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AN EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF AEROBIC EXERCISES ON SELECTED WITHDRAWAL SYMPTOMS OF ALCOHOLIC DEPENDENTS IN SELECTED DE-ADDICTION CENTRE OF VADODARA

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ABSTRACT

Background of the study: Alcoholism is an illness characterized by significant impairment in physiological, psychological orsocial functioning of the individual. There have been people who were unable to restrict their use of wind and body alternating substances to culturally prescribed limits and who have fallen into traded or craving to taking alcohol which became habituated are known addictions. According to the nutritional library of medicine, if a person has been drinking alcohol for a long period of time and suddenly stops drinking the person's body can experience different type of signs & symptoms of withdrawal **Objectives**: The present study aimed to reduce the withdrawal symptoms of the alcoholic dependent patients with the help of aerobic exercises. **Materials and method:** Pre experimental pre-test and post-test group was carried out on 34 alcohol dependent patients. Screen for alcohol withdrawal syndrome (AWS) was used to screen our patients. Later on, the Clinical Institute Withdrawal Assessment (CIWA) scale was used to assess the withdrawal symptoms. Descriptive and inferential statistics were applied to analyse the data by using SPSS-20 software. **Result:** Result of the study showed that aerobic exercises are effective to reduce the withdrawal symptoms.

There was significant decrease in AWS (alcohol withdrawal symptoms) of alcohol dependents before and after aerobic exercise program. **Conclusion:** The study concluded that there was significant reduction in AWS after the aerobic exercise programme.

Keywords: Aerobic Exercise, Alcohol withdrawal Syndrome, Alcohol dependent, De-addiction centres

INTRODUCTION:

Alcoholism is an illness characterized by significant impairment in physiological, psychological or social functioning of the individual. There have been people who were unable to restrict their use of wind and body alternating substances to culturally prescribed limits and who have fallen into traded or craving to taking alcohol which became habituated are known addictions. According to the nutritional library of medicine, if a person has been drinking alcohol for a long period of time and suddenly stops drinking the person's body can experience different type of signs & symptoms of withdrawal **[1]**. The cause of alcohol use disorder is still unknown. Alcohol use disorder develops when a person drink so much alcohol these changes increases the enjoyable feelings you get when you drink alcohol. Alcohol use disorder typically develops gradually over time it's also known to run in families. Known risk factor include having more than 15 drinks per week of male, more than 12 drinks per week of female, more than 5 drinks per day at least once a week, mental health problem, such as depression, anxiety or schizophrenia **[2]**. Symptoms of alcohol use disorder are based on the behaviour and physical outcomes that occur as result of alcohol addiction. People with alcohol use disorder may engage in the following behaviour: - Drinking alone, become violent or angry when asked about their drinking habits, not eating or eating poorly, neglecting personal hygiene, Missing work. Alcohol withdrawal is likely to start between 6 hrs. and a day after the last drinks as reported in American family physician with AWS (Alcoholic Withdrawal Symptoms) they may experience combination of physical and emotional symptoms from wild anxiety, fatigue to nausea some symptoms of AWS are as severe as hallucinations seizures **[3]**. The prevalent at 24 - 48 % in certain community. The nutritional prevalence of alcohol use a people aged between 10 years to 75 years is 27 % out of which 43 % people consume more than for alcoholic beverages **[4]**. Aerobic Exercise is any physical activity that makes you sweat causes you to breathe harder and gets your heart beating faster than at rest. It's strengthening your heart and deliver oxygen more quickly efficiently throughout your body. There are two different types of

aerobic exercise high-impact exercise. Alternate your workout between the two to help you stay engaged and motivated to meet your fitness goals and also decrease alcohol withdrawal symptoms **[5]**.

AIM: To assess the to assess the effectiveness of aerobic exercises on selected withdrawal symptoms of alcoholic dependents.

OBJECTIVES:

• To assess the pre-withdrawal symptoms of alcoholic dependents.

• To provide aerobic exercise among alcoholic dependence.

• To assess the post-withdrawal symptoms of alcoholic dependents.

• To assess the effectiveness of aerobic exercises.

• To find out the association between withdrawal symptoms of alcoholic dependents with selected sociodemographic variable.

MATERIAL AND METHODOLOGY:

Pre-experimental research design was used to conduct the study. The Alcoholic De-addiction centres as study setting were selected on the basis of availability of number of samples, giving permission to conduct the study and convenience in terms of distance. Non Probability purposive sampling technique was adopted to select 34 samples from Alcoholic De-addiction centre of Mental Hospital, Karelibaug, Vadodara. Standardized screen for Alcohol Withdrawal Syndrome (AWS) was used. Ethical approval for conducting the study was taken from Sumandeep Vidyapeeth Institutional ethics committee (SVIEC), Vadodara. Administrative approval and permission from Medical Superintendent were taken from concern authorities of Mental hospital, Karelibaug, Vadodara. The consent form was prepared for the study participant regarding their willingness to participate in the research study. The research tool for data collection consists two sections:

Section 1: Demographic data This section includes socio demographic variables such as age, religion, type of family, history of alcoholic dependency in family, current history of medications, current medication intake, marital status.

Section 2: SCREEN FOR ALCOHOL WITHDRAWAL SYNDROME (AWS) standardized tool is used. Link of standardized tool is mentioned below: https://umem.org/files/uploads/1104212257_CIWA-Ar.pdf

Evaluation criteria: Accurate and Unambiguous, meaning that a clear and accurate relationship exists 22 between the criteria and the real consequences. Comprehensive but concise, meaning that they cover the range of relevant consequences but the evaluation framework remains systematic and manageable and there are no redundancies. Direct and ends-

oriented, meaning they report directly on the consequences of interest and provide enough information that informed value judgments can reasonably be made on the basis of them. Measurable and Consistently Applied to allow consistent comparisons across alternatives. This means the criteria should be able to distinguish the relative degree of impact across alternatives. It does not exclude qualitative characterizations of impact, or impacts that can't be physically measured in the field. Understandable, in that consequences and trade-offs can be understood and communicated by everyone involved. Practical, meaning that information can practically be obtained to assess them (i.e., data, models or expert judgment exist or can be readily developed). Sensitive to the Alternatives under consideration, so that they provide information that is useful in comparing alternatives. Explicit about Uncertainty so that they expose differences in the range of possible outcomes (differences in risk) associated with different policy or management alternatives.

Evaluation criteria:

1. Mild >10
2. Moderate 11-15
3. Severe 16+

Total 34 Discussion with experts • Expert opinion and suggestions from the guide and psychologist and school subject teachers were obtained.

RESULT AND DISCUSSION:

Above Table 1 shows that 14.7 % (05) were 25-35 years and 26.5 %(09) were 35-45 years and 47.1% (16)were 45-55 years and 11.8%(04) were above 55 years in selected samples of alcohol withdrawal patients. The mean of age is 1.676471. Whereas 73.5 % (25) Hindu and 2.9 % (01) were Muslim and 14.7% (05) Christian and 8.8% (03) belonged to other category religions in selected samples of alcohol withdrawal patients. 79.4 % (27) live in Joint Family whereas 20.6% (07) live in a Nuclear Family. 23.5 % (08) has the history of alcohol dependency in Family whereas 76.5% (26) do not have any history of alcohol dependency in Family. 47.1 % (16) take some other medications whereas 52.9% (18) does not take any othermedications or drugs. Only 5.9 % (02) has Seizure Disorder, 23.5% (08) High Blood Pressure, 8.8% (03) has Cardiac Complications, 23.5% (8) suffers from Liver Cirrhosis and 38.2% (13) are not suffering from any medical conditions.

SECTION-2

To find Association withdrawal symptoms with selected socio-demographic variables.

This section deals with an association between withdrawal symptoms among alcoholic patients and selecteddemographic variables by using Chi-square.

Table 2 shows the association between Pre-

test score of withdrawal symptoms among alcoholic Patients with selected Demographic variables in selected group which was tested by using chi-square test. The result reveals that there is significance association between withdrawal symptoms and demographic variable as the c^2 (chi-square) value is more than table value. The two variables which got association are 'Religion' and 'Type of Family'.

Hence, **H_2 is partially accepted.**

SECTION-3

Comparison of pre-test and post-test scores.

Table 3 depicts the comparison of Pre and Post-test score of withdrawal symptoms among alcohol dependent patients in chosen group. In Pre-Test, the Mean value is 2.8235 and the Standard Deviation (SD) value is .45863 whereas in Post-Test, the Mean value is 2.2647 and the Standard Deviation (SD) value is .86371

The Mean Difference of Pre-Test and Post-Test is 0.5588 ('t'= 3.103) the Degree of Freedom (Df) values revealed is 33. Hence, H01 is rejected.

Table 1: Frequency and percentage distribution of samples accordingto their demographic variables: N=34

Sr. No	Variables	Frequency (f)	Percentage (%)
1	**Age (in years)**		
	a. 22-35	5	14.7
	b. 35-45	9	26.5
	c. 45-55	16	47.1
	d. Above 55	4	11.8
2.	**Religion**		
	a. Hindu	25	73.5
	b. Muslim	1	2.9
	c. Christian	5	14.7
	d. Others	3	8.8
3.	**Type of Family**		
	a. Joint Family	27	79.4
	b. Nuclear Family	7	20.6
4.	**History of alcohol dependency in Family?**		
	a. Yes	8	23.5
	b. No	26	76.5
5.	**Do you currently take other medication/drugs?**		
	a. Yes	16	47.1
	b. No	18	52.9
6.	**Do you currently have any of the following medical conditions?**		
	a. Seizure Disorder	2	5.9
	b. High Blood Pressure	8	23.5
	c. Cardiac complications	3	8.8
	d. Liver Cirrhosis	8	23.5
	e. None	13	38.2

Table 2: Association between withdrawal symptoms and socio-demographic variables N=34

Sr.No	Variable	Frequency (f)	Df	Table value	χ^2	Level of significance
1.	**Age(in years)**					
	a. 25-35	5	6	10.306[a]	12.59	NS
	b. 35-45	9				
	c. 45-55	16				
	d. Above 55	4				
2.	**Religion**					
	a. Hindu	25				

	b. Muslim	1				
	c. Christian	5				
	d. Others	3	6	13.350[a]	12.59	S
	b. Nuclear Family	7				
	Type of Family					
	a. Joint Family	27				
3.	b. Nuclear Family	7	2	2.574[a]	5.99	S
	History of alcohol dependency in Family?					
4.	a. Yes	8				
	b. No	26	2	3.385[a]	5.99	NS
	Do you currently take other medications/ drugs?					
5.	a. Yes	16				
	b. No	18	2	1.197[a]	5.99	NS
	Do you currently have any of the following medical conditions?					
	a. Seizure Disorder	2				
	b. High Blood Pressure	8				
	c.Cardiac Complications	3				
	d. Liver Cirrhosis	8				
6.	e. None	13				
	f .No	22	8	4.222[a]	15.51	NS
	Total	30				

Table 3: Mean, SD, Mean Difference, 't' value, df, 'p' value of preferential group N=34

Withdrawal Symptoms	Mean	SD	Mean D	't' value	Df	'p' value
Pre-Test	2.8235	0.45863	0.5588	3.103	33	0.05*
Post-Test	2.2647	0.86371				

***p<0.05 level of significance**

CONCLUSION:

The present study assessed the effectiveness of aerobic exercises on selected withdrawal symptoms of alcoholic dependents in selected De-addiction centre of Vadodara found that majority of the patients had severe withdrawal symptoms. After the post-test, the study concluded that patients have moderate withdrawal symptoms.

DISCUSSION:

The present study was conducted to assess the effectiveness of aerobic exercises on selected withdrawal symptoms of alcoholic dependents in selected De-addiction center of Vadodara, in order to achieve the objective of the study, a descriptive designed was adopted. Non probability convenience sampling technique was used in practice. The data was collected from 34 respondents by using structured screening tool and questionnaires. The finding of the study has been discussed with reference to the objective, hypothesis, and with the finding of other studies.

CONSENT

As per international standard or university standard, patients written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL:

The study was approved from the ethical committee of Sumandeep Vidyapeeth institutional ethical committee and ethical approval number is SVIEC/ON/NURS/SRP/21038

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