

A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Risk Factors and Preventive Measures for Suicidal Behavior among the Adolescents Studying in Selected Higher Secondary College, Maharashtra

Sonali Pandurang Satpute

Abstract: ***Background:** Suicidal behavior has existed throughout human history, but due to several complex factors, it has increased gradually in all parts of the world and, in the past few decades, has reached alarming statistical levels. **Aim:** This study was conducted to assess the effectiveness of planned teaching programme on knowledge regarding risk factors and preventive measures for suicidal behavior. **Methodology:** Present study had been done by using one group pre - test and post - test design with 60 samples selected by non - probability purposive sampling technique. **Results:** The result shows pre - test mean score is 13.41 ± 2.64 which is 31.92% and post - test mean score is 17.58 ± 3.08 which is 73.25% with a difference of 41.33%. The paired 't' test value is 7.35 which is significantly higher than the table value of 2.0009 at $p \leq 0.05$ level. **Conclusion:** Thus the planned teaching programme is effective in improving the knowledge regarding Risk factors and Preventive measures for Suicidal Behavior among Adolescents.*

Keywords: assess, effectiveness, planned teaching programme, risk factors, preventive measures, suicidal behavior

1. Introduction

Suicide in ancient time has largely been influenced by sacrificial motives, for the sake of honor, religious, and sociocultural beliefs apart from psychiatric and other causes. Ramayana and Mahabharata are epics of India and down centuries they have influenced the thoughts, temper, conduct, and culture of our people.

Suicidal behavior has existed throughout human history, but due to several complex factors, it has increased gradually in all parts of the world and, in the past few decades, has reached alarming statistical levels. According to the WHO, more than 800, 000 people die by suicide a year, making it the principal cause of death among people 15 - 29 years old. An annual global age - standardized suicide rate of 11.4 per 100 000 population in which 15.0 are males and 8.0 are females.¹

It is a time - proven fact that all the living organisms on this earth fight for survival and existence. The tragedy of self - inflicted death has always attracted the attention of the medical as well as the legal fraternity. People who have committed suicide or have been thinking about committing suicide probably feel overwhelmed by their problems. They might not be able to handle that kind of pressure and feel that death would be the only way to escape it.

Adolescents and their friends or family may be worried or embarrassed about the idea of having a mental disorder. As the nation's largest group of healthcare providers, nurses are in a unique position to make an impact on adolescent's depression and suicide. Nurses are trained in assessment and provide support and education to patients, families, the public, and schools to promote protective ways of a solution on depression, as well as recognize depression. School nurses have a great opportunity to advocate for and ensure

strict policies that address crisis intervention for evaluation and treatment by providing education about adolescent's depression and suicidal behavior, by discussing with teachers and counselors, and support students and parents. Nurses in any setting interact with adolescents and families, and can actively screen and offer help.²

This planned teaching programme regarding risk factors and preventive measures of suicidal behavior among adolescents create awareness related to suicide which helps to minimize this suicidal behavior and suicidal attempt.

2. Review of Literature

A comparative study was conducted on adolescents with suicidal ideation: health care use and functioning in September 2011. The objective of the study was to improve our understanding of the clinical needs among youth with suicidal ideation (SI), the investigator examined health care utilization patterns, functional impairment, and comorbidity among youth who endorsed SI and compared with a control group of youth without SI with 99 samples. The result of this study shown youth with SI had a significantly higher mean functional impairment compared with youth without SI, both at baseline 84% vs 60% "definitely impaired" and 6 - month follow - up 57% vs 39% "definitely impaired". This study suggests that better screening, recognition, and treatment of SI is needed to address the clinical impairment of youth with SI.³

A survey study was conducted on is parenting style a predictor of suicide attempts in a representative sample of adolescents in 2014 at Germany. The objective of the study was to clarify the role of parenting behavior and styles in adolescent's suicide attempts and to identify relevant risk and protective factors for suicide attempts. A representative written survey of sample 44, 610 students in the 9th std of

different schools. The final result of this study was 3 parental variables showed a relevant association in suicide attempts adolescents. In the full model, Authoritative parenting and Rejecting - Neglecting parenting were identified as significant predictors $p < .001$ for suicidal attempts.⁴

An exploratory study was conducted on mental health and suicidal behavior among graduate students in October 2014. The objective of this study was to describe the mental health and service utilization of graduate students at a large southeastern university and identify psychological factors associated with their student suicidal behavior. The sample was 301 and used the questionnaire included the Patient Health Questionnaire (PHQ). The final result of this study was 7.3 % of the sample reported thoughts of suicide, 2.3 % reported having plans for suicide, and 1.7 % had hurt themselves in the past 2 weeks; while 9.9 % had ever made a suicide attempt in their lifetime. It shows that there is association of psychological factors with their student suicidal behavior.⁵

A 10 - year retrospective study of suicide in Sikkim, India for Sociodemographic profile and risk assessment from 2006 to 2015. The present study had been undertaken to investigate the sociodemographic profile of individuals who had committed suicide in Sikkim. Data was collected through ten years of suicide records from Police Headquarters. Which is statistically evaluated to study the socio-demographic profile. The results showed that out of 1604 suicide cases recorded for the past 10 years, 1051 were males 65.5% and 553, 34.5% were females. Rai community 15.8% population of rural areas 82.6%, and among the population of eastern districts 50.6%. Hanging 94.8% was found to be the most common method adopted for suicide.⁶

A cohort study was conducted in January 2015 on the Evaluation and disposition of Medicaid - insured children and adolescents with suicide attempts. The objective of this study was to provide guidelines and quality of care measures for the evaluation of adolescent suicidal behavior. The sample was 929 episodes of suicidal behavior evaluated in an acute setting, rural - residing youth were less likely to be admitted to a psychiatric hospital. The result was the female subjects were less likely to be admitted to a psychiatric hospital 95% CI 0.41 - 0.74 and more likely to be discharged home 95% CI 1.01 - 2.04. Only 40% of those discharged to home had documentation of discharge instructions with both follow - up provider and date.⁷

School - based suicide prevention programmes: the SEYLE cluster - randomised, controlled trial in 2014. The aim to investigate the efficacy of school - based preventive interventions of suicidal behaviors. Randomly selected 11110 adolescent pupils from 168 schools. In this study questionnaire and informational module with Youth Aware of Mental Health Programme (YAM) used. At the 12 month follow - up, YAM was associated with a significant reduction of incident suicide attempts [OR] 0.45, 95% CI 0.24-0.85; $p=0.014$ and severe suicidal ideation 0.50, 0.27-0.92; $p=0.025$, compared with the control group. No participants completed suicide during the study period.⁸

Problem statement

A study to assess the effectiveness of planned teaching programme on knowledge regarding risk factors and preventive measures for suicidal behavior among the adolescents studying in selected higher secondary college, maharashtra.

Objectives of the study:

- To assess the levels of knowledge regarding risk factors and preventive measures for suicidal behavior among the adolescents.
- To evaluate the effectiveness of planned teaching programme on knowledge regarding risk factors and preventive measures for suicidal behavior among adolescents.
- To find significant association between the pre - test knowledge score with selected socio - demographic variables.

Hypothesis

H₀: There is no significant difference between pre - test knowledge scores and post - test knowledge scores regarding risk factors and preventive measures of suicidal behavior among adolescents.

H₁: There is significant difference between pre - test knowledge scores and post - test knowledge scores regarding risk factors and preventive measures of suicidal behavior among adolescents.

H₂: There is significant association between pre - test knowledge scores with selected socio - demographic variables of adolescents.

3. Methodology

- **Research Approach:** Quantitative approach
- **Research Design:** Pre - experimental one group pre - test post - test design
- **Research Setting:** A selected higher secondary college, Maharashtra.
- **Sample:** Adolescents at selected higher secondary college.
- **Sample Size and Sampling Technique:** 60 Samples selected by purposive sampling technique.

4. Result

Distribution of respondents based on the socio - demographic variables, n = 60

Sr. No.	Socio - demographic variables	N	%
1	Age in year		
	16 - 17	39	65%
	18 - 19	21	35%
		60	100%
2	Gender		
	Male	24	40%
	Female	36	60%
		60	100%
3	Type of family		
	Joint	23	38.33%
	Nuclear	37	61.66%
		60	100%
4	Area of residence		

Sr. No.	Socio - demographic variables	N	%
	With own family	34	56.66%
	With other's family	14	23.33%
	In hostel	12	20%
	Living alone	0	0%
		60	100%
5	History of suicide or suicidal attempt in your family		
	Yes	4	6.66%
	No	56	93.33%
		60	100%
6	History of mental illness in your family		
	Yes	8	13.33%
	No	52	86.66%
		60	100%
7	History of substance abuse in your family		
	Yes	25	41.66%
	No	35	58.33%
		60	100%
8	Source of information regarding risk factors and preventive measures for suicidal behavior		
	TV/Radio	21	35%
	Newspaper/Magazines/Books/Journals	32	53.33%
	Parents/Relatives/Friends/Neighbors	2	3.33%
	Information from health personnel	5	8.33%
		60	100%

It shows that 39 (65%) samples are in the age group of 16 – 17 years and 21 (35%) are in the 18 – 19 years. Pertaining to the gender 24 (40%) are males and 36 (60%) are females. Concerning the type of family 23 (38.33%) are from a joint family and 37 (61.66%) are from a nuclear family. Related to an area of residence 34 (56.66%) are residing with their own family, 14 (23.33%) are residing with other’s family, 12 (20%) are residing in a hostel and no one is living alone. As

per the history aspect first is history of suicide or suicidal attempt in family there is 4 (6.66%) yes and 56 (93.33%) no, second is history of mental illness in family for that 8 (13.33%) yes and 52 (86.66%) no and third is history of substance abuse in family 25 (41.66%) yes and 35 (58.33%) no. Related to source of information regarding risk factors and preventive measures for suicidal behavior for that 21 (35%) are TV/Radio, 32 (53.33%) are Newspaper/Magazines/ Books/ Journals, 2 (3.33%) are Parents/Relatives/ Friends/ Neighbors and 5 (8.33%) is Information from health personnel.

Mean percentage difference of pre - test and post – test, n = 60

Sr. No.	Knowledge	Maximum score	Mean	SD	Mean %	Difference in Mean %
1.	Pre - test	24	13.41	2.64	55.87	17.38
2.	Post - test	24	17.58	3.08	73.25	

The pre - test mean score is 13.41±2.64 which is 31.92% and post - test mean score is 17.58±3.08 which is 73.25% with a difference of 41.33%.

Table of paired ‘t’ test value of effectiveness of planned teaching programme, n = 60

Knowledge	Mean	S. D.	Calculated ‘t’ Value	df	Table ‘t’ value
Pre - test	13.41	2.64	7.35	59	2.0009
Post - test	17.58	3.08			

Significant at p≤ 0.05 level

The paired ‘t’ test value is 7.35 which is significantly higher than the table value of 2.0009 at p≤0.05 level. Thus the planned teaching programme is effective in improving the knowledge regarding Risk factors and Preventive measures for Suicidal Behavior among Adolescents.

Association table of socio - demographic variables with pre – test, n = 60

Sr. No.	Socio - demographic variables	N	%	Pre - test level of knowledge		χ ² value
				≤ 14	> 14	
1	Age in year					χ ² =3.43, df=1, p ≥0.05, NS.
	16 – 17	39	65	28	11	
	18 – 19	21	35	10	11	
2	Gender					χ ² =2.33, df=1, p ≥0.05, NS.
	Male	24	40	18	6	
	Female	36	60	20	16	
3	Type of family					χ ² =0.62, df=1, p ≥0.05, NS.
	Joint	23	38.33	16	7	
	Nuclear	37	61.66	22	15	
4	Area of residence					χ ² =10.69, df=3, p ≤0.05, S.
	With own family	34	56.66	22	10	
	With other's family	14	23.33	12	2	
	In hostel	12	20	4	10	
	Living alone	0	0	0	0	
5	History of suicide or suicidal attempt in your family					χ ² =0.3, df=1, p ≥0.05, NS.
	Yes	4	6.66	3	1	
	No	56	93.33	35	21	
6	History of mental illness in your family					χ ² =0.003, df=1, p ≥0.05, NS.
	Yes	8	13.33	5	3	
	No	52	86.66	33	19	
7	History of substance abuse in your family					χ ² =0.19, df=1, p ≥0.05, NS.
	Yes	25	41.66	15	10	
	No	35	58.33	23	12	
8	Source of information regarding risk factors and preventive measures for suicidal behavior					χ ² =2.15, df=3, p ≥0.05, NS.
	TV/Radio	21	35	12	10	
	Newspaper/Magazines/Books/Journals	32	53.33	21	10	

Sr. No.	Socio - demographic variables	N	%	Pre - test level of knowledge		χ^2 value
				≤ 14	> 14	
	Parents/Relatives/Friends/Neighbors	2	3.33	2	0	
	Information from health personnel	5	8.33	3	2	

Significant at $p \leq 0.05$ level, NS – No significant, S – Significant.

There is no significant association found between the knowledge regarding Risk factors and Preventive measures of Suicidal Behavior among adolescents with their age, gender, type of family, history of suicide or suicidal attempt, history of mental illness, history of substance abuse and source of information but there is significant association with area of residence at $p \leq 0.05$ level.

5. Discussion

To evaluate effectiveness of planned teaching programme pre - test and post - test was taken by using same structured knowledge questionnaire of risk factors and preventive measures for suicidal behavior, which shows result that was 23 (38.33%) adolescents have good knowledge, 32 (53.33%) adolescents have average knowledge and 5 (8.33%) adolescents have poor knowledge regarding Risk factors and Preventive measures of Suicidal behavior.

To find the effectiveness of planned teaching programme compared pre - test score with post - test score which shows result that the mean score during pre - test is 13.41 ± 2.64 , and the mean score during post - test is 17.58 ± 3.08 . The paired 't' test value is 7.35 which is significantly higher than the table value of 2.0009 at $p \leq 0.05$ level.

Which shows that,

A supporting pre - experimental study to assess the effectiveness of structured teaching programme on the preventive measures of suicidal ideation among the adolescents in selected higher secondary schools of mehsana district. In which objective was to assess the effectiveness of structured teaching programme regarding preventive measures of suicidal ideation among the adolescents and association of Pretest knowledge with their selected socio - demographic variable. The sample size was 100 which is taken by Non - Probability Convenient sampling technique. For this study self structured questionnaire were used for data collection which given result as the calculated 't' value (42.64) was greater than the table value (1.98) at 0.05 level of significance. The investigator concluded that the structured teaching programme was effective on the adolescents.

6. Conclusion

The study was conducted to assess the Effectiveness of Planned Teaching Programme on knowledge regarding Risk factors and Preventive measures for Suicidal Behavior among Adolescents in a selected higher secondary college, Maharashtra. The study findings showed that the planned teaching programme was effective in improving their knowledge. There was no significant association found between the knowledge of adolescents regarding Risk factors and Preventive measures for Suicidal Behavior and their selected socio - demographic variables except area of

residence. This study intervention would help the adolescent to run healthy life without any distress, reduce the risk of suicidal behavior and also encourage them also to help those who have suicidal risk in the public or among friends.

References

- [1] Trimboli A. world mental health day. World Federation for Mental Health. [Internet].2019 [cited 5 February 2020]. Available from: URL: <https://wfmh.global/world-mental-health-day-2019/>
- [2] Mukhopadhyay A. Fair observer. [Internet].2019 [cited 5 February 2020]. Available from: URL: https://www.fairobserver.com/region/central_south_asia/india-student-suicides-mental-health-south-asia-news-75495/
- [3] McCarty C, Russo J, Grossman D, Katon W, Rockhill C, McCauley E et al. Adolescents With Suicidal Ideation: Health Care Use and Functioning. *Academic Pediatrics*. [Internet].2011 [cited 5 February 2020]; 11 (5): 422 - 426.
- [4] Donath C, Graessel E, Baier D, Bleich S, Hillemacher T. Is parenting style a predictor of suicide attempts in a representative sample of adolescents? *BMC Pediatrics*. [Internet].2014 [cited 5 February 2020]; 14 (1).
- [5] Garcia - Williams A, Moffitt L, Kaslow N. Mental Health and Suicidal Behavior Among Graduate Students. *Academic Psychiatry*. [Internet].2014 [cited 5 February 2020]; 38 (5): 554 - 560.
- [6] Singh B, Chettri R, Gurung J. A 10 - year retrospective study of suicide in Sikkim, India: Sociodemographic profile and risk assessment. *Indian Journal of Psychiatry*. [Internet].2016 [cited 5 February 2020]; 58 (4): 448. Available from: URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5270272/>
- [7] Williams C, Cooper W, Balmer L, Dudley J, Gideon P, DeRanieri M et al. Evaluation and Disposition of Medicaid - Insured Children and Adolescents With Suicide Attempts. *Academic Pediatrics*. [Internet].2015 [cited 5 February 2020]; 15 (1): 36 - 40.
- [8] Wasserman D, Hoven C, Wasserman C, Wall M, Eisenberg R, Hadlaczky G et al. School - based suicide prevention programmes: the SEYLE cluster - randomised, controlled trial. *The Lancet*. [Internet].2015 [cited 5 February 2020]; 385 (9977): 1536 - 1544.