

# Effectiveness of Multicomponent Intervention Programme on Motivation, Anxiety and Risk for Relapse among Clients with Alcohol Dependence Syndrome

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**Abstract:** *The present study investigates the Effectiveness of Multicomponent intervention programme on motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome. The research design selected for this study was quasi experimental pre-test post-test control group design and the samples were selected by non-probability purposive sampling technique. The theoretical frame work of the study was based on Betty Neuman's System model. The tools used were Sociopersonal data sheet, SOCRATES 8A Scale, Hamilton Anxiety Rating Scale, and AWARE Questionnaire. For the study, the researcher selected thirtyclients with Alcohol dependence syndrome from TRADA, Manganam as control group and thirty clients with Alcohol dependence syndrome from ADARRT, Pala as experimental group who met the inclusion criteria. Socio personal data, motivation, anxiety and risk for relapse were analysed using frequency distribution and percentage. Computation of median, IQR and Mann Whitney U value were used to determine the effectiveness of Multicomponent intervention programme. The inter correlation between motivation, anxiety and risk for relapse were analysed using Spearman's rank correlation coefficient. Association of motivation, anxiety and risk for relapse with selected variables were analysed by using Chi-square test. The data were analyzed using the licensed SPSS21.0 version software. The findings revealed that clients with Alcohol dependence syndrome had very low motivation, very severe anxiety and high risk for relapse. The study also revealed that the multicomponent intervention programme was effective in enhancing motivation to quit alcohol, in reducing anxiety and in preventing the risk for relapse ( $p < 0.01$ ) among clients with alcohol dependence syndrome. The researchers suggest that multicomponent intervention programme can be used regularly for clients with ADS in deaddiction centres and community setting.*

**Keywords:** Multicomponent intervention programme, Motivation, Anxiety, Risk for relapse, Alcohol dependence syndrome

## 1. Introduction

Alcohol dependence is a chronic disease in which a person craves drinks that contain alcohol and is unable to control his or her drinking. A person with this disease also needs to drink greater amounts to get the same effect and has withdrawal symptoms after stopping alcohol use. Alcohol misuse has been implicated in over 20% of traumatic brain injuries, 60% of all injuries reporting to emergency rooms.<sup>1</sup>The World Health Organization estimates that about 140 million people throughout the world suffer from alcohol dependence.<sup>2</sup>The highest rate of alcohol dependence syndrome is seen in men aged 30 to 50 years. The report also states that in 2012, about 3.3 million deaths, or 5.9% of global deaths, were attributable to alcohol consumption.<sup>3</sup> On an average, individuals over 15 years of age consume 6.2 liters of alcohol each year. The report says that about 30% of India population, consuming alcohol regularly. Among them 11% were moderate to heavy drinkers.<sup>4</sup>Globally an estimated 237 million men and 46 million women suffer from alcohol-use disorders with the highest prevalence among men and women in European region(14.8% and 3.5%) and the regions of Americas(11.5% and 5.1%).<sup>5</sup> India Spend analysis of 2013 National Crime Records Bureau (NCRB) data reveal that, in India, 15 people die every day or one in every 96 minute from the effects of drinking alcohol. Alcohol consumption in India amounted to about

5.4 billion liters in 2016 and was estimated to reach about 6.5 billion liters by 2020. The steady increase in consuming these beverages can be attributed to multiple factors including the rising levels of disposable income and a growing urban population among others.<sup>6</sup>

Kerala has the highest per capita alcohol consumption of any state in India, at over 8 litres (1.76 gallons) per person per year. This is well above the national annual average alcohol consumption, which is 5.7 litres (1.25 gallons) per person per year.<sup>7</sup>Studies on alcohol abuse among general population in India have indicated that 30% of the males and less than 5% of the females are alcohol users. In Southern India the prevalence varies between 33% and 50% with a higher prevalence among the less educated and the poor.<sup>8</sup>

Motivation is an important first step towards any action or change in behavior and all the interventions would be useless until alcohol-dependent client is self-motivated to change his or her drinking behavior.<sup>9</sup>Motivation plays an important role in alcoholism treatment by influencing patients to seek, comply with, and complete treatment as well as make successful long-term changes in their drinking.<sup>10</sup>Anxiety and relapse are often connected. People often drink to relax and reduce anxiety and, in some instances, chronic alcohol abuse can lead to anxiety. Anxiety is a mental health disorder that can be caused by prolonged drinking in some instances.<sup>11</sup>

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A relapse or uncontrolled return to alcohol or other drug use following competent treatment, is one the greatest problems of alcohol abusers and their counselors face. Relapse prevention is a major challenge in alcoholism. About 50% of detoxified alcohol users relapse within 3 months. There is evidence that approximately 90% of alcohol dependents are likely to experience at least one relapse over the 4 year period following treatment.<sup>12</sup> Psycho education facilitates learning to discriminate a lapse from a relapse and identify stressful situations and objects in the environment.<sup>13</sup> JPMR is a simple technique that works for many people. Regular relaxing exercises and meditation are helpful in relieving anxiety and preventing risk for relapse.<sup>14</sup> According to recent studies, group therapy that is offered in an inpatient setting appears to be more effective at helping clients overcome their addiction by focusing on treating anxiety, painful withdrawal, and symptoms of depression.<sup>15</sup>

## 2. Objectives

- 1) To determine the motivation among clients with alcohol dependence syndrome.
- 2) To assess the level of anxiety among clients with alcohol dependence syndrome.
- 3) To identify the risk for relapse of alcoholism among clients with alcohol dependence syndrome.
- 4) To evaluate the effectiveness of multi component intervention programme on motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome.
- 5) To determine the correlation between motivation and risk for relapse among clients with alcohol dependence syndrome.
- 6) To determine the correlation between anxiety and risk for relapse among clients with alcohol dependence syndrome.
- 7) To find out the association of motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome with selected variables.

## 3. Materials and methods

Present study was conducted among sixty clients with Alcohol dependence syndrome. It was conducted in Alcohol and Drug Addicts Research, Rehabilitation and Treatment centre (ADARRT), Pala and Total Response to Alcohol and Drug Abuse (TRADA), Manganam to find out the effectiveness of Multicomponent intervention programme on motivation, anxiety and risk for relapse. Quasi experimental pretest post test control group design was adopted for this study. A non probability purposive sampling was used for allotting subjects to control and experimental group. The sample comprise of 60 clients with ADS in which 30 clients were assigned to the control group and 30 clients to the experimental group. Multi component intervention programme include Psycho education, Group counselling and Progressive muscle relaxation. Psychoeducation consists of two computer assisted teaching sessions of 45 minutes duration on two consecutive days for clients with ADS. Group counselling will be provided for 6-8 members with ADS in a group for enhancing the motivation to seek further help in dealing with alcohol problems and to maintain abstinence from alcohol. Group counselling include

discussions about how to cope with situations at risk for drinking, to seek further help in dealing with alcohol problems and to motivate them to stay sober lasts for 30 minutes. Progressive muscle relaxation refers to a relaxation technique in which the client with ADS first tenses and relaxes major muscle groups of the body in a prefixed and systematic order, usually beginning at the forehead and progressing downwards and is performed for 30 minutes twice daily for 21 consecutive days. The data were collected over a period of 6 weeks from 29<sup>th</sup> January to 7<sup>th</sup> March 2020. The subjects were selected by purposive sampling after observing the inclusion exclusion criteria. Total sample size was sixty. Thirty clients were selected from TRADA for control group and thirty clients were selected from ADARRT for experimental group. The investigator met the clients individually, explained the purpose of study and obtained informed consent before the commencement of the study. Socio personal data, pretest assessment of the motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome were done using SOCRATES 8A Scale, Hamilton Anxiety Rating Scale and AWARE Questionnaire. Pretest was done in samples on the first day of admission. Following that no intervention was given for control group. First post test was conducted for the subjects in experimental group immediately after 21 days of progressive muscle relaxation. Second post was conducted two weeks after the first post test. The pre and post tests were done on control group first and later on the experimental group to prevent contamination of sample. After the completion of the study multicomponent intervention programme was given to clients with alcohol dependence syndrome in control group. The collected data were analyzed using descriptive and inferential statistics. Socio personal data, motivation, anxiety and risk for relapse were analysed using frequency distribution and percentage. Computation of median, IQR and Mann Whitney U value were used to determine the effectiveness of Multicomponent intervention programme after the post test. The inter correlation between motivation, anxiety and risk for relapse were analysed using Spearman's rank correlation coefficient. Association of motivation, anxiety and risk for relapse with selected variables were analysed by using Chi-square test. The data were analyzed using the licensed SPSS21.0 version software.

## 4. Results

### 4.1 Socio personal data of clients with alcohol dependence syndrome

Among the study participants selected for the study 30% of clients in control group belonged to the age group of 31-40 years whereas in experimental group 36.6% of clients belonged to the age group of 41-50 years. Majority of the clients were married and residing in rural area.

Considering the education majority of clients had studied upto 10<sup>th</sup> standard and were employed and had monthly income >15000. Among the clients majority (70%) in control group and in experimental group (70%) belonged to nuclear family and majority in both groups (70% and 80%) had family history of alcoholism. Regarding the duration of alcoholism 60% of the clients in control group and 90% of

clients in the experimental group had more than 10 years of alcoholism. Regarding the number of hospitalisation majority of the clients in both control and experimental group (36.7% and 63.35%) were hospitalised at least once and most of them in both groups (66.7% and 50%) had no comorbidities. Chi square value shows that there was no statistically significant difference between control and experimental group in terms of sample characteristic sand hence the groups were homogeneous.

**Table 1:** Frequency distribution and percentage of clients with Alcohol dependence syndrome based on age, marital status, domicile and educational status (n=60)

Sample characteristics	Control Group (n=30)		Experimental Group (n=30)		df	χ <sup>2</sup>
	f	%	f	%		
<b>Age in years</b>						
20-30	5	16.6	2	6.7	3	1.8
31-40	9	30.0	8	26.7		
41-50	8	26.7	11	36.6		
51-60	8	26.7	9	30.0		
<b>Marital status</b>						
Unmarried	3	10	1	3.4	3	1.7
Married	18	60	21	70.0		
Divorced	6	20	4	13.3		
Separated	3	10	4	13.3		
<b>Domicile</b>						
Rural	24	80	25	83.3	1	0.1
Urban	6	20	5	16.7		
<b>Educational status</b>						
Up to 10th standard	12	40	19	63.3		
Predegree/Higher secondary	9	30	7	23.3	2	8.2
Under graduate	9	30	2	6.7		
Post graduate	0	0	2	6.7		

**Table 2:** Frequency distribution and percentage of clients with Alcohol dependence syndrome based on occupation and monthly income of family (n=60)

Sample characteristics	Control group (n=30)		Experimental group (n=30)		df	χ <sup>2</sup>
	f	%	f	%		
<b>Occupation</b>						
Unemployed	6	20	0	0		
Manual labour	2	6.7	23	76.7		
Skilled work	2	6.7	0	0		
Private sector	5	16.7	2	6.7	6	23.3
Govt. service	3	10	1	3.3		
Business	5	16.7	4	13.3		
Self employment	7	23.2	0	0		
<b>Monthly income of family</b>						
₹≤5000	6	20	0	0		
₹5001-10000	3	10	3	10	3	6.8
₹10001-15000	8	26.7	9	30		
₹>15000	13	43.3	18	60		

**Table 3:** Frequency distribution and percentage of clients with Alcohol dependence syndrome based on type of family, family history of alcoholism and duration of alcoholism (n=60)

Sample characteristics	Control group (n=30)		Experimental group (n=30)		df	χ <sup>2</sup>
	f	%	f	%		
<b>Type of family</b>						
Nuclear	21	70	21	70	1	0.0
Joint	9	30	9	30		
<b>Family history of alcoholism</b>						
Yes	21	70	24	80		
No	9	30	6	20	1	0.8
<b>Duration of alcoholism</b>						
1-5 years	4	13.3	0	0		
6-10 years	8	26.7	3	10	2	8.0
More than 10 years	18	60	27	90		

**Table 4:** Frequency distribution and percentage of clients with Alcohol dependence syndrome based on number of hospitalisations for deaddiction and comorbidities (n=60)

Sample characteristics	Control group (n=30)		Experimental group (n=30)		df	χ <sup>2</sup>
	f	%	f	%		
<b>Number of hospitalisations for deaddiction</b>						
Once	11	36.7	19	63.3		
Twice	9	30.0	8	26.7	2	5.9
More than twice	10	33.3	3	10.0		
<b>Comorbidities</b>						
Nil	20	66.7	15	50		
Hypertension	3	10.0	3	10.0		
Diabetes	1	3.3	10	33.4		
Liver problems	4	13.3	1	3.3	4	10.2
Others (Arthritis, asthma, cancer)	2	6.7	1	3.3		

**4.2 Motivation among clients with Alcohol dependence syndrome**

Motivation has three domains- Recognition, Ambivalence and Taking steps. 70% of clients in control group and 50% of clients in experimental group had very low recognition. Regarding ambivalence 43.3% of clients in control group and 26.7% of clients in control group had low score. For taking steps 46.7% of clients in control group and 33.2% of clients in experimental group had very low score.

**Table 5:** Frequency distribution and percentage of motivation among clients with alcohol dependence syndrome based on different domains of motivation (n=60)

Motivation	Control group (n=30)		Experimental group (n=30)		df	χ <sup>2</sup>
	f	%	f	%		
<b>Recognition</b>						
High (34-35)	0	0	4	13.3		
Medium (31-33)	6	20	5	16.7	6	3
Low (27-30)	3	10	6	20.0		
Very low (7-26)	21	70	15	50.0		
<b>Ambivalence</b>						
Very high (18-20)	7	23.3	9	30.0		
High (16-17)	2	6.7	8	26.7		
Medium (14-15)	3	10.0	0	0	8	4
Low (9-13)	13	43.3	8	26.7		
Very low (4-8)	5	16.7	5	16.6		

Taking steps					
Very high (37-40)	0	0	2	6.7	
High (34-36)	2	6.7	8	26.7	
Medium (31-33)	4	13.3	2	6.7	7 4
Low (26-30)	10	33.3	8	26.7	
Very low (8-25)	14	46.7	10	33.2	

**Table 6:** Median, mean and standard deviation of motivation among clients with ADS

Motivation	Median (mean ± SD)	Minimum	Maximum	Interpretation
Recognition	23.50 (23.92 ± 6.79)	7	35	Very low
Ambivalence	13.00 (14.00 ± 4.77)	4	20	Low
Taking steps	26.00 (25.48 ± 7.48)	8	40	Low

**4.3 Anxiety among clients with Alcohol dependence syndrome**

Regarding anxiety majority of clients with alcohol dependence syndrome in control group had very severe anxiety and in experimental group majority clients had moderate anxiety.

**Table 7:** Frequency distribution and percentage of clients with alcohol dependence syndrome based on anxiety (n=60)

	Control group (n=30)		Experimental group (n=30)		df	χ <sup>2</sup>
	f	%	f	%		
Anxiety						
Mild (1-17)	7	23.3	4	13.3		
Moderate (18-24)	9	30	13	43.3	3	1.87
Severe (25-30)	4	13.3	5	16.7		
Very severe (31-56)	10	33.4	8	26.7		

**4.4 Risk for relapse among clients with Alcohol dependence syndrome**

Among the clients with alcohol dependence syndrome majority of clients had very high risk for relapse.

**Table 8:** Frequency distribution and percentage of clients with alcohol dependence syndrome based on risk for relapse (n=60)

	Control group (n=30)		Experimental group (n=30)		df	χ <sup>2</sup>
	f	%	f	%		
Risk for relapse						
Very low (28-69)	1	6.7	0	0		
Low (70-97)	2	3.3	2	6.7		
High (98-125)	10	33.3	6	20.0	3	2.64
Very high (126-196)	17	56.7	22	73.3		

Clients who belonged to very high score had 90% -100% probability of heavy drinking for the next two months. Client who belonged to high score had 77% probability of heavy drinking.

**Table 9:** Probability of heavy drinking during the next two months

AWARE Score	If already drinking in the prior two months	If abstinent during the prior two months
Very low (28-69)	62%	21%
Low (70-97)	82%	25%
High (98-125)	77%	37%
Very high (126-196)	>95%	53%

**4.5 The effectiveness of multicomponent intervention programme on motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome**

The Mann WhitneyU test was used to compute effectiveness of multicomponent intervention programme on motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome between control and experimental group. The obtained U value was significant at 0.01 level. Hence it was inferred that there was a statistically significant difference in the post test scores of recognition, ambivalence and taking steps between the control group and experimental group. It could be concluded that the multicomponent intervention programme was effective in enhancing the motivation to quit alcohol.

**Table 10:** Median and IQR of pretest and posttest of motivation among clients with alcohol dependence syndrome in control and experimental groups (n=60)

Motivation	Control group (n=30)		Experimental group (n=30)	
	Median	IQR	Median	IQR
Recognition				
Pre test	22	10	26	10
Post test 1	21	10	31	3
Post test 2	20	8	34	2
Ambivalence				
Pre test	13	7	16	8
Post test 1	10	5	16	4
Post test 2	11	4	20	2
Taking steps				
Pre test	22.5	10	27.5	13
Post test 1	23	8	35	5
Post test 2	24.5	10	39	3

**Table 11:** Mean rank, sum of ranks and U value of post test scores of motivation among clients with alcohol dependence syndrome in control and experimental group (n=60)

	Control group		Experimental group		U value
	Mean rank	Sum of ranks	Mean rank	Sum of ranks	
Recognition					
Post test 1	17.38	521.50	43.62	1308.50	56.50**
Post test 2	15.50	465.50	45.50	1365.50	0.00**
Ambivalence					
Post test 1	18.65	559.50	42.35	1270.50	94.50**
Post test 2	18.25	547.50	42.75	1282.50	82.50**
Taking steps					
Post test 1	18.10	543.00	42.90	1287.00	78.00**
Post test 2	15.87	476.00	45.13	1354.00	11.00**

\*\*Significant at 0.01 level

**4.6 Effect of multi component intervention programme on anxiety among clients with alcohol dependence syndrome**

The obtained U value is significant at 0.01 level. Hence there was statistically significant difference in the post test scores of anxiety between control group and experimental group. It could be concluded that multi component intervention programme was effective in relieving anxiety among clients with alcohol dependence syndrome.

**Table 12:** Median and IQR of pretest and posttest of anxiety among clients with alcohol dependence syndrome in control and experimental group (n=60)

	Anxiety			
	Control(n=30)		Experimental(n=30)	
	Median	IQR	Median	IQR
Pre test	23	14	22.50	13
Post test 1	6	13	31	3
Post test 2	20	8	34	2

**Table 13:** Mean rank, sum of ranks and U value in post test scores of anxiety among clients with alcohol dependence syndrome in control group and experimental group (n=60)

	Anxiety				U value
	Control group (n=30)		Experimental group (n=30)		
	Mean rank	Sum of ranks	Mean rank	Sum of ranks	
Post test 1	42.32	1269.50	18.68	560.50	95.50**
Post test 2	45.03	1351.00	15.97	479.00	14.00**

\*\*Significant at 0.01 level

**4.7 The effect of multicomponent intervention programme on risk for relapse among clients with alcohol dependence syndrome**

The obtained U value was significant at 0.01 level. Hence there was a statistically significant difference in the post test scores of risk for relapse between control group and experimental group. It could be concluded that multi component programme was effective in reducing the risk for relapse among clients with alcohol dependence syndrome.

**Table 14:** Median and IQR of risk for relapse among clients with alcohol dependence syndrome in control and experimental group (n=60)

	Risk for relapse			
	Control (n=30)		Experimental(n=30)	
	Median	IQR	Median	IQR
Pre test	128	34	138	34
Post test 1	127	30	74	60
Post test 2	134.50	21	52	15

**Table 15:** Mean ranks, sum of ranks and U value in posttest scores of risk for relapse among clients with alcohol dependence syndrome in control and experimental group (n=60)

	Risk for relapse				U value
	Control group (n=30)		Experimental group (n=30)		
	Mean rank	Sum of ranks	Mean rank	Sum of ranks	
Post test 1	42.95	1288.50	18.05	541.50	76.50**
Post test 2	45.47	1364.00	15.53	466.00	1.00**

\*\*Significant at 0.01 level

**4.8 Correlation between motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome.**

The Spearman’s rank correlation coefficient was used for determining the correlation between motivation, anxiety and risk for relapse. The obtained ρ value for the correlation between taking steps and risk for relapse was statistically

significant at 0.05 level. It was interpreted that there is a negative correlation between motivation and risk for relapse. It was inferred that as the motivation increases, risk for relapse decreases. The obtained ρ value for the correlation between anxiety and risk for relapse was statistically significant at 0.01 level. It is interpreted that there is a strong positive correlation between anxiety and risk for relapse. It was inferred that as the anxiety increases, risk for relapse increases.

**Section 4.81 Correlation between motivation and risk for relapse among clients with alcohol dependence syndrome**

**Table 16:** Correlation between motivation and risk for relapse among clients with alcohol dependence syndrome (n=60)

Variables	ρ
Motivation Recognition	-0.11
Ambivalence	-0.20
Taking steps	-0.30*
Risk for relapse	

\*Significant at 0.05 level

**4.82 Correlation between anxiety and risk for relapse among clients with alcohol dependence syndrome**

**Table 17:** Correlation between anxiety and risk for relapse among clients with alcohol dependence syndrome (n=60)

Variables	ρ
Anxiety	0.52**
Risk for relapse	

\*\*Significant at 0.01 level

**4.9 Association of motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome with selected variables**

**Section 4.91 Association between motivation among clients with alcohol dependence syndrome and selected variables**

In order to identify the association of motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome with selected variables, Chi square test was used. The obtained chi-square value showed that there was a significant association between Motivation (recognition) among clients with alcohol dependence syndrome and age.

**Table 18**

Motivation Recognition	df	χ <sup>2</sup>
Age	9	20.07**
Marital status	9	5.47
Domicile	3	1.98
Educational status	9	4.97
Occupation	3	1.97
Monthly income	9	5.24
Type of family	3	0.13
Family history of alcoholism	3	0.45
Duration of alcoholism	6	4.67
Number of hospitalisations	6	10.35
Comorbidities	3	2.51

\*\*Significant at 0.01 level

**Table 19**

Motivation	df	$\chi^2$
Ambivalence		
Age	12	13.38
Marital status	12	10.82
Domicile	4	4.25
Educational status	12	11.83
Occupation	4	4.77
Monthly income	12	11.65
Type of family	4	6.60
Family history of alcoholism	4	6.72
Duration of alcoholism	8	8.66
Number of hospitalisations	8	9.99
Comorbidities	4	6.71

**Table 20**

Motivation	df	$\chi^2$
Taking steps		
Age	12	10.76
Marital status	12	5.55
Domicile	4	3.43
Educational status	12	8.03
Occupation	4	0.72
Monthly income	12	10.53
Type of family	4	2.01
Family history of alcoholism	4	1.09
Duration of alcoholism	8	10.15
Number of hospitalisations	8	10.15
Comorbidities	4	1.98

Association between anxiety among clients with alcohol dependence syndrome and selected variables.

The Chi square value of association between Anxiety and monthly income was statistically significant at 0.05 level. It was inferred that there was a significant association between Anxiety among clients with alcohol dependence syndrome and monthly income.

**Table 21:** Chi square value and degree of freedom of anxiety among clients with alcohol dependence syndrome based on selected variables (n=60)

Anxiety	df	$\chi^2$
Age	9	11.00
Marital status	9	5.45
Domicile	3	2.01
Educational status	9	5.72
Occupation	3	0.35
Monthly income	9	18.52*
Type of family	3	0.42
Family history of alcoholism	3	1.57
Duration of alcoholism	6	4.77
Number of hospitalisations	6	2.90
Comorbidities	3	1.41

\*Significant at 0.05 level

**Section 4.93** Association between risk for relapse among clients with alcohol dependence syndrome based on selected variables.

The association between Risk for relapse and selected variables. In this table the Chi square value of association between Risk for relapse and age, marital status, domicile and occupation was statistically significant at 0.05 level and Chi square value of association between Risk for relapse and

educational status was statistically significant at 0.01 level. It was inferred that there was a significant association between Risk for relapse among clients with alcohol dependence syndrome and age, marital status, domicile, educational status and occupation.

**Table 22:** Chi square value and degree of freedom of risk for relapse among clients with alcohol dependence syndrome based on selected variables (n=60)

Risk for relapse	df	$\chi^2$
Age	9	17.03*
Marital status	9	17.86*
Domicile	9	7.92*
Educational status	9	26.89**
Occupation	3	9.45*
Monthly income	9	4.90
Type of family	3	5.84
Family history of alcoholism	3	2.41
Duration of alcoholism	6	9.87
Number of hospitalisations	6	8.44
Comorbidities	3	3.92

\*\*Significant at 0.01 level

\*Significant 0.05 level

## 5. Discussion

The present study was conducted to evaluate the effectiveness of multicomponent intervention programme on motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome. The findings of the study have been discussed with reference to the objectives in the light of other studies.

Regarding the age group 36.6% of clients in experimental group were belonged to the age group of 41-50 years and 30% of clients in control group belonged to the age group of 31-50 years. The results of the study are congruent with the findings of Benegal that heavy drinking during the third and fourth decade of life is a common phenomenon.<sup>1</sup>

Findings of the present study showed that majority of clients were married and were residing at rural area. Most of them had educational status upto 10<sup>th</sup> standard. In control group 23.2% of clients were self-employed and in experimental group 76.7% of clients were manual labourers. Most of the clients in control group and in experimental group had monthly income >15000. Majority (70%) of the clients in control group and in experimental group belonged to nuclear families and majority in both groups (70% and 80%) had family history of alcoholism. Majority of the clients had more than 10 years of alcoholism. These findings were consistent with the study results that assessed the effectiveness of specific nursing intervention programme on motivation and relapse among clients with alcohol dependence syndrome.<sup>16</sup>

In the present study it was found that majority of clients with alcohol dependence syndrome had poor motivation. A supporting study outlines the motivation for change and alcoholism treatment and highlights the level of motivation and recognises that clients vary in their motivation or readiness to change.<sup>10</sup>

In the current study it was found that 33.4% of clients in the control group and 26.7% of clients in the experimental group had very severe anxiety. Anxiety is the subjective emotional response to the stressor. A study suggested that many alcoholic patients were subjected to anxiety because of extraneous factors and it is a pressure that is brought to bear on the individual.<sup>15</sup>

It was found that majority of clients had very high risk for relapse. This finding was consistent with Tempesta that about 50% of detoxified alcohol users relapse within 3 months. There is evidence that approximately 90% of alcohol dependent clients are likely to experience at least one relapse over the 4- year period following treatment.<sup>17</sup>

In the current study Multicomponent intervention programme which include psychoeducation was found effective in enhancing motivation among clients with alcohol dependence syndrome. Another study showed that the psychoeducational programme was effective in reinforcing addicted inpatient's motivation for changing their drinking behaviour. The psychoeducational programme helped alcohol-dependent patients to recognise the nature of their problematic drinking, increase participants' ambivalence towards their drinking behaviour, leading to the contemplation of change and strengthen the possibility that they will change their addictive behaviour.<sup>60</sup> This finding was also consistent with another study in which psychoeducation was effective in improving the level of awareness on ill effect of alcoholic abuse and enhanced their motivation to quit alcohol among lorry drivers.<sup>18</sup>

In the present study Multicomponent intervention programme which include progressive muscle relaxation was found effective in reducing anxiety among clients with alcohol dependence syndrome. Another study suggested that progressive muscle relaxation was effective to reducing anxiety among alcoholic patients. Progressive Muscle Relaxation (PMR) is a great technique for reducing overall body tension. Deep Muscle Relaxation where we rapidly relax our whole body.<sup>19</sup>

In the present study Multicomponent intervention programme which include Group therapy was effective in preventing the risk for relapse among clients with alcohol dependence syndrome. This finding was consistent with another study which shows that group therapy provides a forum for modelling adaptive behaviour. While witnessing the recovery of others, clients learn which strategies help to maintain abstinence.<sup>20</sup>

In the present study there was statistically significant positive correlation between anxiety and relapse and also found that there was no association between anxiety and selected variables among clients with alcohol dependence syndrome. Similar result was found in another study in which patients who had more anxiety scored very high for risk for relapse and that it had no association with demographic variables.<sup>18</sup>

Use of Betty Neuman's system model as theoretical framework was appropriate for this study because of the importance in identifying clients at risk for relapse and

beginning treatment of anxiety as early as possible. In this study, clients with alcohol dependence syndrome were considered as an open system. The stressors act on the flexible line of defence. Neuman's system model guides the nurse in providing the appropriate patient care to meet the needs and multiple stressors of alcohol-related diagnoses and persons at risk for relapse.<sup>21</sup>

## 6. Summary

Present study was conducted among 60 clients with ADS admitted in selected deaddiction centres in Kottayam district to find out the effectiveness of multicomponent intervention programme on motivation, anxiety and risk for relapse among clients with alcohol dependence syndrome. Non probability purposive sampling technique was used. Sixty clients with ADS were purposively selected in experimental group and control group. The pretest was done in samples using socio personal data sheet for clients with ADS. SOCRATES-8A rating scale was used for assessing motivation, Hamilton Anxiety rating scale was used for assessing anxiety and AWARE Questionnaire was used for assessing the risk for relapse. Multi component intervention programme was given to experimental group consisting of 30 clients. It included psychoeducation, group counselling and progressive muscle relaxation. Psycho education consisted two computer assisted teaching sessions of 45 minutes duration on two consecutive days. Group counselling was conducted on every Saturday for 6-8 members. Then Progressive Muscle Relaxation was given for 21 consecutive days. The results showed that multicomponent intervention programme was effective in enhancing motivation, reducing anxiety and risk for relapse.

## 7. Conclusion

The following conclusions were drawn on the basis of the study:

The findings revealed that majority of the clients in the control and experimental group had poor motivation. Motivation has three domains- Recognition, ambivalence and Taking steps. Majority (70%) of clients in control group and 50% of clients in experimental group had very low recognition. Regarding ambivalence majority of clients in control group (43.3%) and in experimental group (26.7%) had low score. For taking steps majority of clients in control group (46.7%) and in experimental group (33.2) had very low score. It also showed majority of clients (Control group 33.4%, Experimental group 26.7%) with alcohol dependence syndrome had very severe anxiety. It also reveals majority of clients (Control group 56.7%, Experimental group 73.3%) with alcohol dependence syndrome had very high risk for relapse. It indicated the need for an intervention programme to enhance motivation, to reduce anxiety and the risk for relapse among clients with alcohol dependence syndrome. In achieving these goals Multicomponent intervention programme was required. Multicomponent intervention programme encompasses psychoeducation, progressive muscle relaxation and group counselling. Multicomponent intervention programme was found effective in enhancing motivation, reducing anxiety and the risk for relapse among clients with alcohol dependence syndrome. This study found

that there was a statistically significant negative correlation between motivation and risk for relapse and positive correlation between anxiety and risk for relapse. The association between motivation and selected variables showed that there was a statistically significant association between motivation and age. The association between anxiety and selected variables showed that there was a statistically significant association between anxiety and monthly income. The association between risk for relapse and selected variables showed that there was a statistically significant association of risk for relapse with age, marital status, domicile, educational status and occupation.

## 8. Nursing implications

### Practice

- Patients admitted with alcohol dependence syndrome must be provided with psychosocial therapies, once their withdrawal period is over.
- Progressive muscle relaxation technique needs to be incorporated as a part of other therapies and to be practiced by the nurse in the day-to-day activities. The nurse has to assess the anxiety of all the alcoholic clients.
- The concept of prevention is better than cure needs to be emphasised among the alcoholic clients.
- The current research findings provide a scientific basis for the effect of multicomponent intervention programme to enhance motivation, reduce anxiety and prevent risk for relapse.

### Education

- This study emphasizes the need for teaching the nursing students about the importance of multicomponent intervention programme for the care of clients with alcohol dependence syndrome;
- Nursing students should be taught and equipped with strategies and techniques of multicomponent intervention programme during their course of study
- Nurse educators can utilize the students and staff for giving multicomponent intervention programme on motivation, anxiety and risk for relapse among clients with ADS in the clinical setting.
- In-service education programme for staff nurses to help them with necessary skills to provide multicomponent intervention programme on motivation, anxiety and risk for relapse among clients with ADS

### Administration

- Nurse administrators should make policies regarding implementation of multicomponent intervention programme on motivation, anxiety and risk for relapse by nurses in clinical setting routinely.
- Ward in charges/ head nurses should make sure that the posted nursing staffs in the psychiatric wards are equipped to manage the patients with ADS with poor motivation, severe anxiety and high risk for relapse. They could initiate special continuing education regarding the motivation, anxiety and risk for relapse of alcoholism and plan how to enhance motivation, reduce anxiety and prevent the risk for relapse of clients with ADS which will enrich their knowledge related to alcoholism.

- Nurse administrators can help in providing adequate infrastructure facilities in providing multi component intervention programme for the patients who seek the services from the hospital or deaddiction centres.

### Research

- The finding of the present study can be used as a reference by the future nurse researchers.
- More studies can be conducted in this area to determine the effectiveness of other psychosocial interventions in enhancing motivation, reduce anxiety and prevent the risk for relapse.
- Inclusion of more interventional studies in relation with motivation, anxiety and risk of relapse of alcoholism should be done.

## 9. Limitations

- Generalisation of the findings could only be done with caution, because of a small sample size (60 samples) and purposive sampling.
- Since the study was conducted in institutional set up with limited sample, the findings could not be generalised to community settings.
- Long term effect of multicomponent intervention programme was not assessed due to limited time for the conduct of the study.

## 10. Recommendations

In the light of present study findings following recommendations are made for future.

- Replication of the study could be done with a larger sample to validate and generalise the findings.
- This study can be carried out among the alcoholic clients in the community set up.
- This study can be done by maximizing the time period of progressive muscle relaxation technique
- Comparative study can be carried out to determine the difference between progressive muscle relaxation technique and other relaxation technique.

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