A Study To Assess The Effectiveness Of Structured Teaching Programme On Knowledge Regarding Risk Factors And Preventive Strategies Of Suicidal Behaviour Among Adolescents In A Selected College At Kozhikode District

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Abstract: This study was undertaken to investigate the effectiveness of a Structured Teaching Programme (STP) on knowledge regarding risk factors and preventive strategies of suicidal behaviour among adolescents. A pre-experimental one-group pre-test post-test design was employed. The study was conducted among 60 first-semester BSc Nursing students selected via convenience sampling from a college in Kozhikode. Data were collected using a structured knowledge questionnaire. The findings revealed that the mean post-test knowledge score (22.38) was significantly higher than the mean pre-test score (17.17), with a paired t-test value of 10.166 ($p<0.05$), indicating the STP's effectiveness. A significant association was found between pre-test knowledge scores and gender, but not with other socio-demographic variables. The study concluded that the structured teaching programme was effective in improving adolescents' knowledge of suicidal behaviour risk factors and prevention.

IndexTerms: Knowledge, Risk factors, Preventive strategies, Suicidal behaviour, Structured teaching programme, Adolescents

I. INTRODUCTION

Suicide is a significant global public health concern, particularly among adolescents and young adults. According to the World Health Organization (WHO), suicide is the fourth leading cause of death for individuals aged 15-29 years, highlighting an urgent need for effective prevention strategies [1]. Suicidal behaviour encompasses a range of actions and thoughts indicating a person is considering or attempting to take their own life. Late adolescence (18-21 years) is a critical developmental period characterized by emotional, social, and psychological changes, making this group highly vulnerable to mental health challenges and suicidal behaviour.

In India, the National Crime Records Bureau (NCRB) reported over 164,000 suicides in 2021, with individuals below 21 years accounting for 8% of the total [2]. The state of Kerala, and specifically Kozhikode district, has reported a concerning number of suicide cases among young people, underscoring the importance of enhancing awareness and knowledge about risk factors and prevention.

A study by Twinamastiko Alice et al. (2024) found that only 23.3% of student nurses had good knowledge about suicide prevention, indicating a significant gap [3]. Structured Teaching Programmes (STP) have been shown to be effective in improving knowledge; for instance, Preetika Ekka et al. (2024) demonstrated a significant increase in knowledge scores among adolescents

Research Methodology

The methodology section outlines the plan and methods for conducting the study, including the research approach, design, setting, population, sample, tools, and data analysis plan.

3.1 Research Approach and Design

A quantitative, pre-experimental one-group pre-test post-test design was used for this study. The design can be represented as: **Group: Pre-test (O1) → Intervention (X) → Post-test (O2)** Where O1 was the assessment of knowledge before the STP, X was the implementation of the STP, and O2 was the assessment of knowledge after the STP.

3.2 Population and Sample

The target population was students of Sree Anjaneya College of Nursing. The accessible population was first-semester BSc Nursing students. A sample of 60 students was selected using a convenience sampling technique based on inclusion criteria such as age (18-21 years) and willingness to participate.

3.3 Data and Sources of Data

Secondary data from literature and primary data collected through a structured questionnaire were used. The tool consisted of two sections:

- **Section A:** Socio-demographic data (age, gender, family type, etc.).
- **Section B:** A 25-item structured knowledge questionnaire on risk factors and preventive strategies of suicidal behaviour. Each correct response scored 1 mark, with a total possible score of 25.

Content validity was established by experts, and reliability was ensured. Ethical clearance and informed consent were obtained prior to data collection.

3.4 Theoretical Framework

The study was based on the General System Theory. The dependent variable was knowledge regarding risk factors and preventive strategies of suicidal behaviour, and the independent variable was the Structured Teaching Programme.

3.5 Statistical Tools and Econometric Models

Data were analyzed using descriptive and inferential statistics with SPSS software.

- **Descriptive statistics:** Frequency, percentage, mean, and standard deviation were used to describe demographic variables and knowledge scores.
- **Inferential statistics:** A paired t-test was used to compare pre-test and post-test knowledge scores. A chi-square test was used to find associations between pre-test knowledge scores and demographic variables. The level of significance was set at $p<0.05$.

Results and Discussion

This chapter presents the analysis and interpretation of data collected from 60 adolescents to assess the effectiveness of the STP.

4.1 Results of Descriptive Statistics of Study Variables

Table 1: Frequency and Percentage Distribution of Sample According to Age (N=60)

Age in years	Frequency	Percentage
18	28	46.66%
19	26	43.33%
20	6	10.00%
Total	**60**	**100%**

The majority of participants (46.66%) were 18 years old. Other demographic findings included: 68.33% were female, 91.66% were from nuclear families, and 56.66% were from rural areas.

Table 2: Frequency and Percentage Distribution of Knowledge Scores in Pre-test and Post-test (N=60)

Level of Knowledge	Pre-test Score		Post-test Score	
	Frequency	Percentage	Frequency	Percentage
Good (≥50%)	36	60%	50	83.33%
Poor (<50%)	24	40%	10	16.67%
Total	**60**	**100%**	**60**	**100%**

Table 2 shows that in the pre-test, 60% of adolescents had good knowledge, which increased to 83.33% in the post-test after the administration of the STP.

4.2 Assessment of Effectiveness of Structured Teaching Programme

Table 3: Mean, Standard Deviation, and Paired t-test of Pre-test and Post-test Knowledge Scores (N=60)

Group	Mean	Standard Deviation	Mean Difference	t-value	p-value
Pre-test	17.17	3.416	5.21	10.166	<0.05 (0.001)
Post-test	22.38	1.530			

Table 3 reveals that the mean post-test knowledge score (22.38) was significantly higher than the mean pre-test score (17.17). The calculated paired t-value (10.166) was greater than the table value, and the p-value was less than 0.05, leading to the rejection of the null hypothesis (H1). This confirms that the STP was effective in improving knowledge among adolescents.

4.3 Association between Pre-test Knowledge Score and Selected Demographic Variables

The chi-square test showed a significant association between pre-test knowledge score and gender (p=0.013). No significant association was found with other demographic variables such as age, type of family, area of living, birth order, monthly income, parental education, mother's occupation, or previous training.

Discussion

The findings of this study are consistent with previous research. The significant improvement in post-test knowledge scores aligns with the work of Rimsha Rashid et al. (2025) and Martha George (2024), who also found STPs to be highly effective in enhancing adolescents' knowledge of suicidal behaviour [5], [6]. The association found with gender suggests that gender-specific educational approaches may be beneficial, a nuance that warrants further investigation.

Summary

The study concluded that the structured teaching programme was an effective method for improving knowledge regarding the risk factors and preventive strategies of suicidal behaviour among adolescent nursing students. The significant increase in post-test knowledge scores demonstrates the value of structured educational interventions in promoting mental health awareness.

Conclusion

The STP was successfully implemented and found to be effective. Enhancing knowledge among adolescents is a crucial primary prevention strategy in combating the public health challenge of suicide. By equipping young individuals with the knowledge to identify risks and seek help, such programmes can play a vital role in saving lives.

Acknowledgment

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