

A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding the Prevention of Suicidal Behavior among Adolescents of Selected Pre-University College Students at Tumkur, Karnataka

NANDAGAON VEERESH S, M.SC.(N)

Lecturer, Department of Mental Health Nursing, KLE University's Institute of Nursing Sciences, Nehru Nagar, Belgaum - 590010, Karnataka.

Abstract

Adolescent age group is a very susceptible age group. These children are in phase of transition and undergo a lot of physical, social, hormonal, psychological and behavioral changes. Suicide is third leading cause of death among teenagers and young adults in their early twenties. The present study aimed to assess the knowledge of adolescents regarding prevention of suicidal behavior by evaluating the effectiveness of Structured Teaching Programme (STP) and to find out the association between the existing knowledge scores of adolescents and selected socio demographical variables i.e. age, gender, religion, type of family, educational status of parents, family income, and source of knowledge.

The research approach used for this study was evaluative approach with pre-experimental one group pre-test post-test design. Non probability convenient sampling technique was adopted for the study. The sample consisted of 60 adolescent students studying at Shri Devi pre-university college of Tumkur, Karnataka. The structured knowledge questionnaire was used to assess the knowledge which consisted of 8 items on baseline information and 40 structured knowledge questionnaire on suicide. The data were analyzed by descriptive and inferential

statistics. The results showed that the overall mean pre-test knowledge score was 19.3 and standard deviation 2.43, whereas mean post-test knowledge score was 30.1 and standard deviation 3.79 with difference of mean and standard deviation 10.9 and 1.36 respectively. Calculated paired 't' value ($t_{25.91}$) was greater than tabulated value ($t_{1.960}$). This indicated that the gain in knowledge score was statistically significant at $P < 0.05$ levels. The investigator concluded that the structured teaching programme in the present study was effective in providing the knowledge regarding prevention of suicidal behavior among adolescents. Suicide prevention programmes should be applied to the 'at risk' population prior to a suicide attempt.

Keywords: Effectiveness, Suicidal Behavior, Adolescents, Structured Teaching Programme, Pre-university Colleges.

Introduction

Adolescents suffer with a feeling of loss, for the childhood they leave behind and undergo a period of adjustment to their new adult identity. Faced with these feelings and lacking effective coping mechanisms, adolescents can become over whelmed and turn to escapist measures such as drugs, withdrawal and ultimately suicide^[1]. According to the World Health Organization annual estimates, approximately one million people die from suicide and every 10 to 20 minutes more people attempt to suicide worldwide. This

Corresponding author: Nandagaon Veeresh S, M.Sc.(N), Lecturer, Department of Mental Health Nursing, KLE University's Institute of Nursing Sciences, Nehru Nagar, Belgaum - 590010, Karnataka.

E-mail: veereshnandagaon@yahoo.co.in

represents one death for every 40 seconds and one attempt for every 3 seconds on average [2].

Asetiline, James and Schilling (2007) studied that suicide is a leading cause of death in children and youth in the United States. This study examined the effectiveness of the Signs of the Suicide (SOS) prevention program in reducing suicidal behavior. 4133 students in high schools in Columbus, Georgia, western Massachusetts, and Hartford, Connecticut were randomly assigned to intervention and control groups during the 2001-02 and 2002-03 school years. Self-administered questionnaires were completed by students in both groups approximately 3 months after program implementation. Significantly lower rates of suicide attempts and great knowledge and more adaptive attitudes about depression and suicide were observed among students in the intervention group. Student's race/ethnicity, grade, and gender did not alter the impact of the intervention on any of the outcomes assessed in this analysis. SOS continues to be the only universal school-based suicide prevention program to demonstrate significant effect of self-reported suicide attempts in a study utilizing a randomized experimental design. Moreover, the beneficial effects of the SOS were observed among high school aged youth from diverse racial/ethnic backgrounds, highlighting the programs utility as a universal prevention program [3].

Suicide is only preventable, once committed it is no longer treatable. College students are vulnerable group attempting suicide. Adolescents should be educated in the Pre-University College regarding suicide prevention. Teachers have a very important role to help the students in their emotional problems and suicide prevention.

Many preventive measures can be taken for prevention of suicidal behavior among adolescents. Amongst them, educational programs are more effective. In the present study the investigator used the structured teaching programme to improve the adolescents' knowledge regarding preventions of suicide.

There are very few studies done on fatal suicidal behaviors in adolescents in India, and there is a great need to conduct such research in this important area. So the researcher selected this particular topic for the study. The present study aimed to assess the knowledge of adolescents regarding prevention of suicidal behavior by evaluating the effectiveness of structured teaching programme (STP) and to find out the association between the existing knowledge scores of adolescents and selected socio-demographical variables i.e. age, gender, religion, type of family, educational status of mother, educational status of father, family income, source of knowledge.

Methodology

The research approach used for this study was evaluative approach with pre experimental one group pre-test post-test design. The independent variable was structured teaching program and the dependent variable was knowledge of adolescents regarding prevention of suicidal behavior. Non probability convenient sampling technique was adopted for the study. The sample consisted of 60 adolescent students studying in selected pre-university college of Tumkur. The setting of the study was Shri Devi Pre-University College, Tumkur.

To assess the knowledge on prevention of suicidal behavior, a structured knowledge questionnaire was used. The first part of the questionnaire consisted of 8 items on baseline information of the subjects i.e. age, gender, religion, educational status of mother, educational status of father, type of family, family income, source of knowledge and the second part consisted of 40 items divided in 5 areas such as definition and terminologies, incidence and prevalence, etiology and risk factors, plans and methods and prevention and management of suicide.

The 40 questions were multiple choice questions and for each correct answer score given was 1 and 0 score was given for wrong answer. The score ranged from minimum of 0

to a maximum of 40. The level of knowledge scores were interpreted as per the following:

Good Knowledge: Score from 31-40 (75- 100%)

Average Knowledge: Score from 21-30 (50-75%)

Poor Knowledge: Score from 0-20 (0-50%)

Experts in the field of Mental Health Nursing gave the content validity of tool and tool was tested for reliability on 10 PUC students during pilot study by using split half method and by applying Karl Pearson's correlation coefficient formula. Correlation coefficient (r) was found to be 0.79. On the first day pre- test was conducted, on the third day structured teaching program was administered to the PUC students and on the seventh day post- test was administered.

The investigator took the formal permission from the principal of Shri Devi Pre- University College Tumkur to collect the data. The investigator introduced himself, explained the purpose of the study and the verbal consent was obtained from the subjects. The pre-test included assessment of subject's knowledge through structured knowledge questionnaire., The time given to answer the question was 40 minutes. The structured teaching programme was administered on the third day after the pre-test. The post-test was carried out on the 7th day by using the same tool.

The data obtained were analyzed in the terms of the objectives of the study using descriptive and inferential statistics. The data analysis was done by organizing data on master data sheet and using descriptive and inferential statistics.

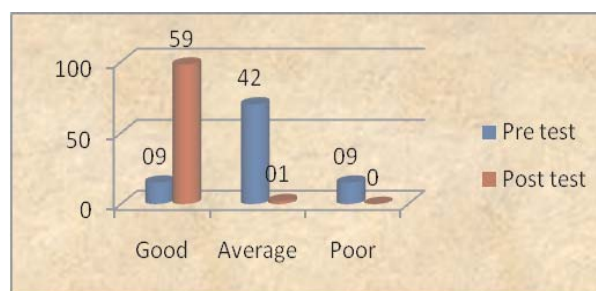
Results

Findings related to socio-demographic variables

- Majority of the subjects, that is, 27 (45%) belonged to age group 18-19 years and 17-18 years.

- In terms of gender, 35(58%) subjects were males where as 25 (42%) were the females.
- Majority of the subjects, that is,45 (75%) belonged to Hindu religion and 3 (5%) belonged to Christian religion.
- 40(67%) subjects belonged to nuclear family.
- 28 (47%) subjects had their family income between Rs. 5000 to 10000 per year, where as 15 (25%) had below Rs. 50000.
- In 35 (58%) subjects, news papers, journals, magazines were the source of knowledge related to suicide prevention and the health personnel were the sources of knowledge for 3(5%) subjects only.

Figure 1 : Distribution of knowledge of PUC students during pre-test and post-test



Findings on knowledge of adolescents on prevention of suicidal behaviour

The major findings of the study showed that during the pre test 09 (15%) of the subjects had good knowledge regarding prevention of suicidal behavior, 42(70%) of the subjects had average knowledge and 09 (15%) of the subjects had poor knowledge regarding prevention of suicidal behavior. After the introduction of the STP, in the post test there was significant increase in the knowledge scores. Out of 60adolescents, 59 (98%) were found to have good knowledge and 01 (02%) had average knowledge related to prevention of suicidal behavior. This showed that the STP was an effective method to improve the knowledge of adolescents regarding prevention of suicidal behavior.

Findings related to evaluation of effectiveness of STP

Overall mean pre-test knowledge score was 19.3 with standard deviation of 2.43, whereas mean post-test knowledge score was 30.1 with standard deviation 3.79. The difference of mean and standard deviation was 10.9 and 1.36 respectively.

Calculated paired 't' value ($t=25.91$) was greater than tabulated value ($t=1.960$). This indicated that the gain in knowledge score was statistically significant at $P < 0.05$ levels. Therefore, the structured teaching programme on prevention of suicidal behavior was found to be effective in improving in the knowledge of adolescents regarding suicide prevention.

Findings related to the association between pre-test knowledge scores and selected socio-demographic variables

In the present study it was found that there was no association between the socio-demographic variables (age, gender, religion, educational status of parents, type of family, family income, source of knowledge) and pre-test knowledge scores of adolescents as the chi-square calculated value was found to be less than the tabulated value in all cases.

Discussion

The study was experimental in nature which was carried out in Shri Devi Pre-University College. The data was analyzed by descriptive and inferential statistics. The mean post test scores of knowledge were more than pretest scores. Hence the study proved that the structured teaching program was effective in providing the knowledge regarding prevention of suicidal behavior among adolescents.

The findings of the study were supported by the some of the similar studies conducted by Jena and Siddhartha (2004) who investigated the suicidal behavior among adolescents. Suicidal behaviors were thought to be specific

suicidal plan and suicide attempt. In this study, the researchers felt the need that professionals like general practitioners, school and college teachers should be trained in identifying and preventing suicidal behaviors in adolescents^[4].

In another study the efficacy of a school based prevention programme for reducing suicide potential among high risk youth was tested. A sample of 105 youth at suicide risk participated in a three group, repeated measures and intervention study. All groups showed decreased suicidal risk behaviors, depression, hopelessness, stress and anger; all groups also reported increased self-esteem and network social support. Increased personal control was observed only in the experimental groups and not in the assessment only control group. The potential efficacy of the experimental school based prevention programme was demonstrated^[5]. The present study also points towards the effectiveness of teaching programmes in enhancing the knowledge of adolescents regarding suicide prevention.

Psycho-educational programs are among the most commonly applied suicide prevention approaches for young people, a fact substantiated by the present study, as well as another study which examined the effectiveness of these programs in a controlled study by assessing the effect on knowledge, attitudes, coping and hopelessness. 14 to 18-year-old students were administered structured questionnaires before and after the program to assess the effect on knowledge, attitudes, coping and hopelessness. The program had no effect on coping styles and levels of hopelessness. However, a positive effect on knowledge could be identified and an interaction effect of the program with gender on attitudes was also found. A negative impact of the program could not be found. The findings from this study suggested that the psycho-educational programs in schools may influence knowledge about suicide and attitudes towards suicidal persons but may not affect the use of coping styles or levels of hopelessness^[6].

Interpretation and conclusion

The study showed that the most of the adolescents had average knowledge on prevention of suicidal behavior before the administration of STP. However, the knowledge improved a great deal after the administration of the STP. The present study enabled the students to become aware about preventive measures for suicidal behavior and motivated them to take care of them and prevent incidence of suicides in society by educating their friends and their neighbors as well.

Nurse educators have an ample opportunity to educate adolescents and youth regarding prevention of suicides. The community psychiatric nurse needs to enhance their knowledge on identification and avoidance of risk factors among the adolescents. Considering that suicide is leading causes of death among adolescents in India, further education related to prevention of suicidal behavior, coping mechanisms to overcome the stressful events for nursing students is required at Diploma, Graduate and Post-graduate level. The findings of the study and the STP can be used as reference materials for student nurses.

The nursing administrator should take an initiative in making health policy and developing protocols in providing education to the patients during hospital visits and involve patients in the promotion of their healthy habits and improvement of coping skills during stressful events. Thus, the findings

of the study have implications for nursing education, practice and research.

The study proved that the structured teaching program was effective in providing the knowledge regarding prevention of suicidal behavior among adolescents and hence this tool can be used very often as an effective teaching and educational method.

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