

A Study to Assess the Effectiveness of Structure Teaching Programme on Knowledge Regarding Risk Factors and Prevention of Suicidal Behavior Among Girls and Boys in Selected College Bilaspur, Chhattisgarh

Preetika Ekka^{1*}, Vartika Gouraha², Kundan Khalkho³, Shibi Santhosh Nair⁴

¹M.Sc. Nursing Final Year, Department of Mental Health Nursing, Government College of Nursing, Bilaspur, Chhattisgarh, India ²Associate Professor, Department of Mental Health Nursing, Government College of Nursing, Bilaspur, Chhattisgarh, India ³Assistant Professor, Department of Mental Health Nursing, Government College of Nursing, Bilaspur, Chhattisgarh, India ⁴Demonstrator, Department of Mental Health Nursing, Government College of Nursing, Bilaspur, Chhattisgarh, India

Abstract: The current study aimed to assess the effectiveness of structure teaching programme on knowledge regarding risk factors and prevention of suicidal behavior among girls and boys in selected college Bilaspur C.G. Pre experimental research design is utilized to achieved the stated. Objectives: 1. To assess the pretest and post- test knowledge score regarding risk factors and prevention of suicidal behavior among girls and boys. 2. To determine the effectiveness of structured teaching programme on knowledge regarding risk factors and prevention of suicidal behavior among girls and boys. 3. To find out the association between the pre- test knowledge score regarding risk factors and prevention of suicidal behavior among girls and boys with their socio demographic variables. Hypothesis: H1: There will be a significant difference between the pre-test and post test on knowledge score regarding risk factors and prevention of suicidal behavior among girls and boys. H2: There will be a significant association between the pre-test knowledge score regarding risk factors and prevention of suicidal behavior among girls and boys with their selected socio demographic variables. Projected **Outcomes:** In the present study Pre experimental research design is used to achieve the stated objectives. The study was based on the conceptual framework of modified Imogene King: Theory of Goal Attainment (1960's). A quantitative research approach is used and pilot study was conducted to confirm the feasibility of the study. For main study simple random sampling technique was used on 100 samples of (50) girls and (50) boys at selected college bilaspur C.G. The tool used for data collection consists of socio demographic variables and self-structured questionnaire was used to assess the effectiveness of structure teaching programme on knowledge regarding risk factors and prevention of suicidal behavior among girls and boys in selected college bilaspur C.G. Data was analyzed using descriptive inferential statistics. In girl's pre-test mean score of knowledge was 11.04 (± 2.08) and in posttest mean score of knowledge was 19.98 (± 1.86). Hence, post-test score is greater than pre-test mean score. And, in boys mean score of knowledge was 8.58 (± 1.7) and in post-test mean score of knowledge was 19.24 (± 2.33). Hence, post-test score is greater than pre-test mean score. The Z test value in girls was (24.16) and in boys (28.05) which is greater than 0.020 in the tabulated value and

*Corresponding author: ekkapreetikaekka@gmail.com

there is significant difference between pre-test and post-test knowledge regarding risk factors and prevention of suicidal behavior among girls and boys in selected college Bilaspur, C.G. (H1 hypothesis is accepted).

Keywords: Effectiveness, Structured teaching programme, Knowledge, Risk factors, Prevention, Suicidal behavior.

1. Introduction

Life is precious and nature created life to be lived fully. So when an individual decides to end one's life, she or he loses the one opportunity that nature has given, i.e. to live and experience all facts of life, to the fullest. However, the experience of life for some is not always a happy one and different people react to such moments or situations, differently. Some are able to cope with the pressure of failure or loss, while others let disappointment, sadness and a sense of defeat overcome their will to survive and take that fatal step of ending their life. Suicidal ideation is a first threatening sign of serious suicidal behavior. It is particularly defined as the realm of ideas and thoughts about suicide or death and serious self-injurious behavior. It consists of thoughts which are closely related to the conduct, planning, and outcome of suicidal ideation, particularly as the last relates to thoughts about the response of others. Researcher has focused on suicidal behavior as a distinct form of psychological disturbance and a domain of suicidal behavior. Even though, not all persons who have suicidal ideation will finally attempt suicide, for many individuals such thoughts may be a predecessor to more serious suicidal behaviors. There are lots of factors may contribute to suicidal ideation of an Adolescent, including daily hassle, personal and societal factor as well as the interaction amongst these variables. Furthermore, suicide or purposeful self-harm, an event considered as more of a cultural or social fact is recently

recognized as a community health problem in most of the nations. Risk factors for suicide include mental and physical illness, alcohol or drug abuse, chronic illness, acute emotional distress, violence, a sudden and major change in an individual's life, such as loss of employment, separation from a partner or other adverse events or in many cases, a combination of these factors. A number of psychological states increase the risk of suicide including hopelessness, loss of pleasure in life, depression and anxiousness, failure in love or educational problems, separation, physical or sexual abuse, emotional neglect, exposure to domestic violence while mental health problems play a role which varies across different contexts, and other factors, such as cultural and socio-economic status are also particularly influential. The impact of suicide on the survivors, such as spouses, parents, children, family, friends, co-workers and peers who are left behind, is immense and a poor ability to solve problems also plays a major role.

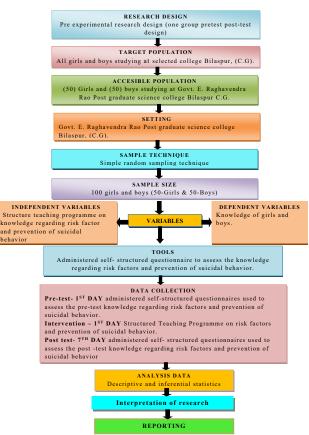


Fig. 1. Schematic representation of research methodology

Suicide prevention must be transformed by integrating injury prevention and mental health perspectives to develop basic public health interventions that address the diversity of populations and individuals whose mortality and morbidity contribute to the burdens of suicide and attempted suicide. The prevention program has been designed to comply with the requirements for students and teacher education in suicide prevention which are now in effect in many countries across the globe. In all states, the program can also be used as part of ongoing in-service training related to student mental health. Worldwide the suicidal rate is estimated to represent 1.8% of the total global burden of disease in 1998 and the rate may get increase up to 2.4% in 2020. About 800,000 people die by suicide worldwide every year. 164,033 Indians committed suicide in 2021 and the national suicide rate was 12 (calculated per hundred thousand or per lakh), which is the highest rate of deaths from suicides since 1967, which is the earliest recorded year for this data. According to The World Health Organization, in India, suicide is an emerging and serious public health issue.

2. Result and Discussion

Organization of data: The findings of the study are discussed under following section.

SECTION A:

Distribution of girls and boys according to their socio demographic variables.

SECTION B:

- a) Distribution of girls and boys of pre-test and post-test knowledge score according to criterion.
- b) Distribution of mean, mean percentage, standard deviation of pre-test and post-test knowledge score of girls and boys.

SECTION C:

- a) Analysis to find the effectiveness of structure teaching programme on pre-test and post-test knowledge score of girls and boys by using Z-test.
- b) Comparison of post-test knowledge score among girls and boys by using Z-test.

SECTION D:

Association between pre-test knowledge score regarding risk factor and prevention of suicidal behavior among girls and boys with their selected socio demographic variables.

Section-A:

Distribution of Girls and Boys According to Their Demographic Variables Using Frequency and Percentage

In relation to age among girls and boys of selected college the findings revealed that majority of them i.e., in girls 7 (14%) belongs to 18-19 years, 14 (28%) belongs to 20-21 years, 29 (58%) belongs to 22-23 years and in boys 8 (16%) belongs to 18-19 years, 17 (34%) belongs to 20-21 years, 25 (50%) belongs to 22-23 years.

In relation to sex among girls and boys of selected college the findings revealed that majority of them i.e., 50 (100%) belongs to female and 50 (100%) belongs to male.

In relation to types of family among girls and boys of selected college the findings revealed that majority of them i.e., in girls 26 (52%) belongs to joint family, 24 (48%) belongs to nuclear family and in boys 23 (46%) belongs to joint family, 27 (54%) belongs to nuclear family.

In relation to place of accommodation among girls and boys of selected college the findings revealed that majority of them i.e., in girls 36 (72%) belongs to days scholar, 14 (28%) belongs to hostel and in boys 44 (88%) belongs to days scholar, 6 (12%) belongs to hostel.

In relation to religion among girls and boys of selected college the findings revealed that majority of them i.e., in girls 10 (20%) belongs to Christian, 38 (76%) belongs to hindu, 2

(4%) belongs to muslim and in boys 5 (10%) belongs to Christian, 43 (86%) belongs to hindu, 2 (4%) belongs to muslim.

In relation to monthly income among girls and boys of selected college the findings revealed that majority of them i.e, in girls 35 (70%) belongs to 10001-above, 8 (16%) belongs to 5001-10000, 7 (14%) belongs to below 5000 and in boys 33 (66%) belongs to 10001-above, 14 (28%) belongs to 5001-10000, 3 (6%) belongs to below 5000.

In relation to educational status of father among girls and boys of selected college the findings revealed that majority of them i.e., in girls 17 (34%) belongs to graduates, 20 (40%) belongs to higher, 3 (6%) belongs to no formal education, 10 (20%) belongs to primary and in boys 16 (32%) belongs to graduates, 23 (46%) belongs to higher, 4 (8%) belongs to no formal education, 7 (14%) belongs to primary.

In relation to educational status of mother among girls and boys of selected college the findings revealed that majority of them i.e., in girls 6 (12%) belongs to graduates, 12 (24%) belongs to higher, 4 (8%) belongs to no formal education, 28 (56%) belongs to primary and in boys 9 (18%) belongs to graduates, 16 (32%) belongs to higher, 9 (18%) belongs to no formal education, 16 (32%) belongs to primary.

In relation to father's occupation among girls and boys of selected college the findings revealed that majority of them i.e., in girls 12 (24%) belongs to government, 22 (44%) belongs to private, 16 (32%) belongs to self and in boys 12 (24%) belongs to government, 26 (52%) belongs to private, 12 (24%) belongs to self.

In relation to mother's occupation among girls and boys of selected college the findings revealed that majority of them i.e., in girls 5 (10%) belongs to government, 28 (56%) belongs to home maker, 17 (34%) belongs to private and in boys 3 (6%) belongs to government, 36 (72%) belongs to home maker, 11 (22%) belongs to private.

Section-B:

a) Distribution of Girls and Boys of Pre-Test and Post-Test Knowledge Score According to Criterion

Percentage distribution of pre-test knowledge score according to criterion wise:

The findings reveals that in pre-test majority of them i.e., in girls 19(38%) belonged to inadequate knowledge, 31(62%) belonged to moderate knowledge, none of them had adequate knowledge and in boys 42(84%) belonged to inadequate knowledge, 8(16%) belonged to moderate knowledge, none of them had adequate knowledge regarding risk factor and prevention of suicidal behavior.

Percentage distribution of post-test knowledge score according to criterion wise:

The findings reveals that in post-test majority of them i.e., in girls 22(44%) belonged to adequate knowledge, 28(56%) belonged to moderate knowledge, none of them had inadequate knowledge and in boys 19(38%) belonged to adequate knowledge, 31(62%) belonged to moderate knowledge, none of them had inadequate knowledge regarding risk factors and prevention of suicidal behaviors.

B) Distribution of Mean, Mean Percentage, Standard Deviation of Pre-Test and Post-Test Knowledge Score of Girls and Boys:

In girls pre-test mean knowledge score was 11.04 (\pm 2.08), mean percentage is 36.8%, and in post-test mean score of knowledge was 19.98 (\pm 1.86), mean percentage 66.6 %. Hence, post-test score was greater than pre-test mean score.

And, in boys mean knowledge score was 8.58 (\pm 1.7), mean percentage was 28.6% and in post-test mean knowledge score is 19.24 (\pm 2.33), mean percentage was 64.13 %. Hence, post-test score was greater than pre-test mean score.

Section-C:

a) Analysis to Find Out the Effectiveness of Structure Teaching Programme on Pre-Test and Post-Test Knowledge Score on Girls and Boys by Using Z-Test

Effectiveness of structure teaching programme on pre-test and post-test knowledge score on girls and boys:

In girl's pre-test mean score of knowledge was $11.04 (\pm 2.08)$ and in post-test mean score of knowledge was $19.98 (\pm 1.86)$. Hence, post-test score is greater than pre-test mean score. And, in boys mean score of knowledge was $8.58 (\pm 1.7)$ and in posttest mean score of knowledge was $19.24 (\pm 2.33)$. Hence, posttest score is greater than pre-test mean score.

The Z test value in girls was (24.16) and in boys (28.05) which is greater than 0.020 in the tabulated value and there is significant difference between pre-test and post-test knowledge regarding risk factors and prevention of suicidal behavior among girls and boys in selected college Bilaspur C.G. (H1 hypothesis is accepted)

It can be concluded that the structure teaching programme was effective in improving knowledge regarding risk factors and prevention of suicidal behavior among girls and boys.

b) Comparison of Post-Test Knowledge Score among Girls and Boys by Using Z-Test:

Effectiveness of structure teaching programme on post-test knowledge score between two sample (girls and boys):

In girls post-test mean score of knowledge was 19.98 (\pm 1.86). and, in boys post-test mean score of knowledge was 19.24 (\pm 2.33). The Z test value between two sample (girls and boys) was (1.76), which is greater than 0.020 in the tabulated value.

Section-D:

Analysis to Find Out the Association Between Pre-Test Knowledge Score Regarding Risk Factor and Prevention of Suicidal Behavior Among Girls and Boys with Their Selected Socio Demographic Variables:

Chi-square for association between pre-test knowledge score and socio demographic variables of girls:

The association between the pre-test knowledge score regarding risk factors and prevention of suicidal behavior among girls with selected socio demographic variables. On applying the chi-square test demographic variable to find out the association between the pre-test knowledge score regarding risk factors and prevention of suicidal behavior among girls with selected socio demographic variables such as age in years (x^2 = 1.36, p<0.05), sex (x^2 = 0, p<0.05), place of accommodation (x^2 = 1.18, p<0.05), religion (x^2 = 1.85, p<0.05),

monthly income (x^{2} = 5.12, p<0.05), educational status of mother (x^{2} = 0.73, p<0.05), father's occupation (x^{2} =1.16, p<0.05) were found to be statistically not significant at 0.05 level of significant.

Only type of family, educational status of father, mother's occupation was significantly associated with the pre-test knowledge score regarding risk factors and prevention of suicidal behavior among girls. The x^2 value of type of family was 5.12 greater than the table value (3.84) at 1 degree of freedom, educational status of father has x^2 value was 61.56 greater than the table value (7.82) at 3 degree of freedom, mother's occupation has x^2 value was 1783.04 greater than the table value (5.99) at 2 degree of freedom at p=0.05 level of significant. Hence H2 i.e., there is significant association between pre-test knowledge score regarding risk factors and prevention of suicidal behavior among girls with "type of family, educational status of father, mother's occupation" is accepted.

Chi-square for association between pre-test knowledge score and socio demographic variables of boys:

The association between the pre-test knowledge score regarding risk factors and prevention of suicidal behavior among boys with selected socio demographic variables. On applying the chi-square test demographic variable to find out the association between the pre-test knowledge score regarding risk factors and prevention of suicidal behavior among boys with selected socio demographic variables such as age in years ($x^2=0.59$, p<0.05), sex ($x^2=0$, p<0.05), place of accommodation ($x^2=0.002$, p<0.05), religion ($x^2=2.67$, p<0.05), monthly income ($x^2=2.05$, p<0.05), father's occupation ($x^2=1.11$, p<0.05) were found to be statistically not significant at 0.05 level of significant.

Only type of family, educational status of father, educational status of mother, mother's occupation was significantly associated with the pre-test knowledge score regarding risk factors and prevention of suicidal behavior among girls. The x² value of type of family was 4.30 greater than the table value (3.84) at 1 degree of freedom, educational status of father has x^2 value was 13.58 greater than the table value (7.82) at 3 degree of freedom, educational status of mother has x² value was 9.54 greater than the table value was (7.82) at 3 degree of freedom, mother's occupation has x² value was 6.24 greater than the table value (5.99) at 2 degree of freedom at p=0.05 level of significant. Hence H2 i.e., there is significant association between pre-test knowledge score regarding risk factors and prevention of suicidal behavior among boys with" type of family, educational status of father, educational status of mother, mother's occupation" is accepted.

3. Conclusion

Hence, all the objectives framed by the investigator were achieved and it is concluded that structure teaching programme more effective to improve the level of knowledge regarding risk factors and prevention of suicidal behaviors among girls and boys. As a nurse investigator has to provide information to entire subjects about risk factors and prevention of suicidal behavior. This study intervention would help the girls and boys 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

- Basvanthappa, B.T. (2000). Nursing Research. New Delhi: Jaypee brothers Publishers.
- [2] Barraclough BM, Pallis DJ. Depression followed by suicide: a comparison of depressed suicides with living depressives. Psychol Med. 1975;5:55-61.
- [3] Beck AT, Steer RA, Kovacs M, Garrison B. Hopelessness and eventual suicide: a 10 year prospective study of patients hospitalized with suicidal ideation. Am J Psychiatry. 1985;142:559-63.
- [4] Bhatia, M.S. (2007). Text Book of Psychiatry, (3rd edition). New Delhi: C.B.S Publishers and Distributors.
- [5] Black DW, Bell S, Hulbert J, Nasrallah A. The importance of Axis II in patients with major depression. J Affect Disord. 1988;14:115-22.
- [6] Burns Nancy and Susan K.Grove. (2004). The Practice of Nursing Research Conduct-Crialle and Utilization, (5th edition). Philadelphia: W.B sunders company publishers.
- [7] Center for Disease Control. Deaths, percent of total deaths, and death rates for the 15 leading causes of death: United States and each State, 2003. CDC: 2006. Available from URL: <u>http://www.cdc.gov/nchs/data/dvs/lcwk9_2003.pdf</u>
- [8] Copper and Pierce. (2002). Abnormal Psychology and Modern Life, New York: Harper Collins Publishers.
- [9] Cutcliffe JR. Research endeavours into suicide: a need to shift the emphasis. Br J Nurs. 2003;12:92-9.
- [10] Dana worchel. (2010). Text Book on Suicide Assessment and Treatment, (1st edition). New Delhi: Springer's company publication.
- [11] De Leo D, Burgis S, Bertolote JM, Kerkhof AJ, Bille-Brahe U. Definitions of suicidal behavior: lessons learned from the WHO/EURO multicentre study. Crisis. 2006;27:4-15.
- [12] Diaconu G, Turecki, G. Family history of suicidal behavior predicts impulsiveaggressive behavior levels in psychiatric outpatients. J Affect Disord. 2009;113:172-8.
- [13] Eleanora. (1986). After suicide: A Ray of Hope. (1st edition). Iowa City. Lynn publication.
- [14] Gail, W, Michele, T et.al., (2005). Principles and practice of psychiatric nursing. (8th edition). Missouri: Mosby Publication.
- [15] Groholt B. & Ekeberg O. Prognosis after adolescent suicide attempt: mental health, psychiatric treatment, and suicide attempts in a nine-year follow-up study. Institute for Psychiatry at the University of Oslo. Suicide Life Threat Behav. 2009;39:125-36.
- [16] Katherine, M. Fortinash, et.al., (1996). Psychiatric Mental Health Nursing, (1st edition). New York: Mosby publication.
- [17] Kaplan and sadock's. (1998). Synopsis is psychiatry (8th edition) New Delhi: New B.L. Waverky Pvt. Ltd.
- [18] Kerkhof AJFM. Attempted suicide: Patterns and trends. In: The international handbook of suicide and attempted suicide. Hawton K, van Heeringen K. (editors). Chichester Wiley; 2000.
- [19] Lalitha, K., (2007). Mental Health and Psychiatric Nursing-an Indian perspective. (2nd edition). Bangalore: V.M.G. Book Publishers.
- [20] Louise, (2008). Basic Concept of Psychiatric Mental Health Nursing, (7th edition). New Delhi: Wilkins and Williams publishers.
- [21] Mahajan, B.K. (1989). Methods in Biostatistics. New Delhi: Jaypee Brothers Publishers.
- [22] Niraj Ahuja, (2011). A Short Text Book of Psychiatry. (7 TH edition). New Delhi: Jaypee Brothers Medical Publishers.
- [23] Polit and Beck. (2004). Nursing research principles and methods (7th edition). Philadelphia: Lippincott Williams & Wilkins.
- [24] Polit, D.F. and Hungler, B. (2000). Nursing Research Principles and Methods. New York: J.B. Lippincott.
- [25] Ratherine, Fortinash, et.al., (1996). Psychiatric mental health nursing. (1st edition) New York: mosby publication.
- [26] Robert, E. Hales, Stuart C. et.al., (2001). Text book of psychiatry. (3rd edition) New Delhi: Jayepee brothers publication.
- [27] Ronald, M. Holmes, (2007). Text book in suicide theory, practice and investigations, (1st edition). California: Sage publication.
- [28] Sreevani, R. (2009). A Guide to Psychiatric and Mental Health Nursing. (3rd edition) New Delhi: Jaypee Brothers Publishers.
- [29] Sheila. I. Videbeck. (2007). Psychiatric Mental Health Nursing. (3rd edition). Philadelphia: Lippincott Williams & Wilkins.

- [30] Stuart and Sudeen. (1979). "Principles and Practice of Psychiatric Nursing. London: C.V Mosby Publishers.
- [31] Sundar Rao. P.S., (2000). An Introduction to Biostatistics, (3rd edition). New delhi: Practice Hall of India. Pvt. ltd.
- [32] Townsend, M.C. (2010). Mental Health and Psychiatric Nursing-Concepts Based on Evidence Based Practice, (6th edition) New Delhi: Jaypee Brothers Publishers.
- [33] World Health Organization. Suicide Prevention (SUPRE). WHO: 2007. Available from URL:
- http://www.who.int/mental_health/prevention/suicide/suicideprevent/en/ [34] Varghese, M (1994). Essential of Psychiatric and Mental Health,
- Churchill livingstone publisher.
 [35] Vijayakumar L, Nagaraj K, Pirkis J, Whiteford H. Suicide in developing countries 1: frequency, distribution, and association with socioeconomic indicators. Crisis. 2005;26:104-11.