Drinking Refusal Self-Efficacy- A Positive Effect of Attending De-Addiction Clinic-Survey Report of South Indian Union Territory Hospital

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Abstract

Introduction: Alcoholism is the most common psychiatric disorder that causes impairment in physical health, mental health, and social functioning. Alcohol dependence syndrome is characterized by a state, psychic, and usually also physical, resulting from drinking alcohol. Self-efficacy is an individual's belief in his/her innate ability to achieve goals. The prevalence of current alcohol use in Pondicherry is 9.5% for males and 20% in total. However, more than 40% of alcohol users drink alcohol in a dependent pattern in Pondicherry. The current study aimed to assess the self-efficacy of clients to quit alcohol.

Methodology: In this descriptive cross-sectional study 97 participants were selected by a convenient sampling technique at de addiction clinic, JIPMER, Puducherry. The tools used for the study include socio-demographic variables, modified version of drinking refusal self-efficacy questionnaire, which consists of 19 questions to assess their belief about the ability to resist alcohol in the various situation on a six-point Likert scale ranged from 1 (I am very sure I would drink) to 6 (I am sure I would not drink).

The primary objective was analysed using descriptive and inferential statistics and the secondary objectives were analysed using the chi-square test and Pearson correlation.

Results: The result showed that among 97 study participants, the majority of them could resist (58.8%) alcohol during their de-addiction follow up visit.

Conclusion: Our study concluded that patients who regularly attend de-addiction clinic could resist alcohol consumption. There is still a need for health education and counseling to quit alcohol.

Keywords: *Alcohol Dependence; Drinking Refusal; Self-Efficacy; De-Addiction*

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Introduction

"Alcohol dependence syndrome is a chronic disease in which a person craves drinks that contain alcohol and is unable to control his/her drinking. A person with this disease also needs to drink a greater amount to get the effect and has withdrawal symptoms after stopping alcohol use. Alcoholism affects physical and mental health and can cause problems with family, friends, and works". It causes a serious impairment in social functioning. The disease is often progressive and fatal. Alcohol dependence is differentiated from alcohol abuse by the presence of symptoms such as tolerance and withdrawal. In alcohol dependence, the reduction of alcohol can be attained by learning to control the use of alcohol (DSM-5) [1].

Alcoholism is the most common psychiatric disorder. An epidemiological survey carried out In India reveals that 20 - 40 percent of subjects age above 15 are current users of alcohol and nearly 10 percent of them are regular or excessive users. Nearly 15 to 30 percent of patients seeking admission in psychiatric facilities are for alcohol related problems [2].

Worldwide In 2016, more than half (57%, or 3.1 billion people) of the global population aged 15 years and over had abstained from drinking alcohol in the previous 12 months. Some 2.3 billion people are current drinkers. World-wide 3 million (5.3%) deaths every year results from harmful use of alcohol and it is a causal factor in more than 200 diseases and injury condition. Overall, 5.1% of the global burden of disease and injury is attributable to alcohol, as measured in Disability - Adjusted Life Years (DALYs). In the age group, 20 to 39 years approximately 13.5% of the total deaths are alcohol-attributable. Beyond the health consequences, the harmful use of alcohol brings significant social and economic losses to individuals and society at large [3].

According to the national survey conducted in all the 36 states and union territories of the country in collaboration with NDDTC, AIIMS, Delhi and with 10 other medical institutes and a network of 15 NGO's that a substantial number of people use psychoactive substances in India, and substance use exists in all the population groups, but adult men bear the brunt of substance use disorder. Nationally about 14.6% of the population (between 10 and 75 years of age) uses alcohol. The use of alcohol is considerably higher among men (27.3%) as compared to women (1.6%). Further about one in five alcohol use in men suffer from alcohol dependence, while one in sixteenth alcohol use in women is dependent on it. The prevalence of current alcohol use in Puducherry is 9.5% for males and 20% in total. However, more than 40% (48.3%) of alcohol users drink alcohol in a dependent pattern in Puducherry [4].

Individuals who have high self-efficacy will exert sufficient effort that, if well-executed, leads to successful outcomes, whereas those with low self-efficacy are likely to cease effort early and fail [5]. Those who had high confidence in their ability to resist drinking were more likely to maintain abstinence for 6 months [6]. Alcohol and drug dependent patients in residential treatment, a high level of abstinence self-efficacy at treatment discharge was the strongest predictor of 1-year abstinence, suggesting the clinical importance of developing a high degree of abstinence self-efficacy [7].

Aim of the Study

The current study aimed to screen at de-addiction clinic, those with drinking refusal self-efficacy and aims to intervene in them to improve their resistance to further alcoholism.

Methodology

This cross-sectional survey aimed to assess drinking refusal self-efficacy among clients with ADS attending the de-addiction clinic at JIPMER, with the secondary objective to find the association between the level of drinking refusal self-efficacy with selected demographic variables. The study has been conducted from 2019 January to August 2019 at The Jawaharlal Institute of Postgraduate Medical Educa-

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tion and Research (JIPMER) is a medical school in India. It is located at Puducherry, in southern India. JIPMER is an institute of national importance and a tertiary care referral hospital that is under its administrative control of the Director-General of Health Services (DGHS), Ministry of Health and Family Welfare, Government of India. The clients with ADS who are attending the de-addiction clinic, JIPMER, Puducherry were selected with the following inclusion criteria. Age group 18 to 60 years, Clients with ADS currently on follow up attending de-addiction clinic, Clients had at least 2 counseling sessions. Clients who are in acute alcohol withdrawal syndrome and who had dual diagnoses were excluded.

The sample size was estimated to be 97 using the statistical formula for estimating a population with relative precision. The expected frequency of clients with drinking refusal self-efficacy is 50% and the sample size is estimated at a 5% level of significance and 20% relative precision. Through a Convenient sampling, subjects were selected. After obtaining necessary clearance from NRMC and IEC (JIP/IEC/2019/05), the data collected from clients who were attending the de-addiction clinic, JIPMER. Clients were first oriented about the research project through a clear explanation of the study purpose and their role in the study and informed consent obtained from them. The data collection was done using the preform to collect the demographic characteristics of the participants through the Self-administrated questionnaire method. It included independent variables like age, gender, occupation, type of family, type of alcohol, duration of alcohol intake, number of admissions for alcohol intake, duration of treatment, number of counseling section attended, abstinence and Drinking Refusal self-efficacy was assessed using Drinking Refusal self-efficacy Questionnaire-Revised (DRSEQ-R) which seek the level of drinking refusal self-efficacy of clients. It was developed by Young and Oei [8]. It was a 19 item self-report scale, it assesses participant's belief about their ability to resist drinking alcohol in certain situations. Participants were asked to rate their ability to resist alcohol in various situations on a 6-point Likert scale. The responses ranged from 1 (I am very sure I would drink) to 6 (I am sure I would not drink).

The DRSEQ-R was found to have a good construct and concurrent validity. The factor structure of the DRSEQ-R is more stable than the original structure of the DRSEQ and the revised scale has considerable potential in future alcohol-related researches. DRSEQ has a sound psychometric instrument based on exploratory factor analysis but has not been subjected to confirmatory factor analysis [9].

The level of drinking refusal self-efficacy will be categorized and its association with categorical variables will be carried out using a chi-square test or Fisher's exact test. All statistical analyses will be carried out at a 5% level of significance and P-value < 0.05 was considered significant.

Proper instructions were given to the study participants and informed consent obtained the participants were given the assurance that anonymity and confidentiality would be maintained, and they were given the choice to withdraw from the data collection in case of any discomfort before starting the data collection.

Results

Out of 97 study participants, all the participants were male 97 (100%) and the majority of them belongs to Hindu 90 (92.8%), among them 48 (49.5%) had primary education, and about 24 (24.7%) were self-employed. Most of them were married 88 (90.7%) and belong to a nuclear family 71 (73.2%). About 54 (55.7%) participants were middle-class people and most of them have attended 59 (60.8%) counselling sessions. Brandy was consumed more by them 14 (14.4%). Among them, 93 (95.9%) have tried abstinence and 71 (73.2%) have achieved within 1 - 5 times. The mean age of the participants was 43 years, Income (Mean = 9056.70, SD = 8503.025), Duration of alcohol intake in months (Mean = 208.49, SD = 132.879), Amount of alcohol intake of participants (Mean = 594.85, SD = 581.714), Number of hospital admission (Mean = 1.57, SD = 2.738).
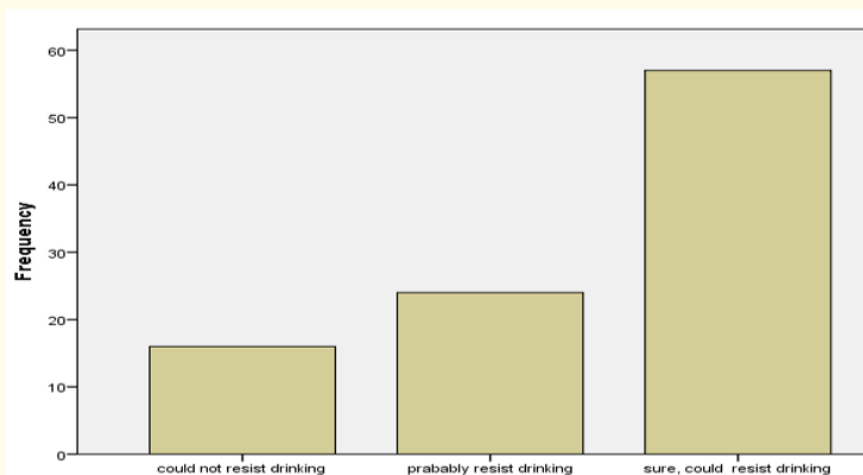
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Figure 1: Frequency and percentage of the levels of self-efficacy in ADS patients (N = 97).

The sub scales of DRSE have revealed that mean score of the social pressure was 19.54with SD 8.6, emotional relief score was 31.8 with SD 9.8, opportunistic refusal was 30.8 with SD 10.26 for all participants. This shows that not only over all refusal was good, but also subscales scores indicated the same.

Variable	Categories	f (%)	Mean (SD)	Anova test P value
Religion	Hindu	90 (92.8)	82.7 (27)	F (3.850) (p = 0.025)*
	Christian	4 (4.1)	52.5 (26.3)	
	Muslim	3 (3.1)	107.3 (5.7)	
Education	Primary	48 (49.5)	81.7 (28)	F (0.77) (p = 0.54)
	Secondary	36 (37.1)	85.5 (26)	
	Higher Secondary	9 (9.3)	92.3 (10)	
	Degree and Above	4 (4.1)	71.2 (28)	
Occupation	Coolie/Daily Wages	43 (44.4)	87.4 (22.8)	F (4.13) (p = 0.001)*
	Govt/Non Govt	19 (19.5)	69.7 (28.5)	
	Self Employed	35 (36)	38.0 (12.7)	
Marital Status	Married	88 (90.7)	84.7 (26.8)	F (2.660) (p = 0.05)*
	Single	9 (9.3)	57.8 (22.0)	
Economic Status	Low	36 (37.1)	86.3 (28.8)	F (0.64) (p = 0.52)
	Middle	54 (55.7)	79.6 (26.1)	
	High	7 (7.2)	81.5 (30.5)	

Table 1: Characteristics of subjects and drinking refusal self-efficacy (N = 97).

p < 0.05 significant.

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Table 1 shows that the level of self-efficacy of ADS patients is associated with Religion, Marital status and occupation of the client at a p level less than 0.05. None of the other demographic variables associated with the level of drinking refusal self-efficacy of the ADS patients.

Continuous Variables	Mean (SD)	r-value*	p-value
Age in years	43.66 (9.8)	0.674	0.64
Income in rupees	9056.70 (8503)	0.587	0.71
Duration of alcohol intake in months	208.49 (132.8)	-.099	0.33
Amount of alcohol intake in ml	594.85 (581.7)	-0.007	0.94
Duration of treatment in months	23.66 (33.6)	0.975	0.437

Table 2: *Correlation of level of self-efficacy among ADS patients with socio-demographic variables (N = 97).*

*Pearson corelation.

In table 2, demographic and clinical variables of participants had positive correlation with the level of self-efficacy among ADS patients except amount of alcohol and duration of intake which was negatively corelated. But none had statistically significant correlation.

Discussion

Out of 97 participants mean age of the participants was 43, and males, most of them were married, and had primary education and 24 (24.7%) were self-employed. The majority belonged to the nuclear family About 54 (55.7%) participants were middle class and most of them have attended counselling session 59 (60.8). Among them, 93 (95.9%) have tried abstinence and 71 (73.2%) have achieved within one to five times. The study conducted in Stanford medical school reported that the maximal level of abstinence self-efficacy (i.e. 100% confident) measured at discharge was the strongest predictor of 1-year abstinence. Treatment providers should focus on obtaining high levels of abstinence self-efficacy during treatment with the goal of achieving 100% confidence in abstinence [10]. Current study also majority of the participants reported tried abstinence and have achieved more than couple of time.

The average duration of alcohol intake in a month was 208.49 (SD = 132.879) that shows alcohol problem is chronic in nature and the mean amount of alcohol intake was 594.85 (SD = 581.714) ml, which shows larger amount has been taken by clients, which led to at least had one hospital admission and the mean duration of treatment in months were 23.66 (SD = 33.601), which signified, more than a year they were on regular follow-up and current study excluded who were on acute withdrawal.

The primary objective was to assess the drinking refusal self-efficacy among ADS clients attending de-addiction clinic, The present study reveals that among 97 study participants, the majority of them could resist (58.8%), could probably resist drinking (29.9%), and could not resist (11.1%) taking alcohol. Findings suggest that when clients regularly attending de-addiction clinic will improve their resistance, study finding supported by Those who had high confidence in their ability to resist drinking were more likely to maintain abstinence for 6 months [6]. but current confidence did not vary as a function of recent binge status reported by study conducted in the mean and standard deviation of the various subscales of the drinking refusal self-efficacy is social pressure 19.54 ± 8.668, emotional relief 31.89 ± 9.825, and opportunistic refusal 30.85 ± 10.263. Higher the mean value more self-efficacy, similar study by Oei., *et al.* in 2005 on a new factor structure of drinking refusal self-efficacy questionnaire - revised among 273 participants. It reveals that the mean and standard deviation of the various subscale of drinking refusal self-efficacy is social pressure 9.53 ± 4.25, emotional relief 15.81 ± 7.69, and opportunistic refusal 19.40 ± 7.53. When compared to the other two groups the finding suggests lower drinking refusal self-efficacy related alcohol consumption. Clients attending De addiction clinic has high self -efficacy [8].

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The secondary objective of the study was to associate the level of drinking refusal self-efficacy with selected demographic variables. The present study revealed that among the socio-demographic variables religion (p = 0.025), marital status (p = 0.05) occupational status (p = 0.001) were associated with level of drinking refusal self-efficacy and there was no significant correlation between the level of Drinking Refusal Self-Efficacy and age, income, duration, amount of alcohol intake, duration of treatment and alcohol consumption.

The study was supported by Foster., *et al*. [13] study on the relationship between self-reported drinking identity and alcohol use by considering DRSE as a potential mediator among 1069 students. In this study among the socio-demographic variable, the gender of the participants was significantly associated with no. of drinks consumed per week (p < 0.01) indicating that males had a higher level of SRDI and lower level of DRSE.

Assessing the level of self-efficacy to identify the individuals who are at risk i.e. who are with low self-efficacy helps to change the drinking behaviour of an individual and help them understand how they can resist positively. De-addiction clinic experience may improve their self -efficacy in resisting drinking. This study throws the positive effect of attending a de-addiction clinic regularly. Limitations of the study included hospital-based study with self-rating of drinking refusal self -efficacy, small sample size which was of only males. Data collection period also limited.

Conclusion

The study concluded that patients attending the de-addiction clinic could resist alcohol consumption if they attend regularly. There is still a need for health education and counselling among alcoholics for a longer period to quit without any relapse.

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