



## Effectiveness of Structured Teaching Programme on Level of Knowledge Regarding Ill Effects of Alcoholism among Higher Secondary School Students: A Pre-Experimental Study.

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### ABSTRACT

**Background:** Alcoholism is a social menace. It is a broad term for problems with alcohol, and is generally used to mean compulsive and uncontrolled consumption of alcoholic beverages, usually to the detriment of the drinker's health, personal relationships, and social standing. It is medically considered a disease, specifically an addictive illness. Several other terms are used invariably to denote the disease condition such as "alcohol abuse" and "alcohol dependence syndrome." The World Health Organization estimates that there are 140 million people with alcoholism worldwide.<sup>1</sup> A structured teaching programme (STP) can be used effectively to improve the gain in level of knowledge regarding ill effects of alcoholism and to thus sensitize the youth against consumption and abuse. The aim of the study was to assess the effectiveness of structured teaching programme on level of knowledge regarding the ill effects of alcoholism among higher secondary students in selected school belonging to rural areas of Kollam district. **Materials and Methods:** The following study adopted a pre-experimental design. 100 higher secondary students were assigned using purposive sampling technique. The conceptual framework of the study was based on Von Bertalanffy's General System Model. Tools used for data collection were demographic Performa and structured knowledge questionnaire. **Results:** Findings of the study revealed that the Paired t value computed at 17.83\*\* [df=99] by comparison of the mean pre-test and post-test knowledge scores was statistically significant at P<0.01 level. Significant association was observed between the level of knowledge and selected demographic variables such as Alcohol user in family (P# Value 0.01\*), Previous knowledge/Classes attended ( $\chi^2$  Value 30.19\*\*, P<0.01). **Conclusion:** The findings of the study confirmed that STP was effective in improving level of knowledge regarding ill effects of alcoholism among higher secondary students.

**Key Words:** Alcoholism, ill effects, STP, level of knowledge, Higher secondary students, pre-experimental study.

### INTRODUCTION

'Children are our greatest treasure and they are our future'; Observed 'Nelson Mandela'. Students are the future of any nation and responsible citizens of tomorrow. Higher secondary students under adolescent period are in a transitional stage of development between childhood and adulthood. Adolescence is a period with specific behavioural characteristics, problems, and needs, through which young people experiences significant physical and psychological changes. It is a period of Storm and Stress.<sup>2</sup> The characteristic traits of the adolescents include the tendency to do experimentation and assert their independence. As a result of this tendency, they get into the habit of taking alcohol without realizing the consequences. Many students attending schools, colleges, universities, and other higher education institutions consume alcoholic beverages. The laws and social culture around this practice vary by country and institution nature.<sup>3</sup> Alcohol abuse among students refers to unhealthy alcohol drinking behaviours by college and university students. While the legal drinking age varies by country, the high number of underage students that consume alcohol has presented many problems and consequences for universities. The causes of alcohol abuse tend to be peer pressure, fraternity or sorority involvement, and stress. Students who abuse alcohol can suffer from health concerns, poor academic performance or legal consequences.<sup>3</sup> Most people younger than age 21 who drink alcohol report binge drinking. In college, over 50% of students take part in binge drinking, while 80% of college students report having consumed alcohol during college. Young adults who participate in binge drinking experience higher rates of physical and sexual assault, and unwanted, unplanned, and unprotected sexual activity. The motivations among young students have changed as well. In recent years, more students are drinking with the intended purpose of getting drunk.<sup>3</sup> About two billion people worldwide consume alcoholic beverages and one third is likely to have one or more diagnosable alcohol use disorders. Alcohol is attributed to nearly 3.2% of all deaths and disability.<sup>4</sup> The age at which alcohol consumption begins seems to be coming down year by year. The incidence of alcohol dependence is 2% in India. Nearly 15-30% of patients are developing alcohol related-problems and seeking admission in psychiatric hospitals.<sup>5</sup> A cross-sectional study done in Bangalore revealed that 10% of samples who consumed alcohol belonged to adolescent age group. Kerala comes first in the per capita consumption of alcoholic beverages at 8.3 litres. Over the years, the age at which youngsters begin to consume liquor has come down in Kerala. In 1986 the age was 19, by 1990 it had dropped to 17, and by 1994 the age was 14 years of age.<sup>6</sup> India has the largest population of adolescents

in the world; about 243 million individuals belongs to age 10 to 19 years.<sup>7</sup> It is during adolescence that young people begin to experiment with alcohol, tobacco, and drugs that cause dependence.<sup>8</sup> Survey conducted by NIMHANS, found that, out of 69,00,000 alcohol users in Kerala, 9, 66,000 (14%) are below 21 years of age and they constitute 2.93% of the total Kerala population. Among the total alcohol consuming population, the alcohol consumption by youngsters have noticeably risen from 2% in 1990 to 14% in 2006.<sup>9</sup> Considering the high prevalence of alcoholism among adolescent children and often with a trend of beginning at early adolescence/school ages, it is imperative to educate the higher secondary school children regarding the ill effects of alcoholism. So, the Investigator(s) through this study aims to assess the effectiveness of STP in improving / gain in level of knowledge regarding the ill effects of alcoholism among higher secondary school students.

## OBJECTIVES OF THE STUDY

1. To assess the pre-test and post-test level of knowledge among higher secondary school students regarding ill effects of alcoholism.
2. To determine the effectiveness of structured teaching programme on level of knowledge regarding ill effects of alcoholism.
3. To find out the association between level of knowledge and selected demographic variables.

## HYPOTHESES

- ❖ H<sub>1</sub>-There is significant difference between the mean knowledge scores of higher secondary school students before and after administration of structured teaching programme.
- ❖ H<sub>2</sub>- There is significant association between level of knowledge among higher secondary school students regarding ill effects of alcoholism with selected demographic variables.

## METHODOLOGY

**Research Approach:** Quantitative research approach.

**Research Design:** Pre-experimental research design.

**Population:** Higher secondary school students, Rural areas of Kollam district.

**Settings:** SN Higher secondary school, Kollam.

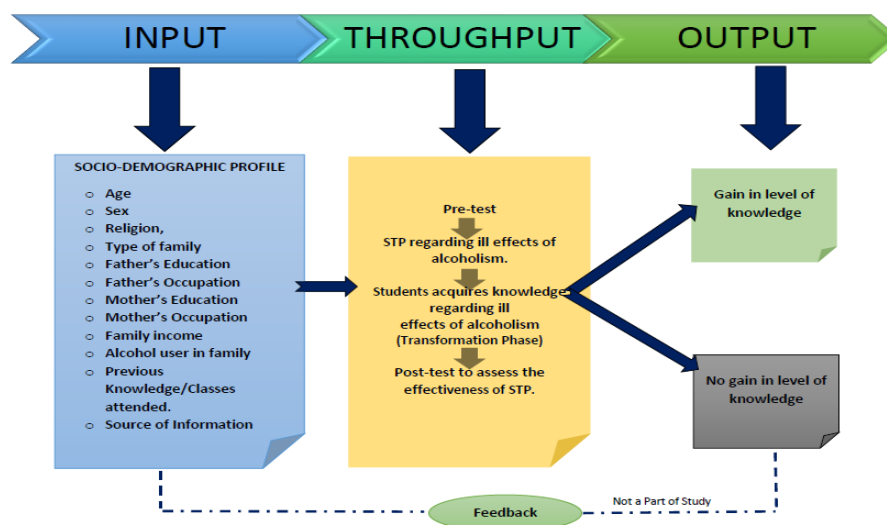
**Sample:** 100 Higher secondary school students.

**Sampling Technique:** Non –probability, Purposive Sampling technique.

**Figure 01: Schematic representation of Research design.**



**Figure 02: Conceptual Framework based on Ludwig von Bertalanffy's General Systems Theory.**



## TOOLS AND TECHNIQUE

**Tool-A:** Socio-Demographic Performa was used to assess the demographic details such Age, Gender, Religion, Type of Family, Father's Education, Mother's Education, Father's Occupation, Mother's Occupation, Family Income, Alcohol User in Family, Previous knowledge/Classes attended and Source of Information.

**Tool-B:** A structured knowledge questionnaire was used to assess the level of knowledge regarding ill effects of alcoholism. The questionnaire contained 30 items with multiple choice questions and covered all aspects of the disease condition with a maximum score of 30 and minimum score of zero.

**Technique: Structured teaching programme (STP)** was administered for a duration of 45 minutes for 100 samples along with a variety of AV aids including LCD-PowerPoint presentation, Charts, Flash Cards, OHP sheets and video assisted modules.

**Method of Data collection:** The data was Collected for a period of one month. [15/05/2015 to 16/06/2015]. After explaining the purpose and obtaining an informed consent, the pre-test was administered followed by a structured teaching programme. After a period of one week a post test was carried out for the samples.

**Inclusion criteria:** higher secondary students who are willing to participate in the study

Students available at the period of data collection.

Students who can understand English/Malayalam.

**Exclusion criteria:** Samples not willing to participate and unavailable during data collection were excluded.

**Statistical analysis:** Both Descriptive and Inferential statistics were used to analyse the data [using SPSS version 25 (SPSS Inc., Chicago, IL)]. Descriptive statistics such as Frequency distribution and Percentage were used to describe the demographic data and Inferential statistics such as paired t test was used to compare the mean knowledge scores before and after the intervention. Chi Square and Fisher's Exact test were performed to find out the association between level of knowledge and selected demographic variables. ' $P < 0.05$ ' was ascertained as the minimum accepted level of significance.

## RESULTS

### Section-I: Description of Sample Characteristics of Higher Secondary Students.

**Table 01:** Frequency distribution and Percentage of higher secondary students.

(N=100)

SL NO.	Demographic variables	Higher secondary students	
01	Age (In years)	Frequency (f)	Percentage (%)
	Up to 16 yrs.	90	90
	17-18 yrs.	10	10
	Above 18 yrs.	0	0
02	Gender	Frequency (f)	Percentage (%)
	Male	46	46
	Female	54	54
02	Religion	Frequency (f)	Percentage (%)
	Hindu	64	64
	Muslim	25	25
	Christian	11	11
03	Type of family		
	Nuclear	92	92
	Joint/Extended	08	08
04	Father's Education	Frequency (f)	Percentage (%)
	Primary	12	12
	High School	62	62

	Higher Secondary and above	26	26
<b>05</b>	<b>Mother's Education</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
	Primary	10	10
	High School	57	57
	Higher Secondary and above	33	33
<b>06</b>	<b>Father's Occupation</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
	Government Job	22	22
	Coolie	29	29
	Private/Business	49	49
<b>07</b>	<b>Mother's Occupation</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
	Homemaker	48	48
	Government job	11	11
	Private/Business	41	41
<b>08</b>	<b>Family Income (Per month)</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
	Up to 10000 Rs	27	27
	10001-20000 Rs	33	33
	20001-30000 Rs	26	26
	More than 30000 Rs	14	14
<b>09</b>	<b>Alcohol User in Family</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
	Yes	62	62
	No	38	38
<b>10</b>	<b>Previous Knowledge/Classes Attended</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
	Yes	78	78
	No	22	22
<b>11</b>	<b>Source of Information</b>	<b>Frequency (f)</b>	<b>Percentage (%)</b>
	Parents/Teachers/Friends	26	26
	Mass Media (TV, Radio, Newspaper, Internet etc)	52	52
	Health Professionals	22	22

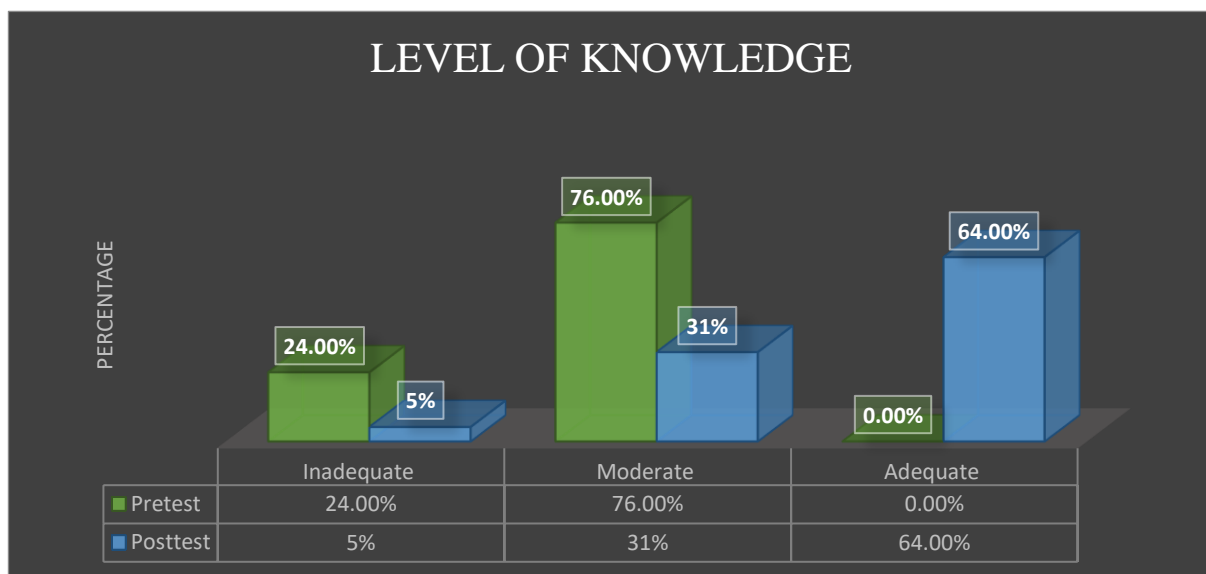
## Section-II: Level of Knowledge among Higher Secondary Students regarding ill effects of Alcoholism

**Table-02:** Frequency distribution and Percentage of level of knowledge among higher secondary students.

(N=100)

SL. No	Level of Knowledge	Pre test		Post test	
		f	%	f	%
01.	Inadequate (Score 0-11)	24	24	05	05
02.	Moderate (Score 12-20)	76	76	31	31
03.	Adequate (Score 21-30)	0	0	64	64

**Figure-02:** Bar Diagram showing the percentage distribution of level of knowledge among higher secondary students.  
(N=100)



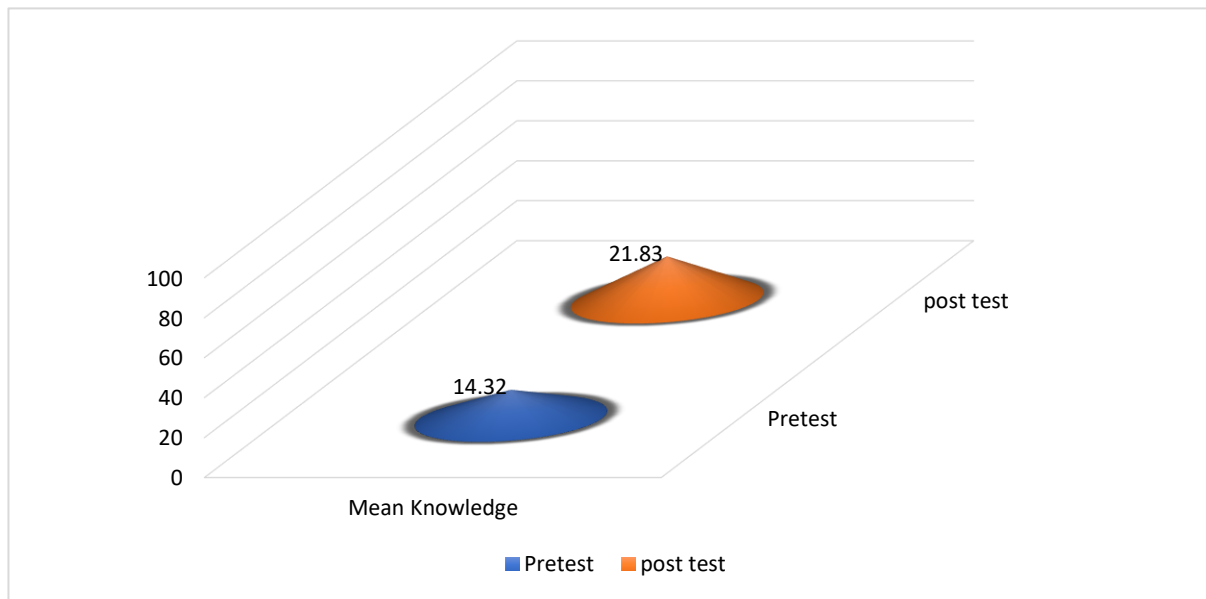
### Section-III: Effectiveness of Structured Teaching Programme on Level of Knowledge regarding ill effects of Alcoholism among Higher Secondary Students.

**Table 03:** Mean, Standard deviation and 'Paired t' value of knowledge scores among higher secondary students before and after intervention.  
(N=100)

Stage	Mean $\pm$ SD	df	Paired t value	P value
Pre-test	14.32 $\pm$ 4.14	99	17.83**	0.000
Post-test	21.83 $\pm$ 5.91			

\*\*Significant at 0.01 level.

**Figure 03:** Cone Diagram showing Comparison of Mean Pre-test and Post-test Mean Knowledge scores. (N=100)



#### Section-IV: Association between level of knowledge and selected demographic variables.

**Table 05:** Association between pre-test level of knowledge among higher secondary students, and selected demographic variables. (N=100)

Demographic Variables	Level of Knowledge				df	$\chi^2$ / Fisher's Exact (P#)	P Value/ P#
	Inadequate		Moderate				
Alcohol User in Family	f	%	f	%			
Yes	08	65.5%	54	34.5%	01	<b>P# Value 0.01*</b>	P#<0.05
No	16	38.7%	22	61.3%			
Previous Knowledge					01	<b><math>\chi^2</math> Value 30.19**</b>	P<0.01
Yes	09	68%	69	32%			
No	15	40%	07	60%			

\*\*Significant at 0.01 level. \* Significant at 0.05 level.

## DISCUSSION

The findings revealed that 24% students had inadequate level of knowledge, 76% had Moderate level of knowledge, and none of the students had adequate level of knowledge regarding ill effects of alcoholism in the pre-test. In post-test, 64% students had adequate level of knowledge, 31% had moderate level and only 05% had inadequate knowledge regarding ill effects of alcoholism. The study finding is in partial agreement with a similar study conducted in Bangalore among 50 pre-university students on knowledge of effect related to alcoholism. The samples were selected using simple random sampling. The mean knowledge score was found to be high [68.8%] and 33.2% had poor knowledge regarding effects of alcoholism. The findings in the present study revealed that the Paired t value(s) computed at 17.83\*\* (df=99) by comparison of the mean pre-test and post-test knowledge scores ( $14.32 \pm 4.14$ ,  $21.83 \pm 5.91$ ) was statistically significant at  $P < 0.01$  level. So, it was revealed that there was significant increase in the mean post-test knowledge scores compared to the mean pre-test knowledge scores. This is in accordance with a similar study conducted to assess the effectiveness of street play on alcoholism among 50 young adults in Raichur, Karnataka State, India using simple random sampling. Structured interview schedule was used for the data collection. The findings revealed that there was significant increase in mean knowledge scores from 19.4 to 28.6 following the intervention.<sup>10</sup> Another study conducted by Sah Et.al to assess the effectiveness of planned teaching program on knowledge regarding effects of alcoholism among Adults revealed that there was significant increase in the post test knowledge score ( $20.4 \pm 1.6$  SD) as compared to the pre-test score ( $9.6 \pm 3.04$  SD) with a mean difference of 10.8, statistically significant ((Paired t value=09) at  $P < 0.05$  level.<sup>11</sup> Also; Significant association was found between the level of knowledge and demographic variables such as alcohol use in the family (P# Value 0.01\*) and previous knowledge ( $\chi^2$  Value 30.19\*\*) respectively.

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## CONCLUSION

The study was conducted to assess the effectiveness of structured teaching programme (STP) on level of knowledge regarding ill effects of alcoholism among higher secondary students in selected school of Kollam district, Kerala. The results of the study confirm that STP was significantly effective in improving the level of knowledge regarding ill effects of alcoholism among higher secondary students. ( $P < 0.01$  level).

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## LIMITATIONS

The study used a non-probability, purposive sampling.

The study was limited to 100 higher secondary students.

The present study was limited to rural areas of Kollam, Kerala.

The duration was limited to evaluate the effectiveness of STP.

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## RECOMMENDATIONS

The Cross-sectional study can be conducted on a large sample with random sampling to generalize the findings.

A quasi-experimental study can be conducted with an addition of a control group.

A similar study can be replicated among college students.

A similar interventional study can be conducted to assess the effectiveness of video assisted instructional module.

## BUDGET

Self-Funding

## CONFLICTS OF INTEREST

Nil

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