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# "A STUDY TO EVALUATE THE EFFECT OF STRUCTURED TEACHING PROGRAMME ON THE SIDE EFFECTS OF ALCOHOL CONSUMPTION DURING DETOXIFICATION WITH DISULFIRUM AMONG PATIENTS AT SELECTED DEADDICTION CENTRES, AHMEDABAD CITY."

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## Abstract

**background**: when alcohol is consumed during disulfiram treatment, it inhibits the enzyme acetaldehyde de-hydrogenase, blocking the oxidation process of acetaldehyde this causes a buildup of acetaldehyde up to 5-10 times higher than after the breakdown of acetaldehyde without the presence of disulfiram. This causes a patient undergoing disulfiram treatment to feel the effects of an extremely severe alcohol hangover immediately upon consuming alcohol. this signs are dangers sometimes lead to death.

**objective:** The aim of the study was to evaluate the effect of structured teaching programme regarding management of side effect of alcohol consumption during detoxification with disulfiram in terms of knowledge among the patient and to find out the association between selected demographic variables with the pre-test knowledge score.

**methods:** a pre-experimental (one group pre-test post-test) design was adopted for collecting the data from 40 samples using a structured self-administerd knowledge questionnaire comprising 30 questions which includes knowledge, application and comprehensive domains. Non- probability purposive method use for data collected.

**results:** according to the findings, the mean post-test knowledge score was 15.45 significantly higher than the mean pre-test score 9.60 knowledge score with a mean difference of 5.85. The calculated't' value (11.424) was greater than the tabulated't' value (2) at 0.05 level of significance. Therefore the null hypothesis ho was rejected and research hypothesis h1 was accepted and it revealed that the planned teaching program was effective in increasing knowledge among the patient with who take disulfiram. the findings also revealed that age, area of residence has significant association with pre-test knowledge score. Hence, the research hypothesis (h2) was accepted.

**Conclusion**: structured teaching programme regarding management of side effect of alcohol consumption during detoxification with disulfiram in improving knowledge about management of side effect of alcohol among the patient. the findings clearly indicate that there is a greater need of awareness regarding side effect of alcohol consumption during detoxification with disulfiram and its management.

**Key words** : detoxification with disulfiram ,alcoholic patient .

**Introduction**

Alcoholism is one of the major health and social problems faced in developing countries alcohol consumption is a causal factor in more than 200 diseases, injuries and other health conditions. Alcohol use disorders are a major contributor to global burden of disease. problematic alcohol use is associated with significant morbidity and mortality. alcohol use is deeply embedded in the social landscape of many societies, and some 2300 million people drink alcoholic beverages in most parts of the world. at the same time, more than half of the global population aged 15 years and older reported having abstained from drinking alcohol during the previous 12 months. national level prevalence has been calculated for many substances of abuse, but regional variations are quite evident. rapid assessment surveys have facilitated the understanding of changing patterns of use. substance use among women and children are increasing causes of concern. preliminary neurobiological research has focused on identifying individuals at high risk for alcohol dependence. clinical research in the area has focused primarily on alcohol and substance related co- morbidity. although there are various drugs, none high percentage of default rates. although addiction may necessitate detoxification in order to begin drug rehabilitation treatment, there are many reasons that patients must undergo detoxification. detoxification refers to a decrease in biological of them proved to be efficacious in the long run owing to the cost, adverse effects and the inadequate compliance for the long term management of alcohol de-addiction. disulfiram (dsm) proved to be an effective drug for indian setting. but its compliance rates are considerably affected due to the large number of adverse effects. contributing to the activity of a drug after it has been metabolized in the body. disulfiram has been used in the treatment of alcohol dependence with consistently successful results in individuals with high compliance or when medication disulfiram is used to treat chronic alcoholism. it causes unpleasant effects when even small amounts of alcohol are consumed. disulfiram is not a cure for alcoholism, but discourages drinking. disulfiram is safe and efficient in supervised short-term and long-term treatment of individuals dependent on alcohol but motivated to discontinue alcohol use. however, some disulfiram side effects can be quite serious, potentially even fatal, so it important for anyone taking this drug to be vigilant. the psychiatric complications such as disulfiram-induced psychosis are more commonly reported from india compared to western setting. disulfiram has an average rating of 7.9 out of 10 from a total of 116 ratings for the treatment of alcohol use disorder. 77% of reviewers reported a positive experience, while 18% reported a negative experience. at international level, alcohol is a major contributor to global disease and a leading cause of preventable death, causing approximately 88,000 deaths annually in the united states alone. current pharmaceutical and behavioral treatments may assist patients in reducing alcohol use or facilitating alcohol abstinence. at national level, a recent analysis of the 2019 national survey on drug use and health found that only 1.6% of people with a past-year aud received an evidence-based medication to treat their aud. according to the data, 4.3% of people in gujarat had alcohol dependence. accounting to about 19.53 lakh persons – are addicted to alcohol. the gujarat government data revealed that 40,000 people in gujarat can legally consume alcohol, with about 16,000 in a study, moderate disulfiram ethanol reaction (der) was reported in 42% of patients on 250 mg/day of disulfiram.

**objectives**

1. To assess the pre-test knowledge score regarding side effects of alcohol consumption during detoxification with disulfiram among in selected de-addiction centres, Ahmedabad city, Gujarat.
2. To assess the post-test knowledge score regarding side effects of alcohol consumption during detoxification with disulfiram among patients in selected de-addiction centres, Ahmedabad city, Gujarat.
3. To evaluate the effect of structured teaching programme regarding side effects of alcohol consumption during detoxification with disulfiram terms of knowledge among patients in selected de-addiction centres, ahmedabad city, Gujarat.
4. To find out association between pre test knowledge score with the selected demographic variables among patients in selected de-addiction centres, Ahmedabad city, Gujarat.

**RESEARCH METHODOLOGY**

A pre-experimental (one group pre-test post-test) design was adopted for collecting the data from 40 samples using a structured self-administerd knowledge questionnaire comprising 30 questions which includes knowledge, application and comprehensive domains. non- probability purposive method use for data collected.we are assess the side effect of alcohol consumption during detoxification with disulfiram among patients.with test-retest method, the reliability of the structured knowledge questionnaire was found 0.83 (by karl pearson correlation coefficient formula) which was more than 0.70 hence the structured knowledge questionnaire was found to be reliable.

**RESULT**

According to the findings, the mean post-test knowledge score was 15.45 significantly higher than the mean pre-test score 9.60 knowledge score with a mean difference of 5.85. the calculated 't' value (11.424) was greater than the tabulated 't' value (2) at 0.05 level of significance. Therefore the null hypothesis ho was rejected and research hypothesis h1 was accepted and it revealed that the planned teaching program was effective in increasing knowledge among the patient with who take disulfiram. the findings also revealed that age, area of residence has significant association with pre-test knowledge score. hence, the research hypothesis (h2) was accepted.

**ANALYSIS AND INTERPRETATION OF THE DEMOGRAPHIC VARIABLES OF THE SAMPLES.**

**TABLE: 1** percentage wise distribution of samples based on demographic data **[n = 40]**

| **sr no.** | **demographic variables** | | **frequency** | **percentage (%)** |
|---|---|---|---|---|
| 1 | age in years | less than 25 years | 2 | 5.0 |
| | | 26 to 35 years | 16 | 40.0 |
| | | 36 to 45 years | 16 | 40.0 |
| | | more than 45 years | 6 | 15.0 |
| 2 | education | illiterate | 2 | 5.0 |
| | | primary | 6 | 15.0 |
| | | secondary | 12 | 30.0 |
| | | graduate | 15 | 37.5 |
| | | post graduate | 5 | 12.5 |
| 3 | occupation | labour worker | 4 | 10.0 |
| | | unemployed | 4 | 10.0 |
| | | unskilled labourer | 9 | 22.5 |
| | | skilled labourer | 15 | 37.5 |
| | | professional | 8 | 20.0 |
| 4 | residence | urban | 26 | 65.0 |
| | | rural | 14 | 35.0 |

**TABLE 1** shows that out of 40 samples, in age in year, minimum 2 (5%) samples belongs to the age group of less than 25 years, 16(40%) were belongs to 26 to 35 years and maximum 16 (40%) samples were in 36 to 45 years and minimum 6 (15%) were belongs to more than 45 years. in educational qualification, minimum 2 (5%) samples were belongs to illiterate, and 6 (15%) samples were belongs to primary education, 5 (12.5% ) samples were belongs to post graduate and maximum 12 (30%) samples were belongs to secondary education , and 15 (37.5%) samples were belongs to graduate. in occupation ,minimum 4(10%) samples were belongs to labour workers, minimum 4 (10%) samples were belongs to unemployed, and maximum 8 (20%) samples were belongs to professional ,9(22.5%) samples were belongs to unskilled labourer, 15(37.5%)samples were belongs to skilled labourer. in area of residence maximum 26 (65%) samples were belongs to urban area, and minimum 14 (35%) samples were belongs to rural area.

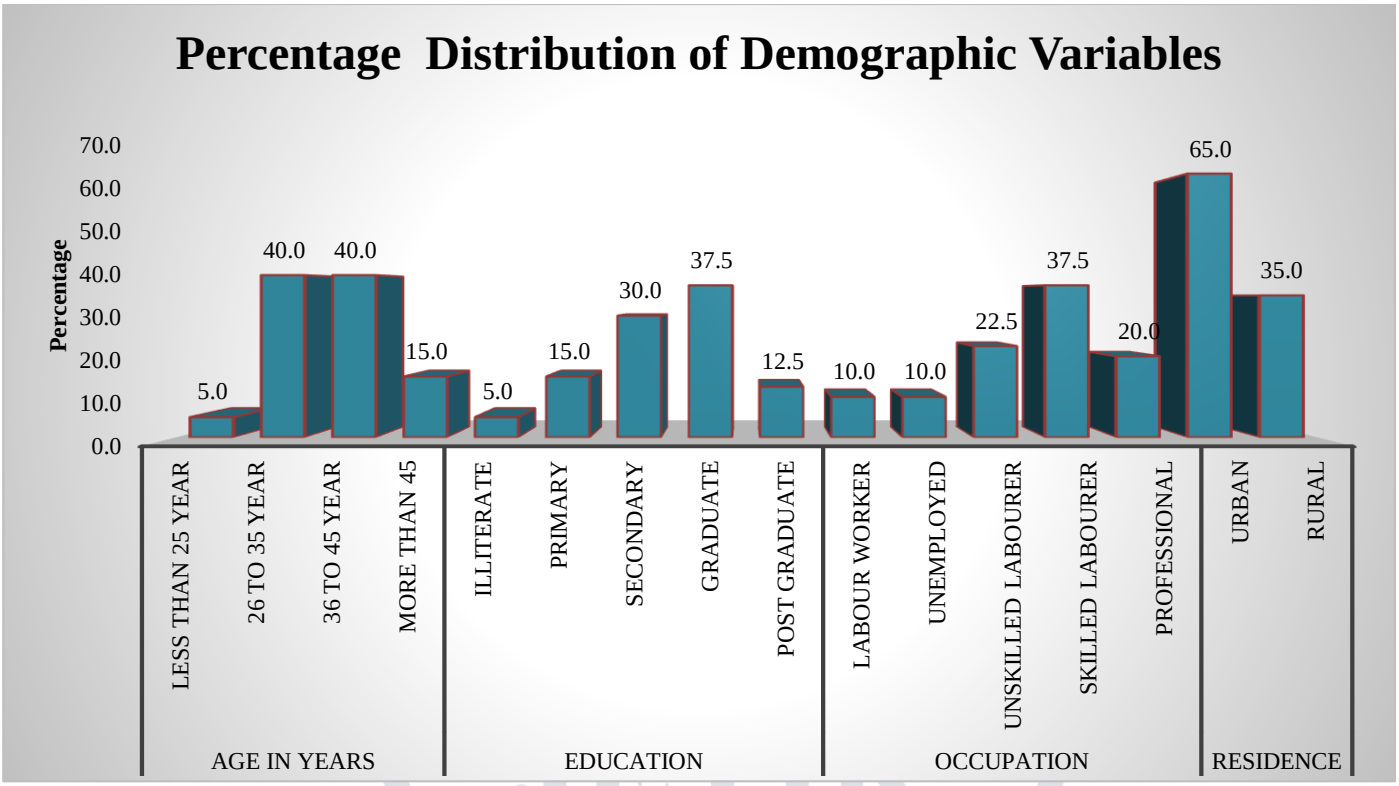
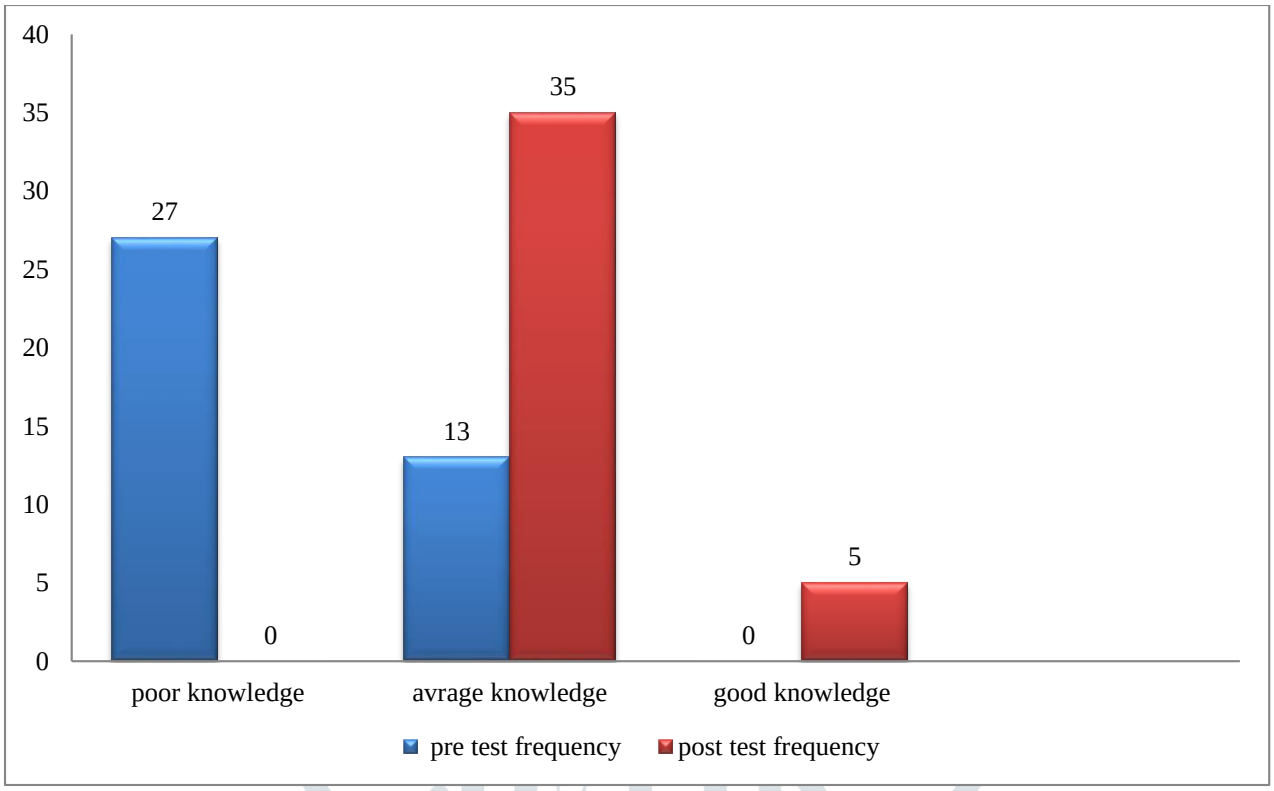



figure **1. analysis and interpretation of the data collected on self- structured knowledge questionnier of the samples**

**TABLE 2 frequency and percentage distribution of the pre-test and post-test knowledge score measured by structured self-administered knowledge questionnaire regarding management offside effect of alcohol consumption during detoxification.**

| **knowledge score** | **pre-test knowledge score** | | **post-test knowledge score** | |
|---|---|---|---|---|
| | frequency | percentage (%) | frequency | percentage (%) |
| **Poor (0-10)** | 27 | 67.5 | 0 | 0 |
| **Average (11-20)** | 13 | 32.5 | 35 | 87.5 |
| **Good (21-30)** | 0 | 0 | 5 | 12.5 |
| **Total** | **40** | **100** | **40** | **100** |

**table 2.**shows that 27(67.5%) samples had poor knowledge, 13 (32.5%) samples had average knowledge and 0(0%) samples had good knowledge as per their pre-test knowledge scores where as 0(0%) samples had poor knowledge, 35 (87.5%) samples had average knowledge, 5(12.5%) had good knowledge as per their post-test knowledge scores.




**comparision of pre test and post knowledge score**

**figure 2: bar graph showing the comparison of pre-test and post-test knowledge score of alcoholic patients**

**TABLE 3. mean, mean difference, standard deviation (sd) and t' test value of the pre-test and post-test knowledge scores of samples.**

| Knowledge test | Mean | Mean difference | Std. Deviation | t test | DF | Table Value | S/NS |
|---|---|---|---|---|---|---|---|
| Pre test score | 9.60 | 5.85 | 2.41 | 11.424 | 39 | 2 | S |
| Post test score | 15.45 | | 3.10 | | | | |

**Table 3.** shows the pre-test and post-test knowledge scores obtained by the respondents on management of side effect of alcohol consumption during detoxification. the mean pre-test score was **9.60** and the mean post-test knowledge score was **15.45.**the mean difference between pre-test and post-test knowledge score was **5.85.** the table also shows that the standard deviation of pre-test score knowledge was **2.41** and standard deviation of post-test knowledge was **3.10.** the calculated t' value was **11.424** and tabulated t' value was **2.00** at **0.05** level of significance. above table reveals that the mean post-test knowledge score was significantly higher than the mean pre-test knowledge scores. the calculated t' value **('t'=11.424)** was greater than the tabulated t' value **(2.00).** therefore the null hypothesis h0 was rejected and research hypothesis was accepted which indicates that the planned teaching programme was effective in gaining the knowledge among the samples. Investigator concluded that there was significant increase in the mean post-test knowledge score as compared to the mean pre-test knowledge score after administration of planned teaching programme was effective.

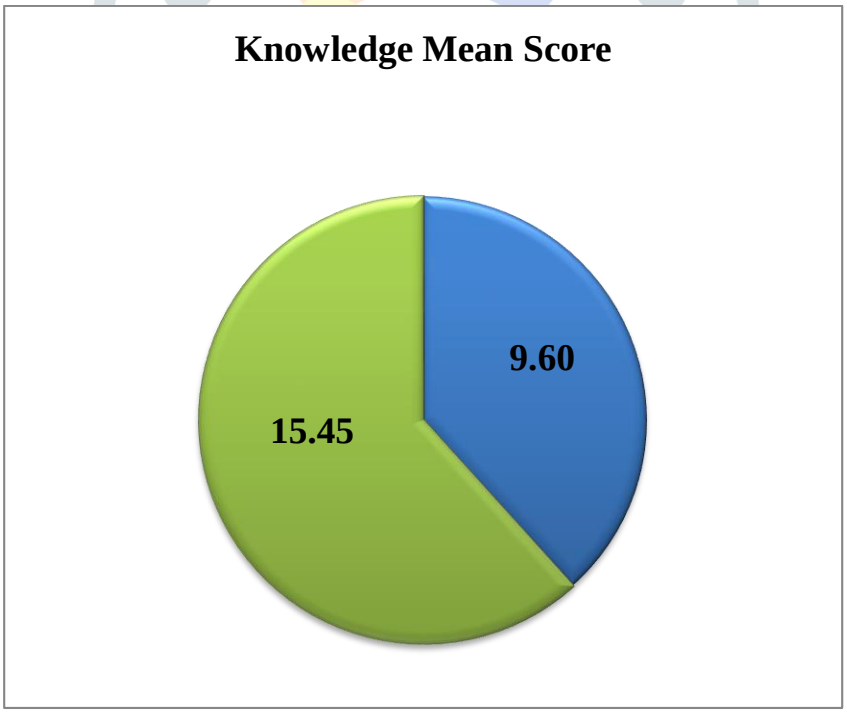



**figure 3: pie diagram showing the mean pre-test and mean post-test knowledge scores of samples on management of side effect of alcohol consumption disulfiram during detoxification**

**TABLE 4. analysis and interpretation of the data related to association between pre-test knowledge scores with selected demographic variables of the samples.**
**table 4.3 association of pre-test knowledge score with selected demographic variables.**

| sr no. | Demographic variable | | pre knowledge | | total | chi square | df | table value | S/NS |
|---|---|---|---|---|---|---|---|---|---|
| | | | poor | Average | | | | | |
| 1 | age in years | less than 25 year | 2 | 0 | 2 | 11.13 | 3 | 7.82 | S |
| | | 26 to 35 year | 10 | 6 | 16 | | | | |
| | | 36 to 45 year | 14 | 2 | 16 | | | | |
| | | more than 45 | 1 | 5 | 6 | | | | |
| 2 | education | Illiterate | 2 | 0 | 2 | 1.709 | 4 | 9.48 | NS |
| | | Primary | 4 | 2 | 6 | | | | |
| | | Secondary | 8 | 4 | 12 | | | | |
| | | Graduate | 9 | 6 | 15 | | | | |
| | | post graduate | 4 | 1 | 5 | | | | |
| 3 | occupation | labour worker | 3 | 1 | 4 | 1.114 | 4 | 9.48 | NS |
| | | unemployed | 3 | 1 | 4 | | | | |
| | | unskilled labourer | 7 | 2 | 9 | | | | |
| | | skilled labourer | 9 | 6 | 15 | | | | |
| | | professional | 5 | 3 | 8 | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 4 | residence | Urban | 14 | 12 | 26 | 6.313 | 1 | 3.84 | S |
| | | Rural | 13 | 1 | 14 | | | | |

**table 4.** shows the association of the demographic variables of the samples. for age of the samples with the pre-test knowledge scores, the calculated value of chi square 11.13 was more than 7.82, the table value of chi square at the 3 degree of freedom and 0.05 level of significance. There fore, age has significant association with the knowledge of the samples.

for education qualification of the samples with the pre-test knowledge scores, the calculated value of chi square 1.709 was less than 9.48, the table value of chi square at the 4 degree of freedom and 0.05 level of significance. Therefore, education qualification has not significant association with the knowledge of the samples.

for occupation of patients samples with pre test knowledge scores, the calculated value of chi square 1.114 was more than 9.48 , the table value of chi square at the 4 degree of freedom and 0.05 level of significance. therefore, occupation of patient has not significant association with the knowledge of the samples.

for years of area of residence of the samples with the pre-test knowledge scores, the calculated value of chi square 6.313 was more than 3.84 , the table value of chi square at the 1 degree of freedom and 0.05 level of significance. Therefore, area of residence has significant association with the knowledge of the samples.

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