

ASSOCIATION BETWEEN HIGH RISK BEHAVIOUR AND ALCOHOL DEPENDENCE SYNDROME

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ABSTRACT

Background: Alcohol use has been shown to be associated with high risk behaviour. However, the exact nature of this association remains to be clarified. The role of personality constructs of sensation-seeking and impulsivity has been implicated in high risk behaviour. Most of the published literature has been on population from the developed countries but not from the developing countries like INDIA have been few.

Methods: 60 male patients admitted with an ICD 10 diagnosis of alcohol Dependence Syndrome were studied using both self-report and semi structured interview. The data was analyzed using an Event-analysis technique for the occurrence of high risk behaviour, namely Road traffic Accidents, Crime and Violence, Self-injurious behaviour and risky Sexual behaviour. Personality variables were studied using the Sensation Seeking Scale, Form V, Indian Adaptation and Barratt's Impulsivity Scale, version 11. Data was analysed using SPSS.

Results: Out of the 60 patients studied 68.3% (n=47) of the sample were exposed to high risk behaviour. Analysis of the data found evidence that Severity of Dependence, Personality Constructs of Sensation Seeking and Impulsivity, and family history of dependence showed significant association with high risk behaviour.

Conclusion: Amongst the high-risk behaviours in alcoholics, risky sexual behaviour was the commonest followed by road traffic accidents. The significance of personality constructs of sensation seeking and impulsivity in high risk behaviour needs to be evaluated more routinely in patients with alcohol dependence syndrome, as intervention strategies need to be planned keeping these in mind to improve the effectiveness of treatment.

KEY WORDS: High Risk Behaviour, Sensation Seeking, Impulsivity.

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BACKGROUND

Alcohol is the most used drug in the world. It is mainly because alcohol is legal and socially acceptable in most countries [1]. Majority of people drink alcohol, generally for enjoyment, relaxation and sociability. Most people belongs to group of moderate drinkers and at this level, alcohol causes only a few adverse effects [2]. Actually, sensible drinking can even be beneficial for the

health of adult [3]. Unlike the moderate drinking, experiencing of severe or frequent intoxication negatively affect short-term as well as long-term health condition. Often alcohol abuse and alcoholism does not affect just health of the drinker, but also harms drinker's family and friends, employer and the broader community. Even though, there are just a small proportion of people who consume alcohol at higher

levels, the impact of this group on society is significant. The society suffers from heavy drinkers mentally as well as economically.

It is not just the treatment of alcohol related to illnesses problems such as cirrhosis of the liver, or cancer of the oesophagus or stomach, which is costly. Drinkers are frequently predisposed to common injuries. All this health related trouble together with often physical and mental incompetence caused by intoxication rise to decrease in productivity and to higher absence from work. Among others, alcohol abuse increases crime-related costs as well as vehicle crash costs. Moreover, heavy drinkers and alcoholics are more likely to die prematurely (Harwood et al, 1998). Unfortunately, the burden of alcohol problems does not fall just on the abusers. It is primarily the rest of society, who bears these costs [4].

Alcohol Dependence Syndrome is one of the most common and one of the most researched illnesses among psychiatric disorders. The Global Burden of Disease Project estimated alcohol to be responsible for 1.5% of all deaths and 3.5% of the total Disability Adjusted Life Years (DALYs) [5]. In India, epidemiological studies have shown a prevalence rate of 16-50% for alcoholism [6]. The morbidity and mortality associated with alcoholism is further compounded by the concept of 'risk-taking'. Literature supports the notion that there are links between alcohol use and problematic or risky behavior; However, the nature of these links have often been explained in terms such as "involved," "implicated" and "associated" [7]. However, there is evidence from literature that drinking and drug use are associated with sensation seeking and risk-taking propensities, as measured by personality scales. Therefore, substance use and risky behavior might be part of a larger constellation of risk taking behavior [8, 9]. Given the cultural differences in the patterns of substance use between the western society and developing countries, it is important to study the association of high-risk behavior with substance use in our country. This assumes greater significance in the background of rising incidence of high-risk behavior such as drunken driving related fatalities, increasing incidences of HIV, sexually transmitted diseases, crime and deliberate self-harm [10]. In this background, a

study of the association between High Risk Behavior and Alcohol Dependence in a group of male alcohol dependent patients, being admitted to the in-patient facility of a Psychiatric unit would be beneficial in furthering our understanding on the subject.

MATERIALS AND METHODS

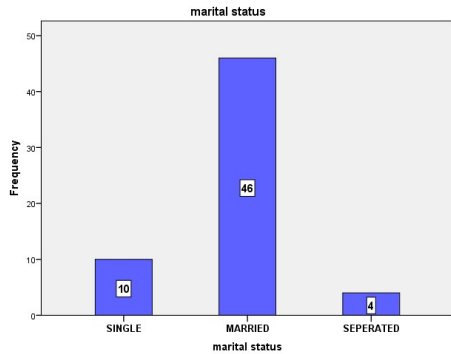
The study was conducted in the Department of Psychiatry at Narayana Medical College and Hospital in Nellore. The study was conducted on 60 male in-patients who were admitted in Hospital for the treatment of Alcohol related illness. The patients were screened to ensure that Male with ICD-10 diagnosis of Alcohol Dependence Syndrome in-patients. Male patients with any other co morbid Axis-1 psychiatric diagnosis, any other substance use, except tobacco and presence of cognitive impairment were excluded from the study. Consenting patients were then interviewed on Structured Clinical Interview for DSM-IV (SCID) to establish a diagnosis of alcohol dependence syndrome. SCID was also used to exclude any other co-morbid axis-I diagnosis. Patients were then screened using Clinical Institute Withdrawal Assessment for Alcohol (CIWA-AD) and Mini-Mental State Examination (MMSE) to ensure that patients were not in withdrawal state and had no cognitive impairment respectively. Patients who were deemed to be out of withdrawal state and not having any cognitive impairment were then assessed on the following by Severity of Alcohol Dependence Questionnaire (Sad-Q) [11], Measurement of Sensation seeking scale, form v: Indian adaptation [12], Measurement of impulsivity by Barratt's impulsiveness scale, version 11 (bis-11) [13]. After the subjects are admitted to the wards, patients are screened for the presence of alcohol use and the presence of any major medical or psychiatric illness. Following this the data was collected in a systematic approach as presented in the flow chart on the following page. The order of presentation of various questionnaires and scales were maintained constant throughout the duration of the study.

Statistical analysis: The data was analyzed using a computerized Software Programme - Statistical Package for the Social Sciences (SPSS

version 21.0 for Windows). Descriptive statistics was used to describe the socio demographic variables. Independent Student t-test, ANOVAs was used to analyze the association between the various independent variables.

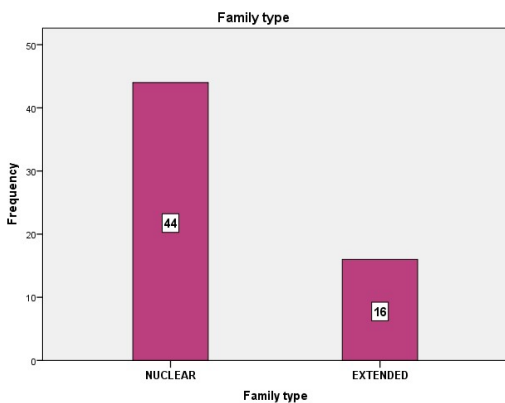
RESULTS

Fig. 1: Frequency of distribution of marital status.



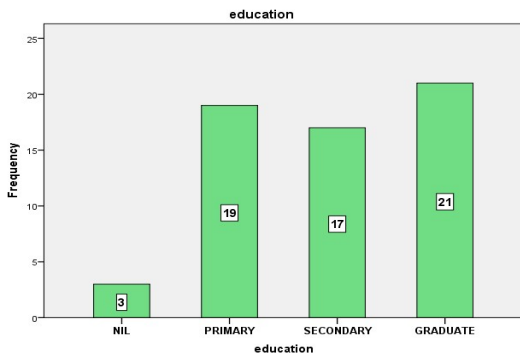
Frequency of distribution of marital status (n = 60): 76.7% of the total sample consisted of married men, 16.7% were single while 6.6% were separated

Fig. 2: Frequency of distribution of family type.



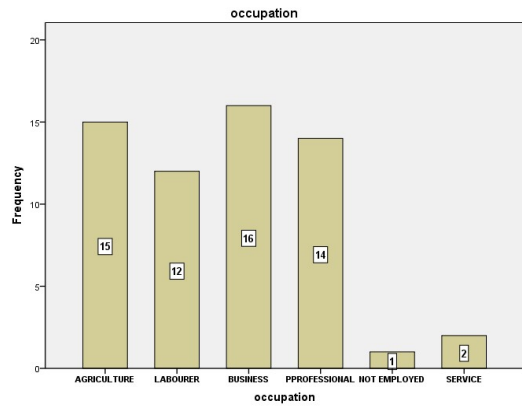
Frequency of distribution of family of family type (n = 60): 73.3% of the total sample belonged to a nuclear family while 26.7% had an extended family.

Fig. 3: Frequency of distribution of education.



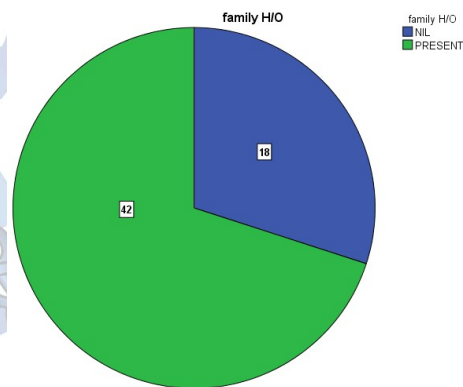
Majority of the sample (35%) were graduates followed by individuals with primary education (31.7%).

Fig. 4: Frequency of distribution of occupation.



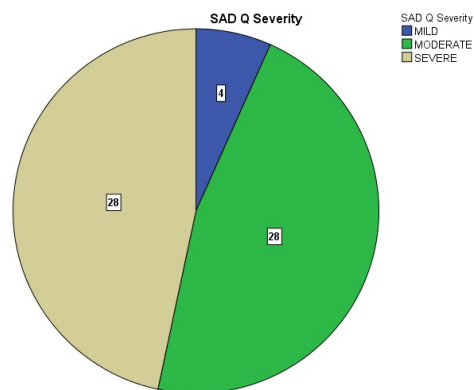
Occupation of 26.7% of the individuals who participated in this study was business closely followed by people with agriculture as the occupation (25%) and 23 % of the individuals were professionals.

Fig. 5: Frequency of distribution of family history.



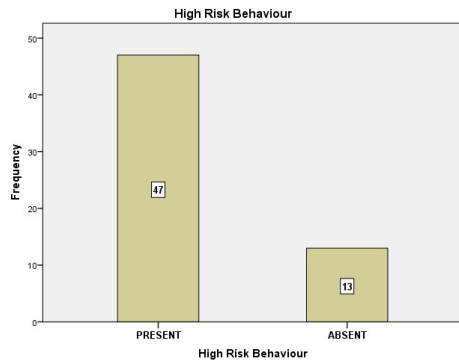
Note: 70 % of the individuals had family history of dependence

Fig. 6: Frequency of distribution of severity of dependence.



Note: Scores on SAD-Q reveal that 46.7% of the sample had severe dependence and the same percentage of the individuals had moderate dependence, while 6.7% of individuals had mild dependence.

Fig. 7: Frequency of distribution of high risk behaviour.



The analysis of the results showed that 68.3% (n=47) of the sample had been involved in some form of High Risk Behaviour, with a temporal relationship with alcohol.

Table 1: Association between severity of dependence and High Risk Behaviour.

Variables	SAD Q Severity	Mean ± SD/ Frequency (%)	t-value / Chi square/ F-Value
High Risk Behaviour	MILD	Present – 1 (25.00%) Absent – 3 (75.00%)	13.916*
	MODERATE	Present – 19 (67.9%) Absent – 9 (32.1%)	
	SEVERE	Present – 27 (96.4%) Absent – 1 (3.6%)	
RTA	MILD	Present – 0 (0.00%) Absent – 4 (100.0%)	5.185
	MODERATE	Present – 15 (53.6%) Absent – 13 (46.4%)	
	SEVERE	Present – 17 (60.7%) Absent – 11 (39.3%)	
CRIME & VIOLENCE	MILD	Present – 0 (0.0%) Absent – 4 (100.0%)	2.902
	MODERATE	Present – 5 (17.9%) Absent – 23 (82.1%)	
	SEVERE	Present – 9 (32.1%) Absent – 19 (67.9%)	
SELF INJ. BEHAVIOUR	MILD	Present – 1 (25.0%) Absent – 3 (75.0%)	2.502
	MODERATE	Present – 4 (14.3%) Absent – 24 (85.7%)	
	SEVERE	Present – 9 (32.1%) Absent – 19 (67.9%)	
HIGH RISK SEXUAL BEHAVIOUR	MILD	Present – 1 (25.0%) Absent – 3 (75.0%)	10.549*
	MODERATE	Present – 11 (39.3%) Absent – 17 (60.7%)	
	SEVERE	Present – 22 (78.6%) Absent – 6 (21.4%)	

Level of significance: *-p<0.05, **-p<0.01, ***-p<0.001, NS-Not significant

High Risk Sexual Behaviour was found to be significantly associated with severity of dependence among the individuals.

Table 4: Frequency of occurrence of HIGH RISK BEHAVIOUR in the sample (n=60).

TYPE	Road Traffic Accidents		Crime & violence		Self Injurious Behaviour		Risky Sexual Behaviour	
	Present	Absent	Present	Absent	Present	Absent	Present	Absent
FREQUENCY	32	28	14	46	14	46	34	26
PERCENTAGE (%)	53.3	46.7	23.3	76.7	23.3	76.7	56.7	43.3

Table 2: Association between severity of dependence and Sensation Seeking behaviour.

Variables	SAD Q Severity	Mean ± SD/ Frequency (%)	t-value / Chi square/ F-Value
TAS	MILD	4.25 ± 1.3	3.680*
	MODERATE	4.79±0.8	
	SEVERE	5.21±0.7	
ES	MILD	4.00±0.8	0.842
	MODERATE	3.93±0.9	
	SEVERE	4.18±0.5	
BS	MILD	5.00±0.8	1.988
	MODERATE	5.07±0.9	
	SEVERE	5.46±0.7	
DIS	MILD	4.50±1.0	5.199*
	MODERATE	5.18±1.1	
	SEVERE	5.86±0.8	
SENSATION SEEKING TOTAL SCORE	MILD	17.75±3.8	3.786*
	MODERATE	18.96±3.2	
	SEVERE	20.71±2.2	

Level of significance: *-p<0.05, **-p<0.01, ***-p<0.001, NS-Not significant

Severity of dependence was found to be significantly associated with disinhibition, thrill and adventure seeking behaviour.

Table 3: Association between severity of dependence and impulsive behaviour.

Variables	SAD Q Severy	Mean ± SD/ Frequency (%)	t-value / Chi square / F-Value
MOTOR	MILD	27.25±4.0	4.267*
	MODERATE	28.82±3.2	
	SEVERE	30.75±2.6	
NON- PLANNING	MILD	27.75±4.3	3.808*
	MODERATE	29.43±3.2	
	SEVERE	31.07±2.1	
COGNITIVE	MILD	21.50±3.3	2.853
	MODERATE	21.96±2.1	
	SEVERE	23.11±1.5	
BIS-TOTAL SCORE	MILD	76.50±11.6	4.270*
	MODERATE	80.21±8.1	
	SEVERE	84.93±5.5	

Level of significance: *-p<0.05, **-p<0.01, ***-p<0.001, NS-Not significant

Impulsive behaviour was found to be significantly influence by severity of dependence. Motor impulsivity and non-planning were much more in individuals with severe dependence when compared to that of individuals with moderate and mild dependence.

On examining the frequencies of high risk behavior in the entire sample it was seen that the occurrence of risky sexual behaviour (56.7 %) was the highest among the high risk behaviours, with 53.3 % also being involved in road traffic accidents. Crime and violence was seen in 23.3 % of the sample, whereas 23.3 % showed self-injurious behaviour. These were values of occurrence of High Risk Behaviour without accounting for any temporal relation with alcohol use.

Table 5: Association between High Risk Behaviour and socio demographic variables.

Variables	High Risk Behaviour	Mean ± SD/Frequency (%)	t-value/Chi Square	
Age (in Years)	Present	35.87 ± 7.05	-2.268* P<0.05	
	Absent	41.31 ± 7.80		
Marital status	Present	Single	10 (21.30%)	5.01**
		Married	33 (70.20%)	
		Separated	4 (8.50%)	
	Absent	Single	0 (0.00%)	
		Married	13 (100.00%)	
		Separated	0 (0.00%)	
Education	Present	Nil	2 (4.30%)	4.475***
		Primary	12 (25.50%)	
		Secondary	15 (31.90%)	
		Graduate	18(38.30%)	
	Absent	Nil	1 (7.70%)	
		Primary	7 (53.80%)	
		Secondary	2 (15.40%)	
		Graduate	3 (23.10%)	
Occupation	Present	Agriculture	8 (17.00%)	9.613*****
		Labourer	10 (21.30%)	
		Business	15 (31.90%)	
		Service	1 (2.10%)	
		Professional	12 (25.50%)	
		Not Employed	1 (2.10%)	
	Absent	Agriculture	7 (53.80%)	
		Labourer	2 (15.40%)	
		Business	1 (7.70%)	
		Service	1 (7.70%)	
		Professional	2 (15.40%)	
		Not Employed	0 (0.00%)	
Family Type	Present	Nuclear	33 (70.20%)	1.080*
		Extended	14 (29.80%)	
	Absent	Nuclear	11 (84.60%)	
		Extended	2 (15.40%)	

Level of Significance: *-p<0.05, **-p<0.01, ***-<0.001, NS-Not Significant

Association between High Risk Behaviour as determined by Event-analysis and socio-demographic variables. The mean age of individuals with high risk behaviour was 35.87 years. Majority of the individuals were married. High Risk Behaviour was high among graduates followed by individuals with secondary education also was noted to be more among the individuals who had business as their occupation followed by professionals. Majority of the individuals with High Risk Behaviour belonged to a nuclear family.

Table 6: Association of High Risk Behaviour with family history and severity of dependence.

Variable	High Risk Behaviour	Mean ± SD/Frequency (%)	t-value/Chi square	
Family History	Present	Nil	8 (17.00%)	5.9* P < 0.05
		Present	39 (83.00%)	
	Absent	Nil	10 (76.90%)	
		Present	3 (23.10)	
SAD Q Severity	Present	Mild	1 (2.10%)	5.051 **
		Moderate	19 (40.40%)	
		Severe	27 (57.40%)	
	Absent	Mild	3 (23.10%)	
		Moderate	9 (69.20%)	
		Severe	1 (7.70%)	

Level of Significance: *p<0.05, **p<0.01, ***<0.001, NS-Not Significant

High Risk Behaviour was found to be much more in individuals with family history of dependence. Results also reveal the significant correlation between severity of dependence and High Risk Behaviour. High Risk Behaviour was found to be significantly high in individuals with severe dependence when compared to that of mild and moderate dependent individuals.

Table 7: Association between High Risk Behaviour and sensation seeking behavior.

VARIABLES	High Risk Behaviour	MEAN ± SD	t-value *
Thrill & adventure Seeking (subscale of Sensation Seeking Scale)	Present	5.21 ± 0.72	5.795*
	Absent	4.0 ± 0.41	
Experience Seeking (subscale of Sensation Seeking Scale)	Present	4.3 ± 0.6	4.835*
	Absent	3.3 ± 0.6	
Disinhibition (subscale of Sensation Seeking Scale)	Present	5.9 ± 0.8	7.958*
	Absent	4.0 ± 0.6	
Boredom Susceptibility (subscale of Sensation Seeking Scale)	Present	5.5 ± 0.6	7.069*
	Absent	4.2 ± 0.6	
Total Sensation Seeking Scale Score	Present	20.9 ± 2.1	8.761*
	Absent	15.5 ± 1.4	

Level of significance: *-p<0.05, **-p<0.01, ***-p<0.001, NS-Not significant

Thrill and adventure seeking, experience seeking, disinhibition and boredom susceptibility were found to be significantly high in individuals with High Risk Behaviour.

Table 8: Association between High Risk Behaviour and impulsivity.

VARIABLES	High Risk Behaviour	MEAN ± SD	t-value *
MOTOR (subscale of Barratt's Impulsiveness Scale)	present	30.1 ± 1.9	10.791*
	Absent	24.8 ± 1.6	
NONPLANNING (subscale of Barratt's Impulsiveness Scale)	Present	31.3 ± 1.8	10.129*
	Absent	25.6 ± 1.7	
COGNITIVE (subscale of Barratt's Impulsiveness Scale)	Present	23.1 ± 1.5	6.378*
	Absent	20.0 ± 1.7	
BIS (Total Score)	Present	85.4 ± 4.5	10.824*
	Absent	70.4 ± 4.2	

Level of significance: *-p<0.05, **-p<0.01, ***-p<0.001, NS-Not significant.

Individuals with High Risk Behaviour scored significantly high on all domains of impulsivity scale.

Table 9: Association between Family history and High Risk Behaviour.

Variables	Family h/o	Mean ± SD/ Frequency (%)	t-value / Chi square/ F-Value
High Risk Behaviour	Nil	PRESENT – 8 (44.4%) ABSENT – 10 (55.6%)	17.400*
	Present	PRESENT – 39 (92.9%) ABSENT – 3 (7.1%)	
RTA	Nil	PRESENT – 7 (38.9%) ABSENT – 11 (61.1%)	2.156
	Present	PRESENT – 25 (59.5%) ABSENT – 17 (40.5%)	
CRIME & VIOLENCE	Nil	PRESENT – 1 (5.6%) ABSENT – 17 (94.4%)	4.543*
	Present	PRESENT – 13 (31.0%) ABSENT – 29 (69.0%)	
SELF INJ. BEHAVIOUR	Nil	PRESENT – 3 (16.7%) ABSENT – 15 (83.3%)	0.639
	Present	PRESENT – 11 (26.2%) ABSENT – 31 (73.8%)	
HIGH RISK SEXUAL BEHAVIOUR	Nil	PRESENT – 5 (27.8%) ABSENT – 13 (72.2%)	8.739*
	Present	PRESENT – 29 (69.0%) ABSENT – 13 (31.0%)	

Level of significance: *-p<0.05, **-p<0.01, ***-p<0.001, NS-Not significant.

Crime and Violence and High Risk Sexual Behaviour were found to be significantly high in individuals with family history of dependence.

Table 10: Association between Family history and Sensation Seeking Behaviour.

Variables	Family H/O	Mean ± SD/ Frequency (%)	t-value / Chi square / F-Value
TAS	Nil	4.50±0.9	-2.911*
	Present	5.14±0.8	
ES	Nil	3.83±0.8	-1.537
	Present	4.14±0.7	
BS	Nil	4.94±0.8	-1.999*
	Present	5.38±0.8	
DIS	Nil	4.78±1.1	-3.493*
	Present	5.74±0.9	
SENSATION SEEKING TOTAL SCORE	Nil	18.06±2.9	-3.045*
	Present	20.40±2.7	

Level of significance: *-p<0.05, **-p<0.01, ***-p<0.001, NS-Not significant.

Thrill and adventure seeking behaviour, boredom susceptibility and disinhibition were found to be significantly associated with family history of dependence. Sensation seeking behaviour has a positive correlation with family history of dependence.

Table 11: Association between Family history and impulsivity.

Variables	Family (H/O)	Mean ± SD/ Frequency (%)	t-value / Chi square / F-Value
MOTOR	Nil	27.00±3.1	-4.505*
	Present	30.74±2.4	
NON-PLANNING	Nil	27.56±3.2	-4.432*
	Present	31.17±2.1	
COGNITIVE	Nil	21.22±2.5	-2.787*
	Present	23.00±1.5	
BIS-TOTAL SCORE	Nil	75.78±8.4	-4.235*
	Present	84.90±5.4	

Level of significance: *-p<0.05, **-p<0.01, ***-p<0.001, NS-Not significant

Individuals with family history of dependence scored high on all domains of impulsivity scores when compared to others.

DISCUSSION

The aim of the study was to assess the prevalence of high risk behaviour and its association with personality constructs such as sensation seeking and impulsivity in male patients with a diagnosis of ADS. The sample comprised of 60 male patients admitted as in-patients in Narayana general hospital. The mean age of the sample was 37.05 ± 7.4years with 76.7% of them being married followed by 16.7% individuals were single. Majority of the individuals belonged to a nuclear family (73.7%) followed by individuals belonging to an extended family (26.3%). Among the individuals recruited for the study 35% were graduates followed by 37.5% who only had primary education.70% of the individuals recruited for the study have family history of alcohol dependence. Severity of dependence shows significant association with family history (odds ratio 1.52).

The results of the current study indicated significant prevalence of high risk behaviour in patients with alcohol dependence. High risk sexual behaviour (56.7%) was the most common high risk behaviour observed followed by road traffic accident (53.3%). Crime and violence and self-injurious behaviour were present in about 20% of the individuals. The results of the current study were consistent with the findings of Biju Poullose et al., [14] the most common high risk behaviour was road traffic accident followed by high risk sexual behaviour. In a national survey by Temple MT et.al., [15] findings suggest that the relationship between

drinking and risky sex is the result of a complex interaction among personality, situational, and behavioural factors.

Personality constructs contributing to the high risk behaviour sensation seeking and impulsivity were evaluated. Patients with high risk sexual behaviour scored significantly in the disinhibition domain of sensation seeking. The results of the current study revealed that high risk sexual behaviour was much more in young adults when compared to that of the older age group which is consistent with the study conducted by Dermen KH et.al., [16] about Sex-related alcohol expectancies as moderators of the relationship between alcohol use and risky sex in adolescents found that alcohol use was associated with greater risk taking primarily among respondents who expected alcohol to increase risky sexual behaviour. Justus AN et.al., [17] studied the influence of traits of disinhibition on the association between alcohol use and risky sexual behaviour. There was a significant correlation between alcohol use and risky sexual behaviour when considered alone. Association between alcohol use and risky sexual behaviour is best explained by their common association with excitement seeking alone. However, when controlling for the effects of personality, the correlation was insignificant. Both excitement seeking and social deviance proneness were found to be significantly associated with alcohol use, and excitement seeking was significantly related to risky sexual behaviour. The current study also showed significant correlation between high risk behaviour and personality constructs of sensation seeking scale such as disinhibition and thrill and adventure seeking.

In a study by Laphamet al et.al., [18] the prevalence of psychiatric disorders rates showed that 70% of the male offenders had a diagnosis of Alcohol Dependence Syndrome, whereas only 35.7% of the men had a diagnosis of dependence syndrome in the National Co-morbidity Sample. Fish et al et.al., [19] and McCord et.al., [20] found that in individuals convicted with drunk driving nearly 50% were Alcohol Dependent at follow-up, with a constant increase in the prevalence of a diagnosis of Alcohol Dependence Syndrome in following convictions

as seen by 70% of the second- time offenders, with further increases to nearly all those convicted with multiple convictions for drunken driving fulfilling the criteria for dependence. Thus, what these studies show are that Road Traffic Accidents are one of the most common high-risk behaviour seen in people with Alcohol Dependence Syndrome as has also been noticed in our study but only second to high risk sexual behaviour which may be attributed to rural background of the recruited individuals were road traffic accidents are known to be low. James B et.al, [21] conducted a meta-analysis to investigate the association between sensation seeking and alcohol use. On analysis of the four sensation-seeking components indicated that disinhibition was most strongly correlated with alcohol use. The current study also reveals a strong correlation between severity of alcohol and sensation seeking predominantly with disinhibition component of the scale followed by thrill and adventure seeking.

Moeller et.al., [22] in their study concluded that impulsivity is a risk factor and a consequence of substance abuse which has to be addressed during both the initiation and maintenance of substance abuse treatment. The current study revealed that the prevalence of impulsive personality traits were much higher in people with high risk behaviour and substance use suggesting a strong correlation between all the three.

In the current study severity of dependence was much higher among young adults and there was a significant correlation with high risk behaviour and sensation seeking. Scores on the impulsivity scale were also much higher for the young adults. The findings of this study are consistent with the results of a study conducted by Dom et.al., [23] found that the symptom severity of the early-onset alcoholics alcohol-use disorder and related problems was higher than that of the late-onset alcoholics. Furthermore, the early-onset alcoholics had higher levels of impulsivity, sensation seeking, and aggression relative to the late-onset alcoholics. The differences in impulsivity remained after an analysis controlling for the effect of aggressiveness. It was found that cigarette smoking was positively correlated with impulsiveness across

alcoholic subgroups.

Antonio Verdejo-García et.al., [24] in their study on negative emotion-driven impulsivity as a predictor of substance dependence problems stated that impulsivity is predominant among users of several drugs of abuse including alcohol, cocaine, and amphetamines, and it is considered a risk factor for later development of alcohol and substance abuse and dependence among the different impulsivity dimensions, urgency was the best predictor of severity of medical, employment, alcohol, drug, family/social, legal and psychiatric problems in individuals with substance dependence. Urgency is characterized by a tendency to act impulsively in response to negative emotional states and was found in 83% of the individuals with substance dependence. Negative emotion states were not evaluated in the present study. On the impulsivity scale young adults had higher scores in non-planning component followed by motor component whereas the individuals belonging to higher age group had less impulsivity and their scores were high on cognitive component of the BIS. From the above studies it can be concluded that high risk behaviour is predominant among individuals with substance dependence and various personality constructs such as sensation seeking and impulsivity contribute towards their behaviour. A comprehensive management of individuals with substance dependence needs to address these issues to reduce the relapse rates which are high among this population.

CONCLUSION

The present study aimed to find out the association between High Risk Behaviour and Alcohol Dependence Syndrome. There was a very high occurrence of high-risk behavior in alcoholics, risky sexual behavior was the commonest followed by road traffic accidents. Severity of alcohol dependence was significantly associated with the occurrence of high-risk behaviour. Patients scoring high on certain personality constructs such as sensation seeking and impulsivity were particularly vulnerable to indulge in high-risk behaviour. Analysis indicated that severity of alcohol dependence interacted with personality variables

and demographic characteristics (younger age, married, primary education) resulting in occurrence of high-risk behavior. The results of the present study suggest that treatment interventions must inquire into and specifically target such high-risk behaviour to reduce morbidity and mortality associated with severe alcohol dependence.

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