

Efficacy of Role Play on Ill Effects of Alcoholism among College Going Students

Pooja R. Kasturkar¹, Prajakta Nandeshwar², Neha Mahabudhe²,
Priyanka Mohite², Priyanka More², Sadhana Naik²

¹Assistant Professor, Mental Health Nursing Department, ²Final year Post Basic B.Sc. Nursing Students, Smt. Radhikabai Meghe Memorial College of Nursing, Datta Meghe Institute of Medical Sciences (Deemed to be University), Sawangi (M) Wardha, Maharashtra, India

Abstract

Introduction: Alcoholism is the most serious type of substance addiction which includes drinking habits and unable to control them. It is also called as Alcohol Dependence Syndrome or Alcohol use disorder.

Aim: To determine the efficacy of role play on ill effect of alcoholism among college going student.

Materials and Method: Purposive sampling was used to collect data from college going students by using structured knowledge questionnaire regarding ill effects of alcoholism with their selected demographic variables.

Results: The mean pre-test knowledge score was 12.27 and mean post-test knowledge score was 25.19. There was a statistically significant improvement in the level of knowledge regarding ill-effects of alcoholism among college going students. The tabulated value for $n=100-1$ i.e. 99 degrees of freedom was 1.98. The calculated 't' value i.e. 58.96 are much higher than the tabulated value at 5% level of significance for overall knowledge score of college going students which is statistically acceptable level of significance and noassociation was found between post-test knowledge score with their selected demographic variables.

Conclusion: The demand of increase knowledge regarding ill effects of alcoholism is important among college going students because they are more prone to consuming alcohol due to recreation, experience and specially peer pressure.

Keyword: Effectiveness, psychodrama, side effects, Alcohol use disorder, College Student.

Introduction

The word alcoholism and alcoholic were first used by Dr. Magnus Huss, a Swedish physician.¹ Alcoholism is defined as the consumption of or preoccupation with alcoholic beverages to the extent that this behavior interferes with the alcoholic's normal personal, family, social, or work life.² Chronic alcohol use can contribute to both psychological and physiological disorder.³ Alcohol abuse can have harmful effects that can endanger life. There may be increased threat to certain cancers-especially liver, esophagus, throat, larynx and breast cancers. Excess alcohol consuming can also lead to cirrhosis of liver, gastro intestinal disease, anemia,

immune system difficulty, pancreatitis, brain damage and damage to the fetus during pregnancy. WHO has reported that around the world 6,000 people are killed every day. Although 28% of these deaths are caused by accidents such as traffic collisions, self-harm and crime, 21% are caused by digestive disorders, 19% are caused by cardiovascular diseases and the remainder are caused by infectious diseases, tumors, psychiatric disorders and other conditions of health. Each year in India nearly 1 lakh deaths occur on roads indirectly linked to drug misuse. About 30,000 deaths can also be attributed from drug use by cancer patients each year. The most serious health issue posed by alcohol use is liver cirrhosis with 4.5 lakh deaths per sunlight hours

Materials and Method: A research design was used in this study is pre-experimental—one group pre testpost test. The study was conducted during 30 December 2019 to 14 January 2020 and the setting was selected in Yashwant Mahavidyalaya and the Vidyabharti College Seloo, Wardha after getting ethical permission (Ref No. DMIMS(DU)/IEC/Sep-2019/8501). By using purposive sampling technique, 100 college going students were selected based on the calculation. where, z =standard normal variate, which is 1.96 at 5% type 1 error, SD =standard deviation of knowledge score, d =absolute error or precision. On the basis of the previous study, p -values are considered significant below 5%, hence, 1.96 is used in formula. Considering 95% Confidence Interval (CI) and 20% allowable error, the sample size was calculated to include 92 respondents. However, the researcher decided to include 100 college going students (data collection phase was completed within one month only to avoid sample mortality). Students who were going to college were told and explained about the study intent. The registered, informed consent was received dully signed by them individually. The inclusion criteria were: i. College of arts, commerce, science and electronics students studying in Wardha City. ii. College going students who were willing to participate in the study. iii. College going students who were accessible at the time of the data collection. iv. College going students who know the language like Marathi and English. Students who are participated in similar type of project in last 1 year have excluded.

Demographic variables were collected in terms of Age (in years), Gender, Residence, Religion, Types of family, Family income (monthly), Have you taken alcohol anytime? If yes, Duration...Frequency... Quantity..., Type of alcohol, Do you have any information about ill effects of alcoholism? If yes, what the source of information? A structured knowledge questionnaire, which is attached in Annexure 1, has 30 multiple choice questions. The questionnaire was prepared based on the existing literatures, which were discussed in previous sections and clinical experiences of handling of Alcoholism clients. Each right answer carries one mark and total score is 30. Prepared tool was validated by nine experts, out of them four were from nursing department, four were from the Department of psychiatry and one was from statistics department. Split half method was adopted for reliability testing and it

was found as $r=0.86$. Hence it was reliable. Researchers were planned to gather demographic information and the knowledge on ill effects of alcoholism.

The role play was organized on ill effects of alcoholism. Role play was shown to 100 college going students. Role play was shown to 25 students on first day. 2nd day next 25 students, 3rd day next 25 students and 4th day last 25 students for duration of 30-45 minutes. After seven days of each group from the day of role play shown, each of college going students was asked individually for his/her responses by structured knowledge questionnaire i.e. 30 questions. The responses, as collected, were arranged in tabular form to conduct statistical analyses, which are mentioned in the following sections.

Statistical Analysis: Demographic data, collected in pre-test point, was analyzed in terms of frequency and percentage, on nine closed-ended questions. The paired t-test was used to compare the scores of information before and after the test. To find out the relation between selected variable and Post-test, unpaired t test and one-way ANNOVA were applied.

Results

Hundred college going students randomly identified as sample to achieve the purpose of present study. The demographic variables of samples are depicted in the [Table/Fig-2] which shows that the maximum (i.e. 37%) of college going students belonged to 17 years of age group. Majority of college going students (i.e. 70 %) were male. Out of 100 college going students, majority (i.e., 52%) belonged to rural area and almost (65 %) were Hindu religion, (58 %) belonged to nuclear family, (33 %) had 5001-10000 Rs. family income per month, only 7 % college going students consumed alcohol, 87 % of had information regarding ill effects of alcoholism and out off 87 college going students (29.9 %) got information regarding ill effects of alcoholism from medias i.e. face book, whatsapp, newspaper etc. depicts that 50 % of college going students had average knowledge was in the range of (07 -12) and 50 % had good knowledge regarding ill effects of alcoholism was in the range of (13 -18) in pre test. Where 66 % of college going students had excellent knowledge was in the range of (19-24) and 34 % had very good knowledge regarding ill effects of alcoholism was in the range of (25-30) in post test.

Table 1: Demographic Variables

Sr. No.	Demographic Variables	No. of college going students	Percentage (%)
1	Age (yrs)		
	17 yrs	37	37
	18 yrs	33	33
	19 yrs	30	30
2	Gender		
	Male	70	70
	Female	30	30
3	Area of residence		
	Rural	52	52
	Urban	48	48
4	Religion		
	Hindu	45	45
	Muslim	19	19
	Christian	13	13
	Sikh	2	2
	Others	21	21
5	Type of family		
	Nuclear	58	58
	Joint	40	40
	Extended	2	2
6	Monthly family income		
	<5000 Rs	28	28
	5001-10000 Rs	33	33
	10001-15000 Rs	18	18
	>15000 Rs	21	21
7	Have you taken alcohol any time		
	Yes	7	7
	No	93	93
8	Information about ill effects of alcoholism		
	Yes	87	87
	No	13	13
9	Source of information		
	Health Personnel	17	19.5
	Media	26	29.9
	Neighbours	23	26.4
	Friends	8	9.2
	Parents	13	14.9

Table 2: Frequency percentage of knowledge score (N=100)

Level knowledge	Score Range	Percentage range %	Pre test		Post Test	
			Frequency	Percentage %	Frequency	Percentage %
Poor	1-6	0-20 %	0	0	0	0
Average	7-12	21-40 %	50	50	0	0
Good	13-18	41-60 %	50	50	0	0
Very Good	19-24	61-80 %	0	0	34	34
Excellent	25-30	81-100 %	0	0	66	66

The effectiveness of Role play was analyzed as follows:

H₁: Mean post-test knowledge score was significantly higher than mean pre-test knowledge score represented that mean post-test knowledge score i.e., 25.19 was

higher compared to Pre-test knowledge score (i.e., 12.27) with mean difference of 12.92. This was suggested that there was significant improvement of knowledge due to Role play. It was also observed that calculated t value (i.e., 58.96) was greater than tabulated t value (i.e., 1.98) at df 99 and 0.001 level of significance.

Table 3: Statistical analysis of pre-test post-test knowledge score (N=100).

Overall	Mean	SD	Mean Difference	t-value	p-value
Pre Test	12.27	1.97	12.92±2.19	58.96	0.0001 S,p<0.05
Post Test	25.19	1.36			

t (at α = 0.001 and 99 df) = 1.98; df = degree of freedom

Thus, null hypothesis was rejected and alternative hypothesis was accepted, i.e., knowledge was significantly increased after Role play. Therefore, Role play was effective in provisions of increase in knowledge.

Table 4: Association between post-test knowledge score with their selected demographic variables (N=100).

Sr. No.	Demographic variables	Frequency	Percentage %	Mean post test knowledge score	F-value	p-value
1	Age in years			F value		
	17 yrs	37	37	25.43±1.34	1.03	0.36 NS,p>0.05
	18 yrs	33	33	25.12±1.51		
	19 yrs	30	30	24.96±1.18		
2	Gender			F value		
	Male	70	70	25.28±1.39	1.07	0.28 NS, p>0.05
	Female	30	30	24.96±1.27		
3	Residence			F value		
	Rural	52	52	25.19±1.54	0.01	0.98 NS, p>0.05
	Urban	48	48	25.18±1.14		

Sr. No.	Demographic variables	Frequency	Percentage %	Mean post test knowledge score	F-value	p-value
4	Religion					
	Hindu	45	45	25.06±1.37	0.62	0.64 NS, p>0.05
	Muslim	19	19	25±1.33		
	Christian	13	13	25.30±1.10		
	Sikh	2	2	25±1.41		
	Others	21	21	25.57±1.53		
5	Type of family					
	Nuclear	58	58	25.32±1.31	2.02	0.13 NS, p>0.05
	Joint	40	40	24.92±1.36		
	Extended	2	2	26.50±2.12		
Monthly Family Income						
6	<5000 Rs	28	28	24.96±1.13	0.94	0.42 NS, p>0.05
	5001-10000 Rs	33	33	25.30±1.46		
	10001-15000 Rs	18	18	24.94±1.43		
	>15000 Rs	21	21	25.52±1.40		
7	Have you taken alcohol any time			F value		
	Yes	7	7	25.85±1.34	1.35	0.18 NS, p>0.05
	No	93	93	25.13±1.35		
Information about ill-effects of alcoholism						
8				F value		
	Yes	87	87	25.19±1.40	0.10	0.91 NS, p>0.05
	No	13	13	25.15±1.06		
Source of Information about ill-effects of alcoholism n= 87						
9	Health Personnel	17	17	25.82±1.23	1.72	0.15 NS, p>0.05
	Media	26	26	25.23±1.70		
	Neighbors	23	23	25.13±1.21		
	Friends	8	8	24.37±1.06		
	Parents	13	13	24.92±1.25		

[Table/Fig-6] illustrates that there was no significant correlation between post-test knowledge score about ill effects of alcoholism of college-going students and their selected demographic variables such as Age (in years), gender, home, religion, family forms, (monthly) family income, Have you ever taken alcohol? If yes, length, quantity, frequency, form

Discussion

This research sponsored the presentation of a report and it was supported to present study that a descriptive study to determine the level of awareness about alcoholism and its hazards in selected school

among adolescents in order to create an information pamphlet. The main finding was that 63.0% of students had average knowledge of alcoholism and its risks while 27.0% and 10.0% had poor and good knowledge. It has been proposed that nurses ought to teach adolescents to prevent drinking and its health risks.

This study also supported to present study that intend to assess the effectiveness of structured teaching program on knowledge regarding alcohol use and its harmful effects among high school children at Municipal Corporation School in Tirupati."In this study research design was used i.e. pre-experimental one-group pre-test post-test design. The populations had been high school

children. The study findings exposed that among 60 high school children 15 (25%) had inadequate knowledge, 24 (40%) had moderate knowledge and 21 (35%) had adequate knowledge in pretest. After administration of structured teaching program, 8 (13.3%) had inadequate knowledge 28 (46.7%) had moderate knowledge and 24 (40%) had adequate knowledge in post test. The value of the pre-test means and standard deviation scores was $15.40 + 2.499$ and the value of the post test means and standard deviation was $24.08 + 2.499$ and the calculated t-value was 15.846 that was statistically significant at $p=0.01$. It showed that after intervention, there was a significant difference between pre-test and post-test scores among high school children so it was fulfilled that after the standardized teaching programs the high school children had improve their knowledge of alcohol use and its adverse effects.⁷

This study also supported to present study which was conducted to assess the effectiveness of role play on knowledge regarding substance abuse among adolescents. Quasi experimental, one group pre-test post-test design was research design with interventional approach. Sample size was 60 selected from 8th std., 9th std and 10th std by probability sampling technique i.e. simple random sampling with lottery method. The result revealed that pre test score was $11.51 + 3.55$ and post test score was $17.5 + 2.89$ it means the post test knowledge score was increased after showing role play to participants. The paired 't' test value were 15.363 ($p < 0.0001$) showed a significant increase in knowledge regarding substance abuse.⁸ There was an association of post test knowledge score of substance abuse with their demographic variables i.e. type of family and general information on substance abuse, education of father with commonly abused substances and the total score on substance abuse, education of mother with commonly abused substances and prevention and management of substance abuse and number of children in the family so it concluded that the role played on substance abuse has been effectively increased adolescent understanding and thus encouraging adolescents to be aware of the harmful effects of substance abuse and to take effective action to handle it.^{9,10}

Limitation: The study was limited to sample size i.e. 100, which might be inadequate to generalize the study findings. More time duration would give more relevant results with variations of any research, but the investigator planned to complete the research work within 21 days to get more feasibility of getting sample

and avoid sample mortality. Therefore, sufficient number of sample and time duration was required to establish the effect of Role play, in general.

Conclusion

Based on the above results, it was concluded that role play is an effective teaching tool to provide information about the negative effects of alcoholism on individuals, families and society. We can reduce the incidence of negative effects of alcoholism and motivate people to stop drinking. We found no correlation between selected demographic variables and post test knowledge score after study.

Acknowledgement: I would like to show my appreciations to Prof Sr. Tessy Sebastian, and Mrs. Jaya Gawai, HOD dept of Mental health nursing, SRMMCON as my thesis supervisors. Beyond that I would like to convey my truthful thankfulness to all my faculty members, psychiatric department of AVBRH and statistician for smooth conclusion of my investigate work.

Ethical Clearance: Taken from institutional ethics committee.

Source of Funding: Self.

Conflict of Interest: Nil.

References

1. Ramesh et al. Alcoholism and Psychiatric Disorders. *Alcohol Research & Health*. 2002;26(2): 90-98.
2. Snehalatha R et al. A Study to Assess the Effectiveness of Structured Teaching Program on Knowledge Regarding Alcohol Use and Its Harmful Effects Among High School Children at Municipal Corporation School in Tirupati. *J Drug Abuse*. 2017;3(3).
3. Thomas L et al. Effectiveness of Role Play on Knowledge of Adolescents Regarding Substance Abuse. *JKIMSU*. 2015;4:47-54.
4. Hebbani S et al. Influence of socio-cultural factors on the emotional problems among college going young-adult children of parents with alcoholism: A study from South India. *Asian Journal of Psychiatry*, 2018; 37: 26-31.
5. Gupta S et al. Prevalence, Pattern and Familial Effects of Substance Use Among the Male College Students –A North Indian Study. *J Clin Diagn Res*.

- 2013; 7(8): 1632–1636.
6. Jaisoorya T et al. Prevalence and correlates of obsessive-compulsive disorder and subthreshold obsessive-compulsive disorder among college students in Kerala, India. *Indian J Psychiatry*. 2017; 59(1): 56–62.
 7. Daisy B et al. Comparative study of alcoholism among male nursing students and male general degree students in selected colleges at Bangalore, Karnataka, India. *Journal of medical research and practice* 2013; 2(8):229-237.
 8. Charpe C et al. Prevalence of Insulin Resistance and its Association with Obesity and Alcoholism in Male Medical Students of Bhopal. *Int. J. Life. Sci. Scienti. Res.*, 2017; 3(3): 1094-1099.
 9. Mohanan P et al. A Study on the Prevalence of Alcohol Consumption, Tobacco Use and Sexual Behaviour among Adolescents in Urban Areas of the Udupi District, Karnataka, India. *Sultan Qaboos Univ Med J*. 2014; 14(1): e104–e112.
 10. Thakur S et al. Prevalence and correlates of substance abuse among school going adolescents in a hilly district of himalayan region in India. *J. Evid. Based Med. Healthc.*, 2017; 4(72): 4278- 4285.