A Study of Relationship between Alcohol Dependence and Personality
Gayatri Hegde¹*, Pavitra Kalmane Sridhara², Handigol Anand³

ABSTRACT
Alcohol dependence is related with multiple etiological factors and one among those is personality of the individual. This study was undertaken to explore the relationship between type of personality and alcohol addiction. Samples of 30 patients who have been admitted for de addiction were taken for the study. Socio demographic proforma, alcohol history proforma, CAGE questionnaire and Eysenck Personality Inventory were administered. It was found that significantly high number of patients with alcohol dependence syndrome had ambivert (76.6%) and neurotic (70%) personality. There were very few introverts (3.3%) and none of them had mentally well balanced personality. Clinical and research implications of the study are discussed.

Keywords: Extroversion, Ambivert, Neuroticism.

Alcoholism, a major public health and bio psychosocial problem has been described as the society’s most devastating problem short of war and malnutrition. A recent study highlighted that in India, health loss from alcohol will grow even larger, unless effective interventions and policies are implemented to reduce these habits (Ramdas et al 2010)

Alcohol dependence has multi factorial causation and one among those factors is personality of the individual. Interest in understanding the personality traits that are associated with alcohol dependency have led to a number of research studies in this area. The fact that personality could influence alcohol dependence and alcohol dependence could influence personality or both could be influenced by a third-variable makes the study more complex and difficult to reach a consensus. However there is a growing body of evidence that core or underlying personality and temperament are important determinants of vulnerability to develop alcohol dependence.

¹ Assistant professor in Clinical Psychology, DIMHANS, Belgaum road, Dharwad, Karnataka
² Professor in Psychiatry, Department of psychiatry, SDM college of medical sciences and Hospital, Dharwad, Karnataka
³ Consultant Psychiatrist, Department of psychiatry, SDM college of medical sciences and Hospital, Dharwad, Karnataka
*Corresponding Author

© 2015 I G Hegde, P Sridhara, H Anand; licensee IJIP. This is an Open Access Research distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and reproduction in any Medium, provided the original work is properly cited.
Personality constructs that are related to impulsivity/behavioral inhibition have been linked to alcohol use disorders. Several meta-analysis have shown that alcohol involvement is associated with low conscientiousness, low agreeableness, and high neuroticism, (Malouff JM, Thorsteinsson E B, Rooke S E, Schutte NS 2007, and Trull & Sher 1994). One of the prominent trait is anxiety which has been found to be associated with susceptibility to heavy alcohol use among adolescents (Colder and Chassin, 1993), with craving for alcohol among alcoholics (McCusker and Brown, 1991), and to predict alcohol dependence longitudinally (Heath et al., 1997).

Apart from these there are a number of theoretical models with varying degrees of empirical support posited to address the question of how or why personality relates with alcohol use disorders. (Sher & Littlefield, 2008), however these models are neither exhaustive nor mutually exclusive.

In India studies of the relationship of underlying personality with the nature, phenomenology, prognosis and treatment of alcoholism have occurred less frequently. This study is undertaken to explore the field in this direction and to find the relationship between type of personality and alcohol addiction.

**OBJECTIVES**

- To study the relationship between alcohol dependency and personality types
- To study socio demographical correlates of alcoholism

**MATERIALS AND METHODS**

**SAMPLE**

Sample consisted of 30 patients, diagnosed as having alcohol dependence syndrome. The study was conducted in the department of psychiatry SDMCMSSH, Dharwad, Karnataka and Maitri De addiction centre Hubli, Karnataka. Male patients, who were admitted for de addiction treatment and who were diagnosed as having alcohol dependence syndrome according to ICD 10 were included in the study. Data were included only when their lie score was less than 5 on Eysenck personality Inventory. Patients who were having psychiatric co morbidity other than alcohol dependence were not included.

**TOOLS**

**Socio demographic proforma:** A proforma specially designed for the purpose of current study which included basic socio demographical details.

**Alcohol history proforma:** Proforma designed for the collection of data in the form of semi structured interview with variables related to alcohol abuse and addiction.

**CAGE:** Developed by Ewing and Rose (1970) the four items CAGE was used. Area assessed are feeling the need to reduce drinking, Acknowledge others criticizing one’s drinking, Feeling guilty about drinking and drinking first thing in the morning.
Eysenck Personality Inventory: EPI is designed to measure two important personality dimensions – Extroversion and neuroticism. Those who score around the midpoint, on both direction who are neither extreme extroverts nor extreme introverts are considered as ambiverts in the discussion of results. In neurotic dimension subjects are classified as neurotic or mentally well balanced. Mid scorers are taken as having average emotional stability.

PROCEDURE
The data was collected with the help of interview and questionnaire methods. Initially patients were screened with CAGE questionnaire. An informed consent was taken for those who agreed to participate in the study. Patients were approached again after 7 – 10 days of their admission, i.e. when withdrawal symptoms come down. A semi structured interview was conducted to collect socio demographical data and alcohol history that was followed by the administration of Eysenck Personality Inventory. The data of the patients whose lie score was more than 5 in EPI rejected.

RESULTS

Table No. 1 Showing the socio demographical details

| Education          | 37.4 |
|--------------------|------|
| Age in years ( Average) |      |
| Illiterate         | 10%  |
| Primary            | 13.3%|
| Secondary          | 26.6%|
| PUC and Equivalent | 43.3%|
| PG                 | 6.6% |
| Occupation         |      |
| Unemployed         | 13.3%|
| Agriculture        | 10%  |
| Self employed/ business | 43.3%|
| Private Employees  | 23.3%|
| Government employees | 6.6% |
| Professionals      | 3.3% |
| Marital Status     |      |
| Unmarried          | 13.3%|
| Married            | 86.6%|
A Study of Relationship between Alcohol Dependence and Personality

Table no 2 showing alcohol history

| Duration In years Avg. | Avg. Quantity Per day | Period of Abstinence | Reasons | Family History | Other drug use |
|------------------------|-----------------------|----------------------|---------|----------------|---------------|
|                        |                       |                      | Max     | Min            | Present | Absent | Present | Absent |
| 12.2 Years             | 515ml                 | 5 yrs                | 6 days  | 43.3%          | 50%     | 44%    | 56%     | 86.6%  | 13.4% |

Table No.3 shows the results of EPI

| Extroversion | Neuroticism |
|--------------|-------------|
| Introverts   | Neurotic    |
| Extroverts   | Normal      |
| Ambiverts    | Mentally well balanced |
| 3.3%         | 70%         |
| 20%          | 30%         |
| 76.6%        | 00%         |

DISCUSSION

Demographical and psychosocial factors

On assessing the socio demographical data (Table no. 1) it was observed that in the group the mean age was 37.4 with age range of 26 years to 60 years. Majority of the patients belonged to the age group ranging from 30 to 50 (76.6%) which shows that majority of people with alcohol addiction are in this age group and it also indicates that admission rate for de addiction is higher in this age group. Among them 13.3 were unmarried and 86.7 were married which indicates that more number of married people opt for de addiction treatment than unmarried ones.

Analysis of patients educational and occupational status revealed that alcohol dependence is less among highly educated (6.6%) and it is more in people with PUC and equivalent level education (43.3) when compared with other educational levels. Occupationally alcohol dependency is less in professionals (3.3%) and more in self employed and business people (43.3). This can also indicate that self employed people opt more for admission for de addiction than other employees.

Average duration of alcohol use was found to be 12.2 years with a broad range of 2 years to 40 years. Longest period of abstinence from alcohol observed in the group was 5 years and 1-2 days of abstinence was the minimum. No association was observed between educational qualification and occupation with severity or duration of illness or duration of abstinence.
In the group 56.6% hold their internal factors such as pleasure and anxiety reduction as the reason for their addiction and 43.3% considered that external factors influence their drinking such as peer pressure, problems in life etc. This suggests that people who have internal locus of control opt for de addiction then those who externalize the cause of their addiction.

Analysis of alcohol history revealed that 43.3% of the group had family history of alcoholism which shows that this is one of the strong predictor of alcohol dependence. It is in line with a host of earlier studies, where parental alcohol problems were clearly related to an increased occurrence of alcohol dependence (Dawson et al., 1992; Kendler et al., 1995; Kranzler et al., 1997).

Majority of the persons with alcohol dependence syndromes (86.6) had other drug use major one being nicotine.

**Personality Types**

In the group, majority of the patient have ambivert personality (76.6%). Only one patient was introvert (3.3%) and 6 were extrovert (20%). The average score of the group as a whole is 12 which are again interpreted as ambivert. The findings suggest that significantly high number of ambiverts is susceptible to alcohol dependence then introverts. Extroversion dimension is found to be associated with alcoholism in few other Indian studies as well. (Charu dube et al 2010)

In neurotic dimension 70% of the sample group is belonging to neurotic dimension and 30% found to have average emotional stability. None of them were found to be mentally well balanced. In comparison with general population where 2/3 will be normal and few will be neurotic and few will be mentally well balanced, neurotic personality is significantly high in people with alcohol addiction. Many cross-sectional and longitudinal studies have found high levels of both neuroticism and novelty seeking to be associated with elevated risk of alcohol use disorders.(Chassin et al., 2004; Elkins et al., 2006; Iacono et al., 1999; Khan et al., 2005).

The personality trait of neuroticism refers to relatively stable tendencies to respond with negative Emotions to threat, frustration, or loss. They show frequent and intense emotional reactions to minor challenges. (Benjamin B. Lahey 2009). They are more likely than the average to experience such feelings as anxiety, anger, envy, guilt, and depressed mood. This negative mood state may motivate them to indulge in behavior which will reduce this negative feeling even if it is temporarily.

Significantly high number of neurotics in this study finding also could be due to the age of the sample (Avg. 36 years) because the association of neuroticism with alcohol dependence is more with older population then in adolescents (Joseph IoCastro, 2000).
Clinical and research implications

Understanding why high neuroticism places persons at increased risk for alcoholism could help in better understanding and conceptualizing alcohol dependence, which will lead to improved treatment and prevention. This has important implication in the psychological management as well. Integrated psychological interventions to reduce negative emotional state and bring balance in physiological response and to improve coping with stress.

Neuroticism is a robust correlate and predictor of many different mental and physical disorders, (Lahey BB 2009). Hence achieving a full understanding of the nature and origins of neuroticism, and the mechanisms through which neuroticism is linked to various mental disorders can be a top priority for further research.

CONCLUSION

To conclude, the factors like family history of substance use disorders, mediocre educational qualification, self employment or business are found to be associated with alcohol dependence syndrome.

Ambivert personality and Neurotic personality was significantly higher in persons with alcohol dependence syndrome. None of the sample group had mentally well balanced personality.

LIMITATIONS

Limitations of this study needs to be considered before generalizing the findings. The sample size was small, consisted only male patients who were admitted for de addiction. The predictive utility of personality correlates found in this study with alcoholism is less, as it can be a cause, a disease entity or a consequence of alcoholism.

REFERENCES

Benjamin B. Lahey (2009), Public Health Significance of Neuroticism , ( Am Psychol. Author manuscript; available in PMC 2009 December 11.) Am Psychol. 2009 ; 64(4): 241–256. doi:10.1037/a0015309.

Charu Dubey, Meenakshi Arora, Sanjay Gupta, and Bipin Kumar(2010, ) Five Factor Correlates: A Comparison of Substance Abusers and Non-Substance Abusers. Journal of the Indian Academy of Applied Psychology Vol.36, No.1, 107-114.

Chassin L, Flora DB, King KM. (2004). Trajectories of alcohol and drug use and dependence from adolescence to adulthood: The effects of familial alcoholism and personality. J. Abnorm. Psychol. 113:483–498.

Colder, C. R. and Chassin, L. (1993) The stress and negative affect model of adolescent alcohol use and the moderating effects of behavioral under control. Journal of Studies on Alcohol 54, 326–333.

Dawson, D. A., Harford, T. C. and Grant, B. F. (1992) Family history as a predictor of alcohol dependence. Alcoholism: Clinical and Experimental Research 16, 572–575.
Elkins IJ, King SM, McGue M, Iacono WG. (2006). Personality traits and the development of nicotine, alcohol, and illicit drug disorders: Prospective links from adolescence to young adulthood. J. Abnorm. Psychol. 115:26–39.

Five-Factor model of personality: a meta-analysis. J Drug Educ. 37(3):277-94.

Heath, A. C., Bucholz, K. K., Madden, P. A. F. et al. (1997) Genetic and environmental contributions to alcohol dependence risk in a national twin sample: consistency of findings in women and men. Psychological Medicine 27, 1381–1396.

Iacono WG, Carlson SR, Taylor J, Elkins IJ, McGue M.( 1999). Behavioral disinhibition and the development of substance-use disorders: Findings from the Minnesota Twin Family Study. Devel. Psychopathol. 11:869–900.

Joseph IoCastro, Avron Spiro, Edward Monnelly and Domenic Ciraulo, ( 2000) Personality Family history and alcohol use among older men: The VA normative aging study Alcoholism, Clinical and experimental research, Vol 24, No 4.

Kendler, K. S., Walters, E. E., Neale, M. C., Kessler, R. C., Heath, A. C. and Eaves, L. J. (1995) The structure of the genetic and environmental risk factors for six major psychiatric disorders in women. Archives of General Psychiatry 52, 374–383.

Khan AA, Jacobson KC, Gardner CO, Prescott CA, Kendler KS (2005). Personality and comorbidity of common psychiatric disorders. Brit. J. Psychiat.186:190–196.

Lahey BB (2009) Public health significance of neuroticism. Am Psychol. 64(4):241-56. doi: 10.1037/a0015309.

Malouff JM1, Thorsteinsson EB, Rooke SE, Schutte NS. (2007) Alcohol involvement and the McCusker, C. G. and Brown, K. (1991) The cue-responsivity phenomenon in dependent drinkers: ‘personality’ vulnerability and anxiety as intervening variables. British Journal of Addiction 86, 905–912.

Ramadas K, Sauvaget C, Thomas G, Fayette JM, Thara S, Sankaranarayanan R. (2010) Effect of tobacco chewing, tobacco smoking and alcohol on all-cause and cancer mortality: a cohort study from Trivandrum, India. Cancer Epidemiol.;34:405–12.

Sher KJ, Littlefield A. Korsmeyer Pamela, Kranzler Henry. (2008). Risk factors for substance use, abuse, and dependence: Personality. Encyclopedia of Drugs, Alcohol, and Addictive Behavior. 3rd edition. Vol. 3. New York: Macmillan; pp. 407–413.

Trull TJ, Sher KJ (1994) Relationship between the five-factor model of personality and Axis I Disorders in a nonclinical sample J Abnorm Psychol. 103(2):350-60.