"A Study To Evaluate The Effectiveness Of A Structured Teaching Programme On Alcoholism In College Life, Among PUC Students In Selected College At Bangalore, Karnataka"

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Date of publication: 10/09/2025
DOI 10.5281/zenodo.18014059

Abstract: Alcohol use among college students is a growing concern, contributing to academic, health, and social problems. This study evaluated the effectiveness of a structured teaching programme (STP) on improving knowledge regarding alcoholism among PUC students in Bangalore. A one-group pre-test post-test design was used. Findings showed that 60% of students initially had inadequate knowledge, which significantly improved after the STP, with a marked increase in mean post-test scores (t = 21.47, p < 0.001). Area of residence showed significant association with pre-test knowledge. The study concludes that STP is effective in enhancing students' awareness about alcoholism in college life.

Keywords: Alcohol use, Alcoholism awareness, College students, Pre-university college (PUC) students, Structured teaching programme, Knowledge assessment, Health education, Substance abuse prevention, Adolescent health, Bangalore

INTRODUCTION

Alcohol is a sedative anesthetic found in various proportions in liquor, wine and beer. It depresses the central nervous system. Individual experiences heightened emotion, mood swings, and cognitive motor impairments. The effects of alcoholism depend on the amount of alcohol consumption. The symptoms vary to severe intoxication that can result is coma, respiration failure and death.

People who abuse alcohol can exhibit various patterns of use. People engage in drinking on a regular or daily basis, during the weekends. People who have abused alcohol for long periods of time often experiences alcohol tolerance. Drinking on college campuses is more pervasive and destructive than many people realize. Alcohol consumption by college students is associated with drinking and driving, diminished academic performance and medical and legal problem. Alcohol consumption on many campuses have evolved into a rite of passage. Traditions and beliefs handed-down through generation of social success.

The combination of social and environmental influences create a culture of drinking that passively or actively promotes the use of alcohol.[2] Students drinking habits are influenced by a combination of personal and environmental factors. Relevant personal factors include family influences, personality and a person's biological or genetic susceptibility to alcohol abuse.

NEED FOR THE STUDY

Drinking on college campus is more pervasive and destructive than many people realize. The extent of the problem was recently lightened by an extensive 3- year investigation by the task force on college drinking, commissioned by the National Institute on Alcohol Abuse and Alcoholism. (NIAAA). The task force reports that alcohol consumption is linked to at least 1,400 students deaths and 5,00,000 unintentional injuries annually.(1) Each year more than 6,00,000 students are assaulted by other students who have been drinking.

Worldwide information

In a recent survey that questioned students about patterns and consequences of their alcohol use during the past year, 31 percent of participants reported symptoms associated with alcohol abuse (e.g., drinking in hazardous situations and alcohol-related school problems), and 6 percent reported 3 or more symptoms of alcohol dependence (e.g., drinking more or longer than initially planned and experiencing increased tolerance to alcohol's effects).30 % of 12th graders, for example report heavy episodic drinking in high school, slightly more report having been drunk, and almost three quarters report drinking in the past year. Rates of excessive alcohol use are highest at colleges and universities where Greek systems dominate, at those where sports teams have a prominent role and at schools located in the northeast.

OBJECTIVES OF THE STUDY

- ✓ To assess the existing knowledge of PUC students regarding alcoholism in college life through pretest.
- ✓ To implement Structured teaching programme to the PUC students regarding alcoholism in college life.
- ✓ To assess the effectiveness of Structured teaching programme on alcoholism in college life by comparing pretest and posttest knowledge scores.
- ✓ To find out the association between pretest knowledge scores with selected demographic variables.

HYPOTHESIS:

Hypothesis will be tested at 0.05 level of statistical significance:

H_{01}: There will not be any statistically significant difference between pretest and post test knowledge scores among PUC students regarding Alcoholism in college life.

H_{02}: There will not be any statistically significant association between knowledge scores among the PUC students with selected demographic variables.

RESEARCH METHODOLOGY

Research methodology organizes all the components of the study in a way that is most likely to lead a valid answer to the sub problems that have been posted (Bruns and Grove, 2002). Research methodologies are a way to solve the research problem in a systematic manner. It consists of the various steps that are generally adopted by a researcher in studying the problem along with the logic behind them. The methodology of research indicates the general pattern of organizing the procedure for gathering valid and reliable data needed for the study.

This chapter deals with the methodology that was selected by the investigator in order to find out the knowledge of PUC students regarding Alcoholism in college life. Methodology of the study includes research approach, research design, variables, setting, and population, sample size, sampling criteria, sampling technique, development and description of tool, reliability of the tool, pilot study, data collection process and plan for data analysis.

Research Approach

Research approach tells the basic procedure for the conduct of research enquiry.

In view of the nature of the problem under study and to accomplish the objectives of the study evaluative approach was found to be appropriate to describe the effectiveness of structured teaching programme on knowledge regarding alcoholism among PUC students in selected colleges at Bangalore.

Evaluatory approach is an applied form of research that involve finding out how well a programme, procedure or policy is working and its goal is to assess or evaluate the success of a programme

Research Design

The research design is the architectural backbone of the study. The research design is the overall plan for obtaining answers to the questions being studied and for handling some of the difficulties encountered during the research process. The research

design used for the present study is one-group pre-test post-test research design. Conducting pre-test, administering STP and then conducting post-test for the same group after 1 week.

Group	Pre-test Administration of knowledge questionnaire on day-1	Intervention Administration of structured teaching programme on day-1	Post-test Administration of knowledge questionnaire On day-7
50 PUC students	0_1	X	0_2

Table 1: Representation of Research Design

0_1 **-** Pre-test knowledge and attitude regarding prevention of oral cancer.

X - Structured teaching programme on prevention of oral cancer.

0_2 **-** Post-test knowledge and attitude regarding prevention of oral cancer.

Variables

Variable is an attribute of a person or object that varies, that is taken on different values.

Dependent variables

Performance on pre-test knowledge and post-test knowledge score on Alcoholism in college life

Independent variables

Structured teaching programme on on Alcoholism in college life

Demographic variables

Age, gender, religion, Type of family, Socio economic status, area of residence, source of information regarding Alcoholism

Setting of the study

Setting is the physical location and condition in which data collection takes place.

The study was conducted in selected Colleges in Bangalore

Population

Khan states "A population is any group of individuals that have one or more common characteristics and are of interest to the researcher.

The population for the study are the PUC students selected from PUC colleges in Bangalore.

Sample

The sample is a small portion of a population selected for the study. It constitutes a subset of total population.

Sample Size

A sample size of the present study comprised of 50 PUC students from selected PUC colleges in Bangalore.

Sampling Technique

Sampling techniques refers to the process of selecting a portion of the population to represent the entire population. Non probability purposive sampling was used to select the samples of this study. A total of 50 PUC students were selected from different colleges in Bangalore. Samples were selected in consecutive days until the sample size reached 50.

Reliability of the tool

Reliability of the tool is the degree of consistency with which it measures the attributes it is supposed to measure. To establish reliability, the tool was administered to ten samples other than study samples. The reliability of the tool is computed by using simplified Split Half Pearson's correlational formula (raw score method).

The reliability of the tool for knowledge questionnaire is computed by using the formula $r_1 = 2r_{1/2}/1+r_{1/2}$ and is found to be 0.89. Since the tool found to be highly reliable, no modifications were made.

Ethical considerations

 ➤ The study was accepted by the research committee of SB college of Nursing
 ➤ Formal permission was obtained from the concerned authority of the selected colleges, Bangalore..
 ➤ Written informed consent was obtained from the study samples. There was no ethical issue aroused during the study period.

The PUC students were informed that their participation was purely on voluntary basis. They had the freedom to withdraw from the study if needed at any time and that the confidentiality of the data will be maintained.

Pilot Study

"Pilot study is a small scale version or trail run done in preparation for a major study"

It was developed in a similar way to the proposed study, using similar subjects, the same setting, the same treatment, the same data collection method and the same analysis technique.

The purpose of the pilot study was to find out the feasibility of the study, clarity of the language in the tool as well as in the structured teaching programme and to finalize the plan for analysis.

Pilot study was conducted in selected colleges on 20.4.16 to find the feasibility of the study. Five PUC students were selected by using purposive sampling technique. The subjects for the pilot study possessed the same characteristics as that of sample for final study. Prior to data collection, permission was obtained from the concerned authority. The selected samples were informed of the purpose of the study and their consent was taken. The researcher himself collected the data from the sample. The pre-test was conducted by administering structured questionnaire on 20.4.16 followed by administration of structured teaching programme and the duration of the session was one hour. Post-test was conducted on 27.4.2016 to estimate the effectiveness of structured teaching programme.

After conducting the pilot study, it was found that the study was feasible, the concerned authority and the samples were found to be cooperative, the questionnaire, and the structured teaching programme were relevant and the time and cost of the study was within the limits.

RESULTS

Analysis is categorizing, ordering, manipulating and summarizing of data to obtain answers to research hypothesis and questions.

The data, which are necessary for the study, were collected through structured interview questionnaire and analyzed by using relevant descriptive and inferential statistics.

The data were analyzed on the basis of objectives of the study

1. To assess the existing knowledge of PUC students regarding alcoholism in college life through pretest.
2. To implement Structured teaching programme to the PUC students regarding alcoholism in college life.
3. To assess the effectiveness of Structured teaching programme on alcoholism in college life by comparing pretest and posttest knowledge scores.
4. To find out the association between pretest knowledge scores with selected demographic variables.

The data organized and presented in three sections

Section A: Socio-demographic data of PUC students

Section B: Pretest level of knowledge among PUC students regarding Alcoholism in college life.

Section C: Post-test level of knowledge among PUC students regarding Alcoholism in college life.

Section D: Comparison between pre-test and post test level of knowledge among PUC students regarding Alcoholism in college life.

Section E: Effectiveness of Structured teaching programme regarding Alcoholism in college life.

Section F: Association of pre-test level of knowledge among PUC students regarding alcoholism in college life with selected demographic variables.

SECTION A: SOCIO-DEMOGRAPHIC DATA OF PUC STUDENTS

S.No	Demographic variables	Frequency	n=50 %
1.	**Age in years**		
	a) 15-17	35	70.00%
	b) 18-20	15	30.00%
2.	**Gender**		
	a) Male	32	64.00%
	b) Female	18	36.00%
3.	**Religion**		
	a) Hindu	24	48.00%
	b) Christian	18	36.00%
	c) Muslim	08	16.00%
	d) Others	0	0.00%
4	**Socio economic status**		
	a) High socio-economic status	26	52.00%
	b) Middle socio- economic status	16	32.00%
	c) Low socio-economic status	08	16.00%
5.	**Type of family**		
	a) Nuclear	40	80.00%
	b) Joint	10	20.00%
6.	**Area of residence**		
	a) Urban area	39	78.00%
	b) Rural area	11	22.00%
7.	**Source of information regarding Alcoholism in college life**		
	Mass media	29	58.00%

Friends		15	30.00%
Health professionals		05	10.00%
None		01	02.00%

Table: 5 socio-demographic data of PUC students

Pretest level of knowledge among PUC students regarding Alcoholism in college life.

PRETEST LEVEL OF KNOWLEDGE	Category	FREQUENCY	PERCENTAGE
Adequate (>75%)	19-24	0	0.00%
Moderate (50-75%)	12-18	20	40.00%
Inadequate (<50%)	00-11	30	60.00%

Table: 6 Pre interventional knowledge levels of PUC students regarding Alcoholism in College life

Table 6 reveals that majority of the students (60.00%) have in adequate knowledge regarding Alcoholism in college life, 40.00% of students have moderate level of knowledge regarding Alcoholism in college life and none of the students have adequate knowledge regarding Alcoholism in college life, in the pretest.
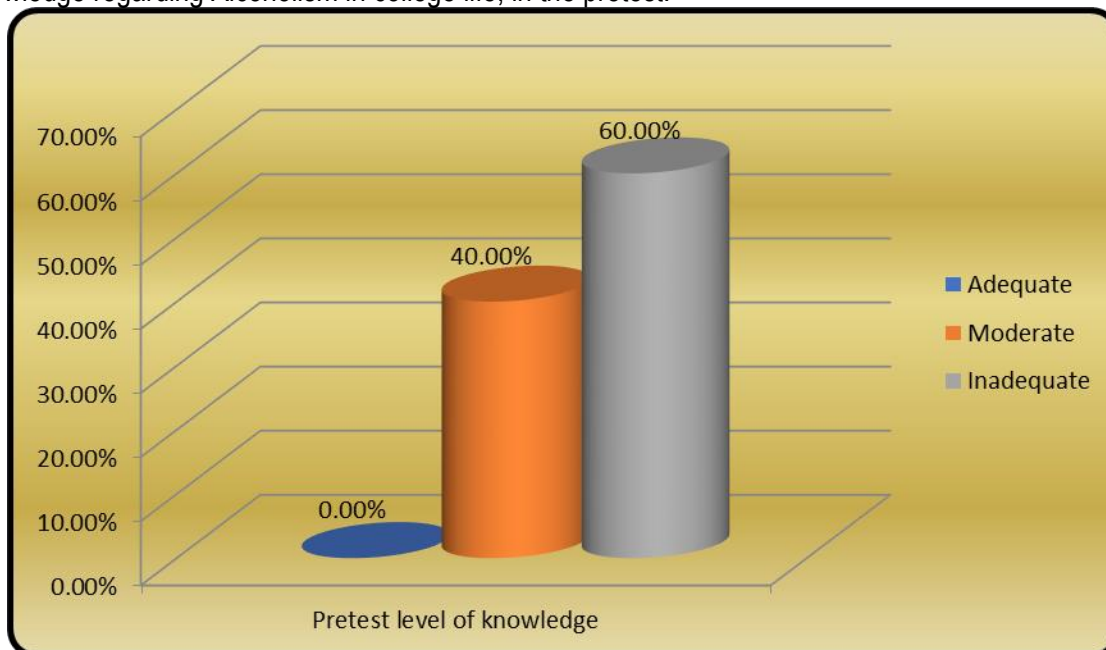

Fig: 10, Percentage distribution of PUC students according to pretest level of knowledge regarding Alcoholism in college life.

Section C: Post-test level of knowledge among PUC students regarding Alcoholism in college life.

POST TEST LEVEL OF KNOWLEDGE	Range	FREQUENCY	PERCENTAGE
Adequate (>75%)	19-24	26	52.00%
Moderate (50-75%)	12-18	24	48.00%
Inadequate (<50%)	00-11	0	0.00%

Table: 7 Post interventional knowledge levels of PUC students regarding Alcoholism in College life

Table 7 reveals that majority of the students (52.00%) have adequate knowledge regarding Alcoholism in college life, 48.00% of students have moderate level of knowledge regarding Alcoholism in college life and none of the students have inadequate knowledge regarding Alcoholism in college life, in the posttest.
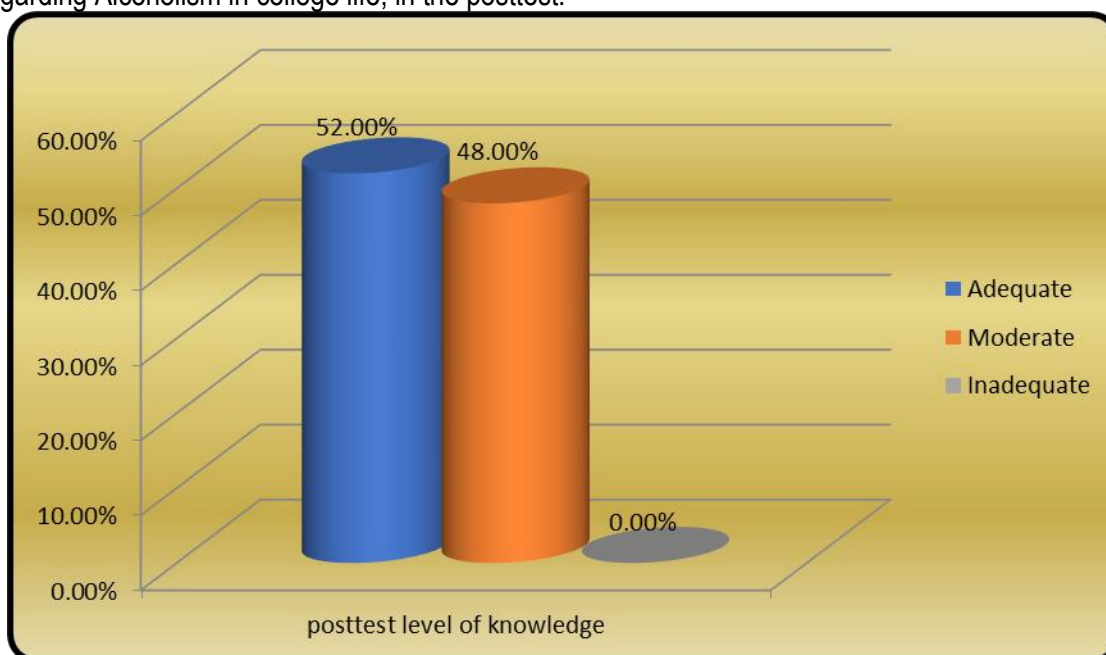

Fig: 11, Percentage distribution of PUC students according to posttest level of knowledge regarding Alcoholism in college life.

Section D: Comparison between pre-test and post test level of knowledge among PUC students regarding Alcoholism in college life.

Level of Knowledge	Pre test		Post test	
	F	%	F	%
Inadequate (> 50%)	30	60.00	0	0.00
Moderate (50- 75%)	20	40.00	24	48.00
Adequate (> 75%)	0	0.00	26	52.00%

Table: 8 Comparison between pre-test and post test level of knowledge among PUC students regarding Alcoholism in college life.

Table 8 reveals that, in the pretest, 60% of the students had inadequate knowledge regarding Alcoholism in college life, 20% of the students had moderate level of knowledge regarding alcoholism in college life and none had adequate knowledge regarding alcoholism in college life. In the post test, none of the students have inadequate level of knowledge regarding alcoholism in college life, 24% of students have moderate level of knowledge regarding alcoholism in college life and 52.00% of students have adequate knowledge regarding alcoholism in college life.
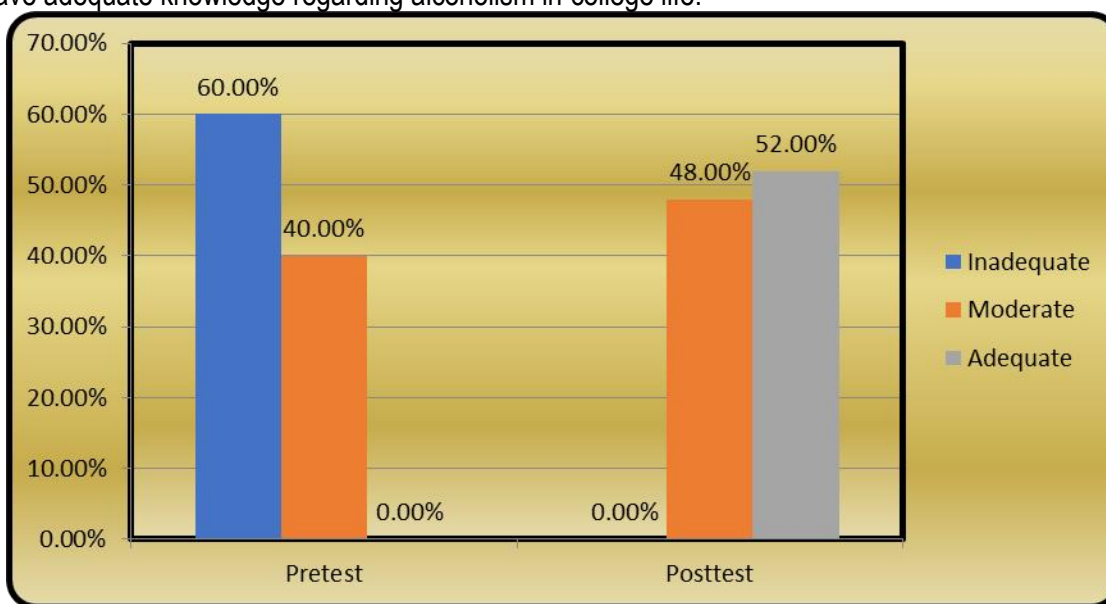

Fig: 12, Comparison between pre-test and post test level of knowledge among PUC students regarding Alcoholism in college life

Section E: Effectiveness of Structured teaching programme regarding Alcoholism in college life.
(a) Comparison of mean and SD for the knowledge levels in the pre and post test

Aspect	Max. score	Mean	SD	Mean %
Pre-test	24	10.8	4.14	45.00%
Post test	24	17.3	2.60	72.08

Table: 9 Comparison of mean, SD and mean % for the knowledge levels in the pre and post test
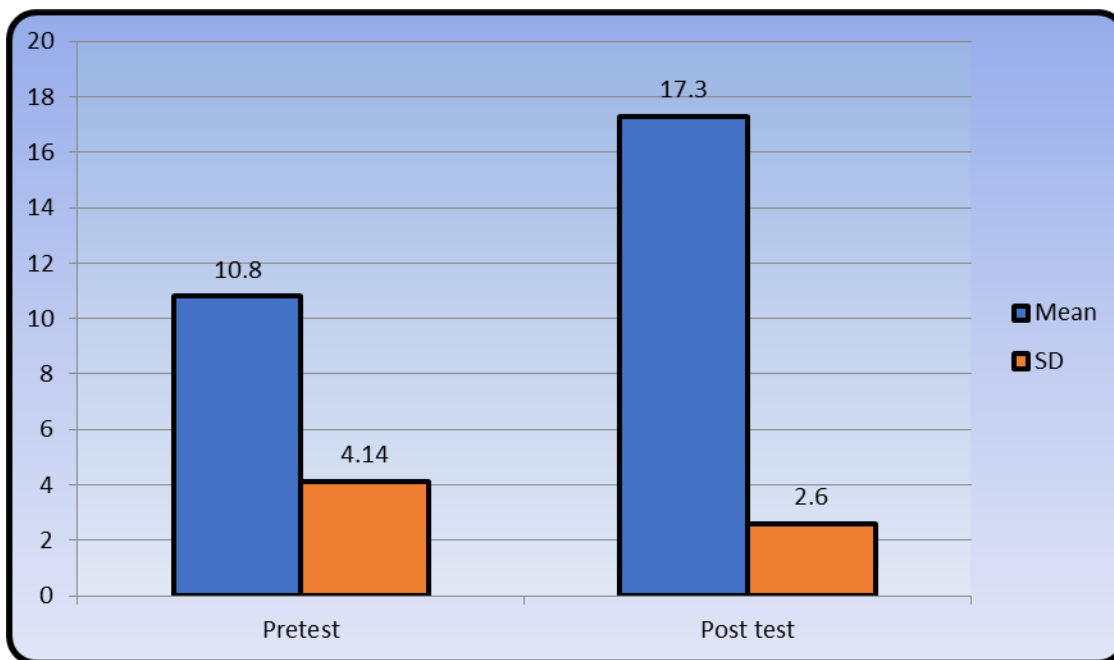
Fig: 13, Mean and SD of pre-test and post- test knowledge scores of respondents.

Aspect	Mean	SD	Mean %	Paired t test
Pre test	10.8	4.14	45.00%	**21.47 S***
Post test	17.3	2.60	72.08%	

NS= not significant. S= Significant, * p < 0.05 level, ** p < 0.01 level, *** p < 0.05level
Table: 10 Improvement of mean score of the overall level of knowledge between pre-test and post-test.
Table 10. Revealed the mean, SD and paired't' value of knowledge score of PUC students regarding Alcoholism in college life. .
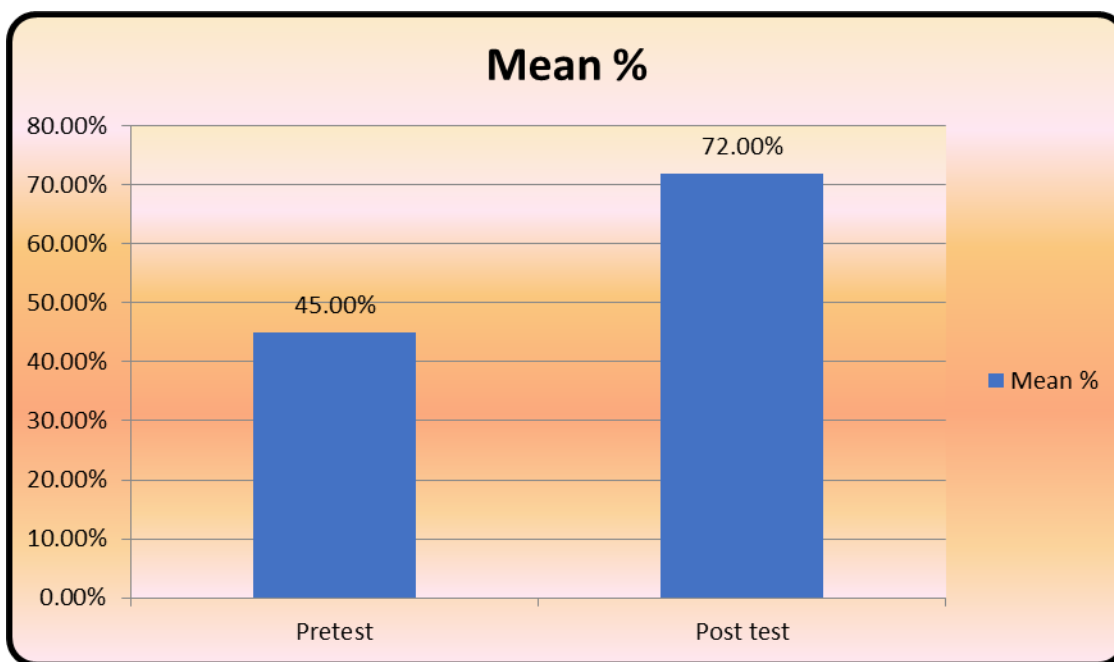
Fig: 14, Pre-test post-test knowledge mean % score.

(b) Effectiveness of Structured teaching programme regarding Alcoholism in college life.

Knowledge	Mean	S.D.	Mean %	Mean difference	Paired test	T P value	Table value at 0.05	Result
PRE	10.8	4.14	45.00	6.50	**21.47**	<0.001	1.68	SIGNIFICANT
POST	17.3	2.60	72.08					

Table: 11 determine the effectiveness of STP on knowledge regarding alcoholism in college life.

The obtained post-test mean value 17.3 was higher than that of the pre-test value 10.8. The SD between pre-test and post-test are 4.14 and 2.60 respectively. The obtained paired 't' value is 21.47 which was significant at 0.05 level.

It is inferred that PUC students had significantly improved knowledge after administration of STP on knowledge regarding Alcoholism in college life. So it is proved that the structured teaching programme was highly effective in improving knowledge level of PUC students regarding alcoholism in college life.

In the post test the calculated 't' value was 21.47 which is statistically significant at $P \leq 0.001$ level. Hence H_{01} stated as H_{01}: There will not be any statistically significant difference between pretest and post test knowledge scores among PUC students regarding Alcoholism in college life **was rejected** and restated as there is a statistically significant difference between the pre test and post test scores among PUC students regarding Alcoholism in college life.

Section F: Association of pre-test level of knowledge among PUC students regarding alcoholism in college life with selected demographic variables.

SI NO	SOCIO DEMOGRAPHIC DATA	LEVEL OF KNOWLEDGE			CHI SQUARE VALUE ($\chi2$ Value)
		Inadequate knowledge	Moderate knowledge	Adequate knowledge	
1.	Age in years				
	a. 15-17	23	12	-	$\chi2$=1.587
	b. 18-20	07	08	-	df=1 NS
2.	Gender-				
	a. Male	17	15	-	1.751
	b. Female	13	05	-	df=1 NS
3.	Religion				
	a. Hindu	14	10	-	$\chi2$=0.926
	b. Christian	10	08	-	Df=2
	c. Muslim	06	02	-	NS
	d. Other	00	00	-	
4.	Socio-economic Status				
	a) High socio-economic status	12	14	-	$\chi2$=5.108 df=2 NS
	b) Middle socio-economic status	11	5	-	
	c) Low socio-economic status	07	1	-	
5.	Type of Family				
	a. Nuclear	22	18	-	$\chi2$=2.083
	b. Joint	08	02	-	df=1 NS
6.	Area of residence				
	a. Urban area	20	19	-	**$\chi2$=5.614**
	b. Rural area	10	1	-	**df=1 S***
7.	Source of information regarding Alcoholism				
	a. Mass media	20	09	-	$\chi2$=3.582
	b. Friends	07	08	-	df=3

	c. Healthcare professionals	02	03	-	NS
	d. None	01	0	-	

df= degrees of freedom, S* = significant (P≤0.05), NS= not significant (P≤0.05)

Table: 10, Association of pretest level of knowledge among PUC students regarding Alcoholism in college life with selected demographic variables.

Table 10 shows that the calculated χ2 value was less than table value for all socio demographic variables except for area of residence; hence **H$_{02}$** stated as there is no statistically significant association between pretest level of knowledge among PUC students regarding Alcoholism in college life with selected demographic variables was **accepted** except for area of residence.

DISCUSSION

This chapter deals with the discussions in accordance with the objectives of the study and hypotheses. The statement of the problem was "**A study to evaluate the effectiveness of a structured teaching programme on alcoholism in college life, among PUC students in selected college at Bangalore, Karnataka**"

Socio demographic data:

- Majority of the PUC students (70.00%) are 15-17 years of age. 30.00% of the students are 18-20 years of age.
- Majority of the students (64.00%) are males, where as 36.00% of students are females.
- Majority of the students(48.00%) belong to the religion Hindu, 36.00% students belong to the religion Christian, 16.00% of students belong to the religion Muslim and none of the students belong to other religion
- Majority of the students (52.00%) belongs to high socio-economic status, 32.00% belongs to middle socio- economic status, and the least 16.00% of students belong to low socio-economic status.
- Majority of the students (80.00%) belong to nuclear family, where as 20.00% of the students belong to joint family.
- Majority of the students (78.00%) live in urban are and 22.00% of students live in rural area.
- Majority of the students (58.00%) got information regarding alcoholism from mass media, 30.00% of students got information regarding alcoholism from friends, 10.00% of students got information regarding alcoholism from health care professionals and the least (2.00%) have no source of information regarding Alcoholism.

The First objective of the study was to assess the existing knowledge of PUC students regarding alcoholism through pretest.

The findings showed that: majority of the students (60.00%) have in adequate knowledge regarding Alcoholism in college life, 40.00% of students have moderate level of knowledge regarding Alcoholism in college life and none of the students have adequate knowledge regarding Alcoholism in college life, in the pretest.

The second objective was to assess the effectiveness of structured teaching programme on alcoholism by comparing pretest and posttest knowledge scores.

The findings showed that:

The obtained post-test mean value 17.3 was higher than that of the pre-test value 10.8. The SD between pre-test and post-test are 4.14 and 2.60 respectively. The obtained paired't' value is 21.47 which was highly significant at 0.001 level.

It is inferred that PUC students had significantly improved knowledge after administration of STP on knowledge regarding Alcoholism in college life. So it is proved that the structured teaching programme was highly effective in improving knowledge level of PUC students regarding alcoholism in college life.

In the post test the calculated 't' value was 21.47 which is statistically significant at P≤0.001 level. Hence H_{01} stated as H_{01}: There will not be any statistically significant difference between pretest and post test knowledge scores among PUC students regarding Alcoholism in college life **was rejected** and restated as there is a statistically significant difference between the pre test and post test scores among PUC students regarding Alcoholism in college life

The Finding is supported by a study conducted by Sr. Paul Lisa and Ramya K R in Trichur, Data were collected using a structured knowledge assessment questionnaire and attitude inventory before after giving a structured teaching programme conducted in school among 100 higher secondary school students selected by convenient sampling. Findings revealed that adolescents had inadequate knowledge as evidenced by only 6% of adolescents had good knowledge regarding alcoholism while 76% had average, and 18% had poor knowledge and with respect to attitude 21% of adolescents had unfavorable in while 51% had moderately favorable and only 28% had unfavorable attitudes. Structured teaching was found be effective in increasing the knowledge and creating a attitude towards alcoholism among adolescents at.001 level of significance.

The third objective was to find out the association between pretest knowledge scores with their selected demographic variables.

The findings showed that:

The calculated χ2 value was less than table value for all socio demographic variables except for area of residence; hence H_{02} stated as there is no statistically significant association between pretest level of knowledge among PUC students regarding Alcoholism in college life with selected demographic variables was **accepted** except for area of residence

The findings of the study is supported by a study conducted by Vaibhav Jani etal, "Effectiveness of planned teaching programme on knowledge regarding ill effects of alcohol consumption." depicts that only one domicile demographic variable, i.e. domicile (area of residence) is significantly associated with pre test knowledge score regarding ill effects of alcohol consumption among adolescents and other demographic variable is not significantly associated with pre test knowledge score.

CONCLUSION

This chapter deals with the conclusion, implications, recommendations and limitation drawn for the study "**A study to evaluate the effectiveness of a structured teaching programme on alcoholism in college life, among PUC students in selected college at Bangalore, Karnataka**"

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

- In the pre-test, 60% of the students had inadequate knowledge regarding Alcoholism in college life, 20% of the students had moderate level of knowledge regarding alcoholism in college life and none had adequate knowledge regarding alcoholism in college life.

- In the post test, none of the students have inadequate level of knowledge regarding alcoholism in college life, 24% of students have moderate level of knowledge regarding alcoholism in college life and 52.00% of students have adequate knowledge regarding alcoholism in college life

- The obtained post-test mean value 17.3 was higher than that of the pre-test value 10.8. The SD between pre-test and post-test are 4.14 and 2.60 respectively. The obtained paired't' value is 21.47 which was highly significant at 0.001 level.

- The calculated 't' value was 21.47 which is statistically significant at P≤0.001 level. Hence H_{01} stated as H_{01}: There will not be any statistically significant difference between pretest and post test knowledge scores among PUC students regarding Alcoholism in college life **was rejected** and restated as there is a statistically significant difference between the pre test and post test scores among PUC students regarding Alcoholism in college life

- The calculated χ2 value was less than table value for all socio demographic variables except for area of residence; hence H_{02} stated as there is no statistically significant association between pretest levels of knowledge among PUC

students regarding Alcoholism in college life with selected demographic variables was **accepted** except for area of residence.

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