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EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING THE SUICIDAL PREVENTION AMONG ADOLESCENTS IN SELECTED SCHOOL AT PULLICHAPALLAM

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Abstract:

Background: Suicide has become a major public health concern among adolescents, with a rising trend observed both globally and in India. It is recognized as the second leading cause of death among individuals aged 15–29 years, primarily attributed to academic pressures, family expectations, psychological distress, and the ongoing stigma surrounding mental health problems. **Aim of the Study:** The study aimed to evaluate the effectiveness of a structured teaching program in improving knowledge regarding suicide prevention among adolescents. **Methodology:** A quantitative quasi-experimental one-group pre-test and post-test design was adopted among 60 adolescents studying in a selected Government Higher Secondary School at Pullichapallam. A structured questionnaire on demographic characteristics and suicide prevention knowledge was administered before and after the intervention. Data were analysed using descriptive and inferential statistics, including paired t-test and chi-square test. **Results:** The findings revealed a significant improvement in knowledge levels regarding suicide prevention following the educational intervention. Inadequate knowledge reduced from 23% before the teaching session to 2% after the intervention, while adequate knowledge increased from 33% to 68%. Mean post-test scores were significantly higher compared to pre-test scores ($p < 0.001$). **Conclusion:** The structured teaching program was found to be highly effective in enhancing adolescents' knowledge of suicide prevention. Incorporating such school-based mental health education can help promote awareness, reduce stigma, and strengthen preventive behaviours among youth.

Keywords: Suicide prevention, Adolescents, Knowledge, Structured teaching program, Mental health education

INTRODUCTION

Suicide has become an issue of public health crisis, particularly among adolescents, where an increasing trend has been reported in the whole world, as well as in India itself. World Health Organization has defined suicide to be the second highest cause of death among the youthful population aged 15-29 years old with up to 800,000 deaths annually (1). The 2020 data released by the National Crime Records Bureau in India indicate that more than 9,000 teenagers committed suicide in India in 2020, implying the necessity to act as soon as possible to solve the problem in the underage population (2). Among the contributing factors is the pressure at school, family expectations, and mental health problems, which are usually worsened due to social stigma of mental health (3, 4).

Suicidal behavior of teenagers is a phenomenon that crosses geographical boundaries but it has its cultural specificities in various areas. In high-income countries, adolescents, who face social isolation, are more likely to have higher levels of suicidal ideation, whereas in low- and middle-income nations, such factors as poverty and the lack of mental health services play a vital role (5, 6). The pressure on academic performance by the society also contributes to mental illnesses like depression and anxiety that are considered suicidal (7, 8). Over the past several years, the awareness of mental health as a critical element of a school environment resulted in a growing demand to create educational interventions that can enhance the level of awareness and knowledge about suicidal tendencies among the vulnerable demographic (9, 10).

Organized education programs increase awareness on suicide prevention among the youth and this involves giving the teenagers the skills that will help them identify and act on suicidal thought and tendencies. Such programs have found their way within educational facilities as can be attested by numerous researches that have documented enhanced knowledge and coping skills by the participants (11, 10). Schools are one of the most strategic locations to initiate intervention since they have the ability to reach a significant number of people and provide a supportive platform to address sensitive mental health-related issues (12, 13). Interventions that focus on educator, mental health professional, and family cooperation have shown beneficial outcomes on awareness and help-seeking behavior of the students (9, 14).

In spite of the growing awareness on mental health programs, studies have shown that there is a big gap in effectively meeting the needs of adolescents in India that are unique. It lacks customized programs that are sensitive to the context of the local culture and which can be used to spread information on suicide prevention (15). The existing education systems often ignore the intricacies of suicidal ideation, such as the stigma that hampers the free discussion of mental health (16). It is so important to incorporate culturally sensitive elements into these programs in order to create the setting in which young people can find partiality and resources to seek help (12, 10).

To summarize, the problem of increasing suicide rates among teenagers requires the multidimensional approach that should include the implementation of orderly educational programs with the help of which young people will have all the necessary knowledge and skills to prevent the disease. The obvious research gaps

underline the acuity of designing the specific educational interventions, which would correspond to the Indian-specific situation. The gap in knowledge can be decreased by developing successful and culturally adequate programs that will create a resilient community of adolescents in schools and encourage mental well-being.

AIM OF THE STUDY

The study aimed to evaluate the effectiveness of structured teaching programme on knowledge regarding the suicidal prevention among adolescents in government higher secondary school at Pullichapallam.

METHODOLOGY:

Study Design and Setting

A quantitative research approach with a quasi-experimental one-group pre-test and post-test design was used. The study was conducted in a Government Higher Secondary School located in Pullichapallam.

Participants and Sampling

The target population for the study consisted of school-going adolescents. A total of 60 students between 11 and 16 years of age who met the inclusion criteria and were available during the data collection period were selected. Convenience sampling was utilized to choose the school, and all eligible participants were enrolled for the intervention. Adolescents of both genders who were able to read and write in Tamil or English were included in the study. Students who were irregular in attending classes or those who had prolonged absenteeism were excluded from participation.

Validity and Tools for Data Collection

A structured questionnaire was developed after reviewing relevant literature and obtaining guidance from nursing and psychiatric experts. The tool comprised two sections: Part I included demographic data such as age, gender, family type, place of stay, religion, family monthly income, and prior exposure to information on suicide prevention. Part II consisted of 25 multiple-choice questions related to suicide prevention, risk factors and warning signs, and strategies to prevent suicidal behaviour. Content validity was ensured through expert review and feedback.

Ethical Consideration

The purpose of the study was clearly explained to the students, and informed consent was obtained prior to data collection. Participation was voluntary, and confidentiality of individual responses was maintained throughout the research.

Data Collection Procedure

Data collection was completed over one week. A pre-test was administered to assess baseline knowledge, followed by the planned educational intervention on suicide prevention. A post-test was conducted using the same tool to measure the improvement in knowledge.

Statistical Analysis of Data

Data were analysed using descriptive and inferential statistics. Frequency and percentage were used to summarize demographic characteristics. Paired t-test was applied to assess differences between pre- and post-test knowledge scores. Chi-square test was used to determine the association between knowledge levels and selected demographic variables.

RESULTS:

Demographic variables of the participants

The study included 60 adolescents, with most aged 12–13 years (53%) and predominantly females (75%). Over half belonged to joint families (52%) and 60% lived in concrete houses. The majority were day scholars (78%) and followers of the Hindu religion (83%). More than half reported a family monthly income of ₹5,000–10,000 (52%). Only 20% had prior knowledge about suicide prevention, mainly gained through mass media and friends/relatives. A previous suicide attempt in the family was reported by 28% of participants, while 8% indicated a family history of psychiatric illness. Substance use in the family included alcohol and chewing tobacco (38% each) and smoking (24%). (Table 1)

Comparison of Pre-test and Post-test Knowledge Levels

The comparison between pre-test and post-test results shows a clear improvement in the knowledge levels of the participants after the intervention. Before the educational programme, 23% of the students demonstrated inadequate knowledge, whereas this reduced sharply to only 2% after the intervention. Moderate knowledge was observed among 44% during the pre-test, which decreased to 30% in the post-test. In contrast, the proportion of students with adequate knowledge showed a substantial rise from 33% before the intervention to 68% after the session. Overall, the findings indicate that the educational intervention was highly effective in improving the knowledge of adolescents regarding suicide prevention.. (Table 2)

Association Between Demographic Variables and Pre-test Knowledge Level

The table shows that family monthly income, source of information about suicide, and substance use in the family demonstrated a significant association with the existing level of knowledge among adolescents. All other demographic variables, including age, sex, type of family, place of accommodation, religion, prior awareness of suicide prevention, family history of suicide attempt, and psychiatric illness, showed no significant association with their pre-test knowledge level. (Table 3)

Table 1: Demographic Characteristics of Study Participants (N = 60)

S. No	Demographic Variables	Category Options	Frequency (n)	Percentage (%)
1	Age in years	a) 12–13 years	32	53
		b) 14–15 years	27	45
		c) 16–17 years	1	2
2	Sex	a) Male	15	25
		b) Female	45	75
3	Type of Family	a) Nuclear family	29	48
		b) Joint family	31	52
4	Type of House	a) Hut	21	35
		b) Concrete	36	60
		c) Cottage	2	3
		d) Farm house	1	2
5	Place of Accommodation	a) Hostel	13	22
		b) Day scholar	47	78
6	Religion	a) Hindu	50	83
		b) Christian	10	17
		c) Muslim	0	0
		d) Others	0	0
7	Family Monthly Income	a) Below ₹5,000	22	37
		b) ₹5,000–10,000	31	52
		c) Above ₹10,001	7	11
8	Prior Awareness of Suicide Prevention	a) Yes	12	20
		b) No	48	80
9	Source of Information on Suicide	a) Not heard	3	5
		b) Mass media	20	50
		c) Health professionals	2	3
		d) Friends and relatives	25	42
10	Previous History of Suicide Attempt in Family	a) Yes	17	28
		b) No	43	72
11	Psychiatric Condition in Family	a) Yes	5	8
		b) No	55	92

12	Substance Use in Family	a) Smoking	14	24
		b) Alcohol	23	38
		c) Chewing tobacco	23	38

Table 2: Comparison of Pre-test and Post-test Knowledge Levels in the Experimental Group (N = 60)

S. No	Knowledge Level	Pre-test (n)	Pre-test (%)	Post-test (n)	Post-test (%)
1	Inadequate knowledge	22	23	1	2
2	Moderate knowledge	14	44	18	30
3	Adequate knowledge	24	33	41	68

Table:3 Association Between Demographic Variables and Pre-test Knowledge Level. (N = 60).

S. No	Demographic Variables	Inadequate Knowledge (%)	Moderate Knowledge (%)	Adequate Knowledge (%)	Statistical Result
1	Age in years				$\chi^2 = 3.63$ / p = 0.05 / NS
	a) 12–13 years	0	28	72	
	b) 14–15 years	4	30	66	
	c) 16–17 years	0	100	0	
2	Sex				$\chi^2 = 2.82$ / p = 0.05 / NS
	a) Male	0	47	53	
	b) Female	2	24	74	
3	Type of family				$\chi^2 = 2.99$ / p = 0.05 / NS
	a) Nuclear family	3	38	59	
	b) Joint family	0	23	77	
4	Place of accommodation				$\chi^2 = 0.69$ / p = 0.05 / NS
	a) Hostel	0	23	77	
	b) Day scholar	2	32	66	
5	Religion				$\chi^2 = 0.002$ / p = 0.05 / NS
	a) Hindu	2	30	68	
	b) Christian	0	30	70	
	c) Muslim	0	0	0	
	d) Others	0	0	0	

6	Family Monthly Income				$\chi^2 = 12.00$ / p = 0.05 / S
	a) Below ₹5,000	0	41	59	
	b) ₹5,000–10,000	3	19	78	
	c) Above ₹10,001	0	43	57	
7	Heard about suicide prevention				$\chi^2 = 0.14$ / p = 0.05 / NS
	a) Yes	0	50	50	
	b) No	2	25	73	
8	Source of information				$\chi^2 = 12.01$ / p = 0.05 / S
	a) Not heard	0	100	0	
	b) Mass media	3	30	67	
	c) Health professionals	0	50	50	
	d) Friends and relatives	0	20	80	
9	Family history of suicide attempt				$\chi^2 = 0.61$ / p = 0.05 / NS
	a) Yes	0	35	65	
	b) No	2	28	70	
10	Psychiatric illness in family				$\chi^2 = 0.35$ / p = 0.05 / NS
	a) Yes	0	20	80	
	b) No	2	31	67	
11	Substance use in family				$\chi^2 = 15.85$ / p = 0.05 / S
	a) Smoking	0	21	79	
	b) Alcohol	0	26	74	
	c) Chewing tobacco	4	39	57	

DISCUSSION:

The results of the study indicate a robust improvement in knowledge regarding suicide prevention among adolescents post-intervention. Initially, 23% of participants displayed inadequate knowledge before the educational program; however, this figure dramatically decreased to only 2% following the intervention. Concurrently, the proportion of participants classified with adequate knowledge increased from 33% in the pre-test to 68% in the post-test. These findings underscore the effectiveness of educational interventions in enhancing adolescent understanding of critical health issues such as suicide prevention, aligning with established literature that supports the efficacy of educational programs in various health promotion contexts. Numerous studies have documented similar patterns of improvement in knowledge following educational interventions in distinct health-related areas. For instance, Radi and Fares conducted an educational program for nurses on pregnancy-induced hypertension, revealing substantial knowledge gaps (64% poor knowledge at pre-test), which notably improved to 88% post-intervention (17). This reflects the consistent findings across different demographics that knowledge can be significantly enhanced through structured educational initiatives.

In a different context, Hossain et al. observed that female adolescents in Bangladesh demonstrated enhanced understanding of reproductive health correlating with educational interventions, emphasizing that educational approaches tailored to adolescents yield measurable improvements in health-related knowledge (18). The statistically significant association found between pre-test knowledge levels and certain demographic factors, including family income, information source, and family substance use, adds a critical layer to understanding the context of knowledge acquisition. Ilesanmi highlighted that socio-demographic factors significantly influence students' knowledge and perceptions toward health issues, confirming our findings (19). For example, their study indicated that socio-demographic characteristics collectively impacted adolescents' knowledge about asthma, suggesting that family background and education significantly shape young people's health literacy. Similarly, Alreshidi et al. found a noteworthy link between nurses' socio-demographic characteristics and their knowledge about preventing ventilator-associated pneumonia, reaffirming that demographic influences are pivotal in one's understanding and attitudes toward health issues (20).

Moreover, evidence from Kumkronglek et al. demonstrates how life skills enhancement programs can effectively curb risky behaviors, showcasing the broader applicability of educational interventions across various health domains (21). The programs not only improve knowledge but also instill life skills that facilitate better health outcomes among adolescents, crucial in the context of sensitive topics like substance use and mental health. As the educational initiatives revolve around better equipping youth with knowledge concerning suicide prevention, their impacts can be positioned within a framework that recognizes the intertwined relationship of education, socio-economic factors, and personal experiences (e.g., family substance use). This relationship indicates that knowledge enhancement depends not only on the intervention but is also strongly influenced by individual and contextual factors, as highlighted by Narasimhaiah and Moorthy. (22).

CONCLUSION:

The study concluded that educational interventions are highly effective in significantly improving adolescents' knowledge regarding suicide prevention. The marked reduction in inadequate knowledge levels and substantial increase in adequate knowledge following the intervention demonstrate the positive impact of structured learning strategies. Additionally, the study concluded that demographic factors such as family income, source of information, and family substance use play a significant role in shaping adolescents' knowledge acquisition.

LIMITATIONS OF THIS STUDY

The study was constrained by a small sample size and a limited geographic area, reducing the generalizability of the findings. Self-reported responses may have introduced bias, and the absence of long-term follow-up prevented evaluation of sustained knowledge retention among adolescents.

RECOMMENDATIONS

Future studies should include larger, more diverse samples across multiple settings, along with follow-up assessments to determine long-term effectiveness. Integrating psychological support and contextual factors into educational programs is recommended to enhance overall outcomes in adolescent suicide prevention.

CONFLICT OF INTEREST:

No

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No

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