A QUASI EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF SCHOOL BASED PROGRAMME ON THE LEVEL OF KNOWLEDGE REGARDING ILL-EFFECTS OF ALCOHOLISM AMONG ADOLESCENT BOYS IN SELECTED SCHOOLS OF MANDI GOBINDGARH, PUNJAB

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ABSTRACT

Adolescence is a crucial developmental stage characterized by rapid physical, emo-tional, and social changes, during which adolescents may become vulnerable to unhealthy habits such as alcohol use. The present study aimed to assess the effectiveness of a school-based programme on the level of knowledge regarding the ill-effects of alcoholism among adolescent boys in selected schools of Mandi Gobindgarh, Punjab. The study was conducted with the objective of measuring the existing knowledge level before the intervention and comparing it with the post-intervention knowledge to determine the effectiveness of the programme. Materials and methods: A quasi-experimental study design was used among adolescent boys studying in selected schools of Mandi Gobindgarh, Punjab. A pretest was conducted to assess the baseline or past data regarding the level of knowledge on the ill-effects of alcoholism. After the pretest, a structured school-based educational programme was administered, followed by a posttest to evaluate the change in knowledge. A structured knowledge questionnaire was used to collect data. The obtained data were analyzed using descriptive and inferential statistics. The present study aimed to assess the effectiveness of a school-based programme on knowledge regarding the ill-effects of alcoholism among adolescent boys in selected schools of Mandi Gobindgarh, Punjab. The objectives of the study were to assess the pre-test knowledge regarding ill-effects of alcoholism among adolescent boys in the control and experimental groups, assess the post-test knowledge in both groups, compare the pre-test and post-test knowledge scores, and determine the relationship between knowledge scores and selected demographic variables.

Keywords: Knowledge, Ill effects. ,Attitude, Adolescent Boys., Alcoholism, School-Based Programme.

INTRODUCTION

Substance abuse refers to the harmful or hazardous use of substances such as alcohol and illicit drugs that adversely affect cognitive functions and mental well-being, often leading to dependence syndrome. This condition is characterized by a strong craving for the substance, impaired control over its use, continued consumption despite harmful consequences, prioritization of substance use over responsibilities, development of tolerance, and sometimes withdrawal symptoms. Adolescence, typically defined as the age group of 10–20 years, is a critical developmental phase marked by rapid physical, psychological, and social changes. In India, adolescents constitute a significant proportion of the population and represent a vital resource for the nation's future. However, this stage is also associated with increased vulnerability to risk-taking behaviours, including substance use, influenced by curiosity, peer pressure, and lack of awareness.

Substance abuse among adolescents and college students has emerged as a serious public health concern, impacting their physical health, mental well-being, academic performance, and social relationships. In India, a substantial number of individuals use alcohol, cannabis, opioids, and other substances, with a notable proportion developing dependence. Alcoholism, in particular, contributes to family disruption, poor academic outcomes, violence, and broader societal issues. The school and college environment, while offering opportunities for growth, may also expose youth to experimentation and risky behaviours. Evidence suggests that structured, school-based prevention programs can effectively reduce substance use by improving awareness, attitudes, and life skills. Therefore, there is a strong need for comprehensive, evidence-based interventions, supportive family and community environments, and educational initiatives to prevent substance abuse and promote healthier lifestyles among adolescents.

MATERIAL & METHODS

Research approach

A Quasi experimental approach was adopted for the study. This approach involves manipulation but lacks at least one of the other two properties of true experimental i.e. randomization or control. The present study lacks randomization. Attempt has been made to

assess the effectiveness of school based programme assess on knowledge regarding ill-effects of alcoholism among adolescent boys.

Research design

Quasi experimental Research design was adopted for the present study.

For present study the research design was utilized to achieve the stated objectives. Pre-test and post-test design was used in this study.

Key-O1 – Pre Test

Experimental group	O1	X	O2
Control group	O1	58.3%	O2

X – School based Programme (Manipulation)

O2 – Post Test

Variables under study:

Dependent Variable

The dependent variable refers to the outcome or effect that is influenced by changes in the independent variables. In this study, the level of knowledge regarding the ill-effects of alcoholism among adolescent boys is considered as the dependent variable.

Independent Variable

The independent variables refer to the factors that may influence or cause changes in the dependent variable and are not affected by other variables in the study. In this study, the independent variables include age (in years), birth order in the family, type of family, academic standard, educational status of mother, educational status of father, occupation of mother, occupation of father, family income per month, and source of information.

Sample Size:

The sample for the present study consisted of 70 adolescents selected from schools in Mandi Gobindgarh, Punjab.

Sampling technique:

It is the process of selecting cases to represents an entire population so that inferences about the population can be made. In convenient sampling elements selection of participants who are easily available is done.

Development of tool:

Part I: Socio-Demographic Data

This part consists items for obtaining personal information about subjects i.e. age (in years), birth order in family, type of family, academic standard, educational status of mother, educational status of father, occupation of mother, occupation of father, family income per month, source of information.

Part II: Structured knowledge questionnaire:

This part consists of multiple-choice questionnaire regarding ill-effects of alcoholism among adolescent boys in selected schools of Mandi Gobindgarh, Punjab. Total numbers of questions were 40. Each question has 4 options. Each correct response 1 mark and 0 mark for incorrect response so maximum score was 40 and minimum score was 0.

Area wise distribution of questions:

Area	No. of items	Score
Introduction and Definition	3	3
Properties of Alcohol	3	3
Causes and Risk Factor	6	6
Signs and Symptoms	4	4
Systematic Effect of Alcoholism	10	10
Prevention and Treatment	11	11
Complications	3	3
Total	**40**	**40**

Maximum score=40
Minimum score= 0

Score interpretation

Level of knowledge	Score	Percentage
Excellent	≥31	≥77
Good	21-30	52-75
Average	11-20	27-50
Below average	≤10	≤25

Organisation of the content of STP:

These parts consist of school based programme on ill-effects of alcoholism consisted of the following objectives:

- Definition of alcoholism.
- Explain the properties of alcoholism
- Discuss the prevalence of alcohol abuse
- Describe the causes of alcoholism
- Enumerate the risk factors of alcoholism.
- Enlist the sign and symptoms of alcoholism
- Describe the effects of alcoholism on body.
- Describe the prevention of alcoholism
- Explain the treatment of alcoholism.

Description of the Intervention Tool:

As the study was to assess the effectiveness of school based programme on knowledge regarding ill-effects of alcoholism among adolescent boys in selected schools of Mandi Gobindgarh, Punjab. A structured knowledge questionnaire was prepared to assess the knowledge regarding ill-effects of alcoholism among adolescent boys. The review of literature, expert's opinion and investigator's own experience provided the basis for construction of the tool

RESULTS

The analysis of the data is done on accordance with the objective of the study.

SECTION I: Demographic variables.

SECTION II: Findings related to pre test and post- test mean knowledge score regarding ill effects of alcoholism among adolescent boys in control and experimental group.

SECTION III: Findings related to relationship of pre-test and post-test knowledge regarding ill-effects of alcoholism among adolescent boys in control and experimental group with selected demographic variables i.e. age (in years), birth order in family, type of family, academic standard, educational status of mother , educational status of father, occupation of mother, occupation of father , family income per month , source of information.

TABLE- Relationship of pre test and post test mean knowledge score regarding ill effects of alcoholism among adolescent boys in control and experimental group with age (in years)

Age (years)	Control Group (n=40)	Percentage			Experimental Group (n=40)			
Excellent	Pre-test Mean	SD	Post-test Mean	SD	Pre-test Mean	SD	Post-test Mean	SD
13–14	19.50	2.94	20.16	3.94	15.00	2.34	26.80	3.34
15–16	16.05	3.42	16.42	3.45	15.38	3.17	26.30	2.35
17–18	15.06	3.45	15.06	2.48	15.40	3.73	24.54	3.21

Source of Variation	Control Group (Pre-test)	Control Group (Post-test)	Experimental Group (Pre-test)	Experimental Group (Post-test)
Between Groups	df = 2, F = 3.73*	df = 2, F = 4.48*	df = 2, F = 0.02 (NS)	df = 2, F = 2.05 (NS)
Within Groups	df = 37	df = 37	df = 37	df = 37
15–16	16.05	3.42	16.42	3.45
17–18	15.06	3.45	15.06	2.48

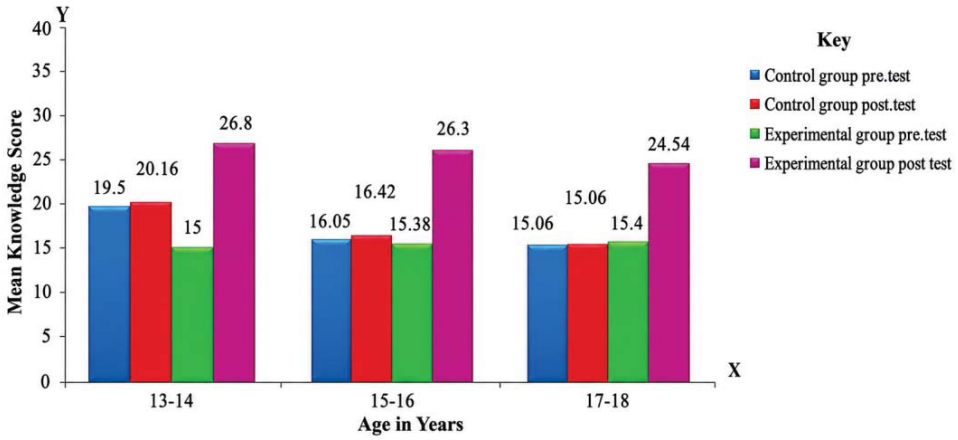

Figure 7: Relationship of pretest and posttest mean knowledge score regarding ill effects of alcoholism among adolescent boys in control and experimental group with age (in years)

Findings of the study are summarized as below:-

Demographic variables

- According to age (in years), in control group maximum 19 (47.5%) adolescent boys were in age group of 15- 16 years as followed by minimum 6 (15%) in 13-14 years. Whereas in Experimental group maximum 22(55%) adolescent boys were in age group of 17-18 years followed by minimum 5(12.5%) in 13-14 years of age group respectively.
- As per Birth order in family, in control group maximum 15(37.5%) adolescent boys had 1st and 2nd child birth order in family as followed by minimum 2(5%) had ≥4th child in family. Whereas in experimental group maximum 20(50%) adolescent boys had 2nd child birth order in family as followed by minimum 3(7.5%) had ≥4 child in family.
- As per type of family, in control group maximum 25(62.5%) adolescent boys were belonged to joint family as followed by minimum 5(12.5%) from extended family. Where as in experimental group maximum 21(52.5%) adolescent boys from joint family as followed by 17 (42.5%) minimum 2(5%) were belonged to extended family.
- As per academic standard in control and experimental group all adolescent boys were equally distributed 10(25%) in 9th , 10th , 11th and 12th standard respectively
- As per educational status of mother, in control group maximum 16 (40%) adolescent boys whose mother were educated up to 6th-10th standard and minimum 2(5%) were illiterate. Whereas in experimental group maximum 23(57.5%) adolescent boys whose mother were educated up to 6th-10th standard education and minimum 2(5%) were illiterate and graduate and above respectively.

As per educational status of father, in control group maximum 17 (42.5%) adolescent boys whose father were educated up to 6th-10th standard as followed by minimum 2(5%) were illiterate. Whereas in experimental group maximum 28(70%) adolescent boys whose father were educated up to 6th-10th standard and minimum 2(5%) were illiterate and graduate and above respectively

DISCUSSION

This study assessed the effectiveness of a school-based programme on knowledge regarding the ill-effects of alcoholism among adolescent boys. Findings were discussed based on study objectives and compared with previous research.

The pre-test mean knowledge scores were similar in both groups (control: 16.2; experimental: 15.2), indicating comparable baseline knowledge. This finding is consistent with Paul L and Ramya KR (2019)[1].

Post-test results showed minimal improvement in the control group (16.5), whereas the experimental group demonstrated a substantial increase (25.4), confirming the effectiveness of the intervention. This is supported by Hegade NK and Nandagaon KV (2018)[2].

Area-wise analysis revealed that both groups had

maximum knowledge in the "properties of alcohol" domain during pre-test. However, only the experimental group showed marked improvement across all areas in the post-test, especially in prevention and effects.

Comparison between groups showed a statistically significant difference in post-test scores ($p \leq 0.05$), supporting the research hypothesis. Similar findings were reported by Yelmule PA (2020)[3].

Regarding demographic variables:

- Age showed significant association in the control group but not in the experimental group post-intervention.
- Birth order, type of family, parental occupation, income, and source of information showed no significant association with knowledge scores.
- Academic standard and mother's education showed partial association in some phases.

These findings align with several previous studies[4–6], suggesting that structured teaching programmes are effective regardless of most demographic variations.

Overall, the study confirms that school-based interventions significantly improve adolescents' knowledge regarding alcoholism.

CONCLUSION

The study concluded that the school-based programme was effective in improving knowledge regarding the ill-effects of alcoholism among adolescent boys.

The findings highlight that structured educational interventions can significantly enhance awareness, irrespective of most demographic factors. Schools play a crucial role in preventing substance abuse by educating adolescents at an early stage.

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