



Effectiveness Of A Structured Teaching Programme On Knowledge Regarding Alcoholic Cirrhosis Among Students In Selected Colleges, Indore, Madhya Pradesh.

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Abstract

Background: Alcoholic cirrhosis is a major global health concern, resulting in chronic liver damage and significant mortality. Young adults often lack awareness regarding the causes, risk factors, and prevention of alcoholic cirrhosis. Educational interventions can play a vital role in building knowledge and promoting healthy practices.

Objectives: To assess the effectiveness of a structured teaching programme (STP) on knowledge regarding alcoholic cirrhosis among students in selected colleges of Indore, Madhya Pradesh.

Methods: A pre-experimental one-group pre-test–post-test design was adopted. A total of 100 students were selected through purposive sampling. Data were collected using a structured knowledge questionnaire covering definition, causes, signs/symptoms, complications, prevention, and management of alcoholic cirrhosis. The STP was administered for 60 minutes using lecture-cum-discussion and audiovisual aids. Post-test was conducted after 7 days. Data were analyzed using descriptive and inferential statistics.

Results: The mean pre-test knowledge score was 11.5 ± 3.4 , which improved to 22.7 ± 4.1 in the post-test. The mean difference of 11.2 was statistically significant ($t = 19.46, p < 0.001$). Before the intervention, 62% of students had inadequate knowledge, 28% moderate, and only 10% adequate. After the STP, 76% had adequate knowledge, 22% moderate, and only 2% inadequate. No significant association was found between knowledge improvement and demographic variables (age, gender, stream, or family history of alcoholism).

Conclusion: The STP was highly effective in improving students' knowledge regarding alcoholic cirrhosis. Structured, focused, and interactive educational programmes can enhance awareness and contribute to preventive health behavior among youth.

Keywords: Alcoholic cirrhosis, structured teaching programme, knowledge, students, Indore.

Introduction

Alcoholic cirrhosis is the final stage of chronic alcohol-induced liver disease, characterized by progressive fibrosis, hepatocellular injury, and impaired liver function. It remains one of the leading causes of liver-related mortality worldwide. In India, alcohol consumption among adolescents and young adults is rising, leading to increased risk of cirrhosis at an early age. Lack of knowledge about harmful effects of alcohol, combined with peer pressure and cultural acceptance, aggravates the problem. Preventive education is a key strategy to reduce the disease burden.

Objectives

1. To assess the pre-test knowledge regarding alcoholic cirrhosis among students.
2. To evaluate the effectiveness of a structured teaching programme on knowledge scores.
3. To find association between post-test knowledge and selected demographic variables.

Methodology

Research Design

The study adopted a **pre-experimental, one-group pre-test–post-test design** to evaluate the effectiveness of a structured teaching programme (STP) on knowledge regarding alcoholic cirrhosis. This design enabled assessment of changes in knowledge levels before and after the intervention.

Setting

The study was conducted in **Index Nursing colleges of Indore, Madhya Pradesh**, providing access to the target group of undergraduate students.

Sample and Sampling Technique

A total of **100 students**, aged **18–22 years**, were selected using **purposive sampling** based on their availability and willingness to participate in the study. Inclusion criteria ensured that participants were students from selected colleges, within the specified age group, and able to understand the questionnaire.

Data Collection Tool

Knowledge was assessed using a **structured knowledge questionnaire** comprising **30 items**. The tool covered aspects such as the meaning, etiology, risk factors, signs and symptoms, complications, management, and prevention of alcoholic cirrhosis. The tool was validated by experts in nursing and medical sciences, and reliability was established through pilot testing.

Intervention

The **Structured Teaching Programme (STP)** was prepared and administered by the investigator. It included interactive teaching methods supported by charts, diagrams, and discussions. The content covered:

- Meaning and definition of alcoholic cirrhosis
- Etiology and risk factors
- Signs and symptoms
- Complications
- Management strategies
- Preventive measures

The programme was delivered in a single session of **45–60 minutes**.

Data Collection Procedure

- **Pre-test:** Administered to participants using the structured knowledge questionnaire.
- **Intervention:** Delivery of the STP on alcoholic cirrhosis.
- **Post-test:** Conducted after seven days using the same tool to assess changes in knowledge levels.

Data Analysis

Data were analyzed using both **descriptive** and **inferential statistics**:

- Descriptive: Frequency, percentage, mean, and standard deviation were used to describe demographic variables and knowledge scores.
- Inferential: Paired **t-test** was used to assess the effectiveness of the STP, and **Chi-square test** was applied to determine the association between pre-test knowledge scores and selected demographic variables.
- A significance level of **p < 0.05** was considered statistically significant.

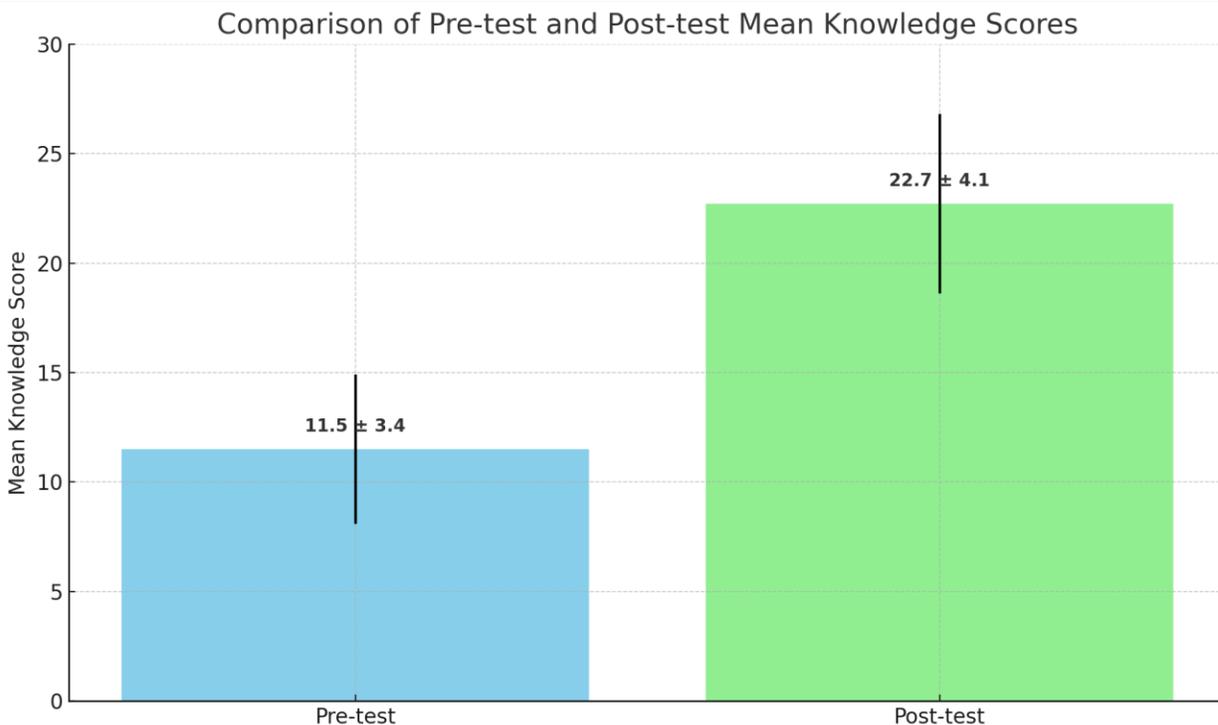
Results

Knowledge Level Distribution

In the **pre-test**, the majority of students (62%) demonstrated *inadequate* knowledge regarding alcoholic cirrhosis, while 28% had *moderate* knowledge, and only 10% possessed *adequate* knowledge. After the intervention, the **post-test** findings revealed a remarkable improvement: 76% of students achieved *adequate* knowledge, 22% retained *moderate* knowledge, and only 2% remained at an *inadequate* level.

Mean Knowledge Scores

The mean pre-test score was **11.5 ± 3.4**, which significantly improved to **22.7 ± 4.1** in the post-test. The **mean difference of 11.2** was highly significant with a paired *t*-value of **19.46** ($p < 0.001$), indicating the effectiveness of the structured teaching programme in enhancing knowledge.



Association with Demographic Variables

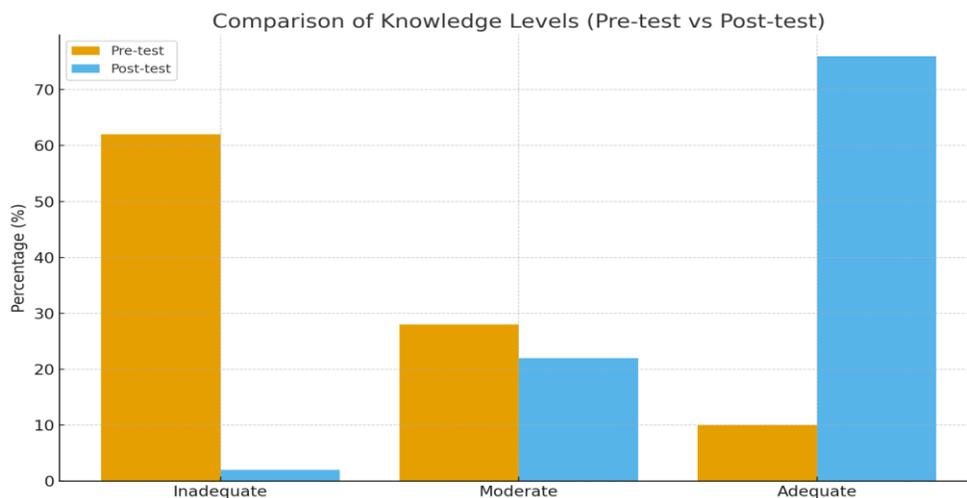
Chi-square analysis showed **no statistically significant association** between knowledge improvement and selected demographic variables such as age, gender, academic stream, or family history of alcoholism ($p > 0.05$). This suggests that the structured teaching programme was uniformly effective across subgroups.

Would you like me to **make tables and graphs** (bar chart for knowledge levels and a paired mean comparison graph) for this Results section so you can insert them directly into your publication?

Knowledge Level Distribution

Knowledge Level	Pre-test (%)	Post-test (%)
Inadequate	62	2
Moderate	28	22
Adequate	10	76

Knowledge Level Distribution: Pre-test vs Post-test



Comparison of Pre-test and Post-test Mean Scores

I've created both the **table** (knowledge level distribution) and the **graphs**:

1. A bar chart comparing pre-test and post-test knowledge levels (Inadequate, Moderate, Adequate).
2. A bar chart showing mean scores with error bars (\pm SD).

Would you like me to also format these into **publication-ready tables and figures with captions** (APA style) so you can directly paste them into your article?

Discussion

The findings confirm that structured, evidence-based teaching programmes significantly improve students' knowledge regarding alcoholic cirrhosis. Similar studies in adolescent health education report that targeted interventions with audiovisual aids and interactive sessions enhance awareness and promote preventive behavior. The results highlight the importance of integrating health education into college curricula to address lifestyle-related health risks.

Conclusion

The structured teaching programme was effective in improving students' knowledge of alcoholic cirrhosis. Preventive education should be prioritized to reduce the long-term health impact of alcohol-related diseases among youth.

Recommendations

- Incorporate regular health education sessions in academic institutions.
- Conduct community-based awareness campaigns targeting adolescents and young adults.
- Replicate the study with a larger sample and control group for generalization.

References (APA 7th Edition – Samples)

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