental factor is likely to be more influential factor in initiation of alcoholism. Thus, the present investigation is aimed at exploring the relationship of family environment (cohesion, expressiveness, conflict, independence, achievement orientation, intellectual cultural orientation, active recreational orientation, moral religious emphasis, organization & control) among alcoholics who belong to different area (Urban & rural) and socio economic class (lower, middle & upper).

Hypotheses of the study

Relationship dimension
- Family cohesiveness and expressiveness would be negatively and significantly correlated with alcoholism.
- Family conflict will be positively and significantly correlated with alcoholism.

Personal growth dimension
- Independence will be positively and significantly correlated to alcoholism.
- Achievement orientation, intellectual cultural orientation, active recreational orientation and moral religious emphasis would be negatively and significantly correlated to alcoholism.

System maintenance dimension
- Family control will be positively and significantly correlated to alcoholism.
- Organization will be negatively and significantly correlated to alcoholism.

Method

Participants

The study has been conducted on a sample of alcoholics (n=180). First of all, they were subdivided into two comparable halves based on their area that form n=90 in urban and another n=90 from rural area. These subjects were also divided into three halves based on their economic class that comprised of n=60 from upper class, middle class n=60 and another n=60 from lower economic class groups. This made six conditions, in each condition 30 subjects were used there by yielding a total sample of 180 subjects’ age between 25 to 45 years. Sampling technique was purposive.

Instruments

Alcohol, Smoking, Substance Involvement Scoring Test (ASSIST): This test was developed by the World Health Organization in 2001. It contains 8 items relating to different situations. It is a brief screening questionnaire to find out peoples’ involvement in alcohol, smoking and substance. Each question in the ASSIST has a set of responses. Item number one has only two options in the form of ‘yes’ or ‘no’. Whereas item numbers from 2 to 5 have five options (Never: not used in the last 3 months, once or twice: 1 to 2 times in the last 3 months, monthly: 1 to 3 times in one month. Weekly: 1 to 4 times per week. Daily or almost daily: 5 to 7 days per week) and remaining three items i.e. item 6, 7 and 8 have three options (No, Never /Yes, but not in the past 3 months /Yes, in the past 3 months). Thus, the score ranges from 0 to 39. For alcohol, scores received for questions 2 through 7 inclusive are added and the results from either Q1 or Q8 in this score are not included. For example, a score for alcohol would be calculated as: Q2 + Q3 + Q4 + Q5 + Q6 + Q7. Alcoholic Beverages 0-10= Low, 11-26= Moderate and 27+ = High. Low scorers are at low risk of health and other problems from their current pattern of use. Moderate scorers are at risk of health and other problems from their current pattern of substance use. High scorers are at high risk of experiencing severe problems (health, social, financial, legal, relationship) as a result of their current pattern of use and are likely to be dependent. Higher the score, more vulnerable the person will be towards ASSIST. The test-retest reliability coefficient ranges from a high of .58 to .90.
Family Environment Scale (Form-R) by Moos and Moos (1986): In the present study, Hindi version of family environment scale (Sharma & Thapa, 2007) was used. The test-retest reliability of family environment scale and its translated version was found to be 0.65 p<.01 on adult bilingual sample (n=106). The scale was used to measure the family climate. It comprises of 10 subscales which assess the three domains or dimensions viz., the relationship dimension, personal-growth dimension and system maintenance dimension. The relationship dimension is assessed by 3 subscales - cohesion, expressiveness and conflict, the personal-growth dimension is assessed by 5 sub-scales - independence, achievement orientation and moral-religious emphasis; and the system-maintenance dimension is assessed by 2 Sub-scales - Organization and Control. The scale consists of 90 items i.e., 9 items per each subscale. The scale measures the respondents' perceptions of emphasis placed on different dimensions of family climate. The scoring was done as per directions in the manual. The test-retest reliabilities are all in the acceptable range varying from a low of 0.68 for independence to a high of 0.86 for cohesion.

Research design
A correlational design was used to find out the relationship between the variables of alcoholism and family environment. Further, regression analysis was computed to find out the significant contributing factors. Family environment has been used as predictor and alcoholism as criterion variables.

Results and discussion
Co-relational analysis was carried out in order to find out the degree of relationship between all the variables viz. family environment and alcoholism. A separate analysis was carried out for urban and rural area by using Pearson's Product Moment Correlation. The details of the values obtained are shown in Table-1. Further, in order to find out the variance explained by each factor of family environment in alcoholism, regression analysis was carried out.

Table 1: Coefficient of correlation between family environment and alcoholism

<table>
<thead>
<tr>
<th>Variables</th>
<th>Alcoholics (180)</th>
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<tbody>
<tr>
<td></td>
<td>Urban</td>
</tr>
<tr>
<td>Cohesion</td>
<td>-.371**</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>-.324**</td>
</tr>
<tr>
<td>Conflict</td>
<td>-</td>
</tr>
<tr>
<td>Independence</td>
<td>-</td>
</tr>
<tr>
<td>Achievement Orientation</td>
<td>-</td>
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<tr>
<td>Intellectual Cultural Orientation</td>
<td>-</td>
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<tr>
<td>Active Recreational Orientation</td>
<td>-</td>
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<tr>
<td>Moral Religious Emphasis,</td>
<td>-</td>
</tr>
<tr>
<td>Organization</td>
<td>-</td>
</tr>
<tr>
<td>Control</td>
<td>.213*</td>
</tr>
</tbody>
</table>

In urban sample, table 1 shows that family cohesiveness (r=-.371** p<.0) and expressiveness (r=-.324** p<.01) are negatively and significantly correlated with alcoholism, whereas, family control (r=213* p<.05) is positively and significantly correlated with alcoholism.

Results further revealed that in rural sample, family cohesiveness (r=.432** p<.01), expressiveness (r=.337** p<.01 level) and family organisation (r=.207* p<.05) are negatively and significantly correlated with alcoholism, whereas, family control (r=.249* p<.05) and family conflict (r=.233* p<.05) are positively and significantly correlated with alcoholism.

Class wise results revealed that in upper class, family conflict (r=.253* P<.05) is positively and significantly correlated with alcoholism. In middle class, family cohesiveness (r=-.393** p<.01) is negatively and significantly correlated with alcoholism, whereas, family control (r=.431** p<.01) is positively and significantly correlated with alcoholism. In lower class, family conflict (r=.406** p<.01) and family control (r=.251* p<.05) are positively and significantly correlated with alcoholism, whereas, achievement orientation (r=.269* p<.05) is negatively and significantly correlated with alcoholism (for details see table-1).

In short, family cohesion, expressiveness, achievement orientation and organisation are negatively and significantly correlated with alcoholism, whereas, family control and conflict are positively and significantly correlated with alcoholism. On rest of the variables, the correlations have been found to be non-significant.

Table 2: Stepwise regression analysis for urban sample: Predictors of alcoholism

<table>
<thead>
<tr>
<th>Variables</th>
<th>r</th>
<th>R</th>
<th>β</th>
<th>R'</th>
<th>R' Change</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cohesion</td>
<td>-.377**</td>
<td>.514</td>
<td>.341</td>
<td>.282</td>
<td>.12</td>
<td>13.26</td>
<td>.01</td>
</tr>
<tr>
<td>Expressiveness</td>
<td>-.324**</td>
<td>.589</td>
<td>.313</td>
<td>.365</td>
<td>.08</td>
<td>09.71</td>
<td>.01</td>
</tr>
</tbody>
</table>

20%
The regression analysis of urban alcoholics sample reveals that 20% of variance is explained by family environment i.e., cohesion 12% (r = -.377**, p<.01; β weight=.341 R² change=.12 & F ratio=13.26**, p<.01) and expressiveness 8% (r = -.324**, p<.01; β weight=.391 R² change=.08 & F ratio=9.71**, p<.01).

In the rural alcoholics' sample, 31% of variance is explained by three factors of family environment i.e. cohesion 19% (r = -.432**, p<.01; β weight=.432 R² change=.19 & F ratio=16.42**, p<.01), expressiveness 8% (r = -.337**, p<.01; β weight=.513 R² change=.08 & F ratio=10.713**, p<.01) and family control 4% (r = -.249*, p<.05; β weight=.257 R² change=.04 & F ratio=3.79*, p<.05).

In upper class, results show that family conflict (r=.253* P<.05) is positively and significantly correlated with alcoholism, but family conflict has failed to reach the level of significance in regression analysis.

In the middle class alcoholics' sample, 30% of variance is explained by two factors of family environment i.e. control 19% (r=.431**, p<.01; β weight=.431 R² change=.19 & F ratio=21.83**, p<.01) and family cohesion 11% (r = -.393**, p<.01; β weight=.393 R² change=.11 & F ratio=11.02**, p<.01).

In the lower class alcoholics' sample, 20% of variance is explained by two factors of family environment i.e. conflict 17% (r=.406**, p<.01; β weight=.406 R² change=.17 & F ratio=18.14**, p<.01) and achievement orientation 3% (r = -.269*, p<.01; β weight=.224 R² change=.03 & F ratio=2.49**, p<.05).

On the basis of the results, it can be seen their family cohesion, expressiveness, achievement orientation and organisation are negatively and significantly correlated with alcoholism, whereas, family control and conflict are positively and significantly correlated with alcoholism. These findings are supported by the earlier researchers (Filstead, McElfresh, & Anderson, 1981; Moos & Billing, 1982) who have found that families of alcoholics have lower levels of family cohesion, expressiveness and higher levels of conflict, higher level of openly expressed anger, aggression and conflict. High family cohesiveness and expressiveness and less family conflict and control lead to greater family support. Strong family connections and family norms against alcoholism may discourage adolescents from alcohol use and protect from future involvement in alcoholism. Every family has problems. Conflict is a part of every family. Conflicts are resolved by a good relationship with family members. Healthy families are able to deal with stressful situations and easily resolve family conflicts.

Poor family relationship can lead to family conflict. Conflict may occur between any members of a family, and affects the family by increasing tension, anger, aggression and stress among its members. Family conflict contributes to domestic violence. Families today face a huge amount of stress. Healthy relationships manage to cope with stress and move on. High family conflict has been associated with negative mental health outcomes. Family conflict may trigger alcohol use (King & Chassin, 2004). Cohesion and expressive may protect from individual heavy drinking and are negatively correlated with alcoholism. Dysfunctional families are characterized by lack of communication and can contribute to a breakdown in trust and respect. Their family members are less cohesive and less likely to be able to tackle family conflicts. Family conflict increases the alcohol use and is positively correlated with alcoholism. Alcohol is used instrumentally by alcoholics to cope with anxiety or stress arising from family problems (Comasco, Berglund, Oreland, & Nilsson, 2010; Kuntsche, Stewart, & Cooper, 2008). In contrast, supportive,
Family expressiveness is negatively and significantly correlated with alcoholism. Parent-child relationship is characterized by open communication, warm and supportive behaviour and firm, consistent reinforcement of developmentally appropriate, expectations, positively influence adolescent adjustment. Good relationship with parent protects children from alcohol use in later life. Hostile, angry and conflictual interpersonal interactions with parent are associated with poor adjustment and risky behavior (Sharma, Karuna, Sharma, & Pal, 2013). Hence, the hypothesis that “family cohesiveness, expressiveness would be negatively and significantly correlated with alcoholism” is accepted and confirmed. On the other hand, “family conflict will be positively and significantly correlated with alcoholism” is also accepted and confirmed.

Personal Growth dimension have five factors i.e., independence, achievement orientation, intellectual-cultural orientation, active-recreational orientation, and moral-religious emphasis. Families low in personal growth dimension is low in independence, achievement orientation, intellectual-cultural orientation and active-recreational orientation. Such families are characterized by low in decision making and low in achievement orientation. They also show low interest in political and intellectual cultural activities (Kaur & Malhotra, 2005).

Achievement orientation is negatively and significantly correlated with alcoholism. This finding is supported by the earlier research of Berkowitz and Perkins (1986) who have found that alcohol consumption has been negatively associated with academic performance. Lack of achievement activities at home has lead to alcoholism. In some cases oral aggressive people may become alcoholics. Achievement-oriented people often want to do things better or more efficiently than they have been done in the past. Achievement motivation is an important determinant of aspiration, effort, and persistence when an individual expects that his performance will be evaluated in relation to some standard of excellence. Such behavior is called achievement-oriented. Achievement oriented family children are more likely to become independent, self-reliant, socially accepted, academically successful, and well-behaved. They are less likely to report stress, anxiety and depression and less likely to engage in alcohol. Thus, on the basis of the results of the present study, the hypothesis that “achievement orientation is negatively and significantly correlated with alcoholism” is accepted and confirmed.

The present study reveals that system maintenance dimension is significantly correlated with alcoholism. Family organization is negatively and significantly correlated with alcoholism. Family control is positively and significantly correlated with alcoholism. Every family has its own certain rules and regulations. Strict control was related to high engagement in alcohol use. Affectionless control is the key variable in predicting anxiety disorders (Parker, 1983; Chorpita & Barlow, 1998). Parental control refers to the degree to which parents manage their children's behavior from being very controlling to setting few rules and demands. Parental control is defined as “the claims parents make on children to become integrated into the family as a whole, by their maturity demands, supervision, and disciplinary efforts and willingness to confront the child who disobeys” (Baumrind, 1991). Both excessive and lower levels of control are dangerous. Parents need to balance appropriate control over and regulation of their adolescent's behavior with developmentally appropriate attempts to grant them more autonomy over personal issues as they get older. As moderate amount of control are beneficial but excess control on the part of the parents curb the individuality, self-esteem and growth of the children thus, making them more vulnerable to risky behaviour i.e. drinking, smoking, drug use etc. (Smetana, 2000).

Organized families lay emphasis on rules and regulations and goes for moderate control where individual's duties and responsibilities are clearly defined and family members make collective effort to accomplish any task. Over control and under organised families are the breeding grounds of alcoholism. Moderate control leads to family cohesiveness and strong bonding. Moderate control of family members protects children from drug addiction and alcoholism. These findings are supported by the earlier researches (Filstead, McElfresh, & Anderson, 1981) which reveal that alcoholic patients entering a residential treatment facility and their family members tend to report low cohesion, low expressiveness and less organized and more conflict than normative sample. When individuals have a lot of strict rules placed upon them, they learn quickly how to avoid punishment, and many times this means hiding activities from their family members. This can sometimes lead to rebellion because when they are reared under a strict rule system, they don't get the opportunity to learn right or wrong for them. This can lead to dangerous consequences, because persons who are unable to think independently may be easily led by others and more willing to follow their peer group. Most risky behaviour in which adolescents engage such as delinquency, substance use, and drinking, takes place in the company of peers (Simons-Morton, Lerner, & Singer, 2005). The effects of peer influence are stronger during adolescence because social influence is a powerful force in the context of drinking. Imposing strict rules prevent youngsters from heavy drinking (Van der Vorst, Engels, Meeus, Dekovic, Van Leeuwe, 2005; Yu & Stiffman, 2007; Jackson, Henriksen, & Dickinson, 1999) that supports our findings. Thus, on the basis of the present study, the hypothesis that “organised family will be negatively and significantly correlated with alcoholism” is mainly accepted and confirmed. On the other hand, “control in the families is positively and significantly correlated with alcoholism” is also accepted and confirmed.

In present study the results reveal that alcohol use is more prevalent in rural area. From these results, it can be inferred that rural area alcoholics consume more alcohol as compared to urban area. Kinnauri culture (rural area) has long promoted alcohol consumption, especially among men. Youth population in rural area is more likely to begin drinking at an early age and later to engage in heavy drinking Alcohol is an important part of rituals, festivals and special events like marriage celebration etc. Kinnauri culture has long promoted alcohol consumption, especially among men.

Middle class drink more alcohol as compared to upper and lower class. The reason being middle suffer from stress and tension. Middle class alcoholics are more anxious as compared to upper and lower class alcoholic sample. They are suffering from superiority complex. They feel they are equal to upper class. They imitate the behaviour of upper class blindly. Middle class people's tendency to compare themselves with their relatives and neighbor as a benchmark to fail to keep up is perceived as a sign of social
inferiority, which in turn, makes people anxious and engaged those anti-social activities, alcohol use. It is expressed by insecurity of own achievement which leads to stress, anxiety and depression. Status anxiety can indicate that people feel inferior and insecure about their social position. The compulsive drinker would seem more apt to be led to further drinking, after he has been inebriated, because of his sense of guilt over this behavior. It may be that the compulsive middle class drinker has a more basic problem and more complex one in recovering from alcoholism (De Botton, 2004).

Conclusion

In a nutshell, it can be concluded that family environment (family cohesion, expressiveness, conflict, achievement orientation, active recreational orientation, organisation & control) is the major significant contributing factor in alcoholism. In the present study, cohesion, expressiveness, organization and achievement orientation are protective factors of alcohol use. Protective factors may reduce the risk of youth engaging in alcohol use. Family conflict and control have turned out to be the major risk factors associated with increased likelihood of youth alcohol use and abuse.

Implications of the study

The genetic component (partially anxiety) and family environment and general culture are the key factor in alcoholism. The contingencies of references are very important and so family environment and general environment has to change time to suit out non-alcoholic culture.

References
