e-ISSN: 0975-5160, p-ISSN: 2820-2651

Available online on www.ijtpr.com

International Journal of Toxicological and Pharmacological Research 2022; 12(4); 08-16

Original Research Article

A Study on Cross Sectional Assessment of Attitudes of Nursing Students Towards Suicide Prevention

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Received: 26-02-2022 / Revised: 17-03-2022 / Accepted: 25-03-2022
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Conflict of interest: Nil

Abstract

Background: Suicide is a major public health problem affecting individuals and society at large. Those who attempt suicide require medical attention and they are at high risk for completing suicide. A patient with suicidal attempt interacts with health care professionals at various levels in health care system. Today's nursing students are tomorrows' nursing staff, who will serve the society at various levels in providing health care service so, identifying their attitude regarding suicide prevention is of paramount importance in achieving successful suicide prevention. The objectives of the current study were to assess the attitudes of nursing students towards suicide prevention and to find its correlation with socio demographic profile of the sample.

Method: This current cross-sectional study was conducted on 227 nursing students enrolled in nursing courses at a tertiary health care centre in Rajasthan. A 14 item Attitudes to Suicide Prevention Scale was used. The study proforma containing socio demographic variables and the attitudes to suicide prevention scale was distributed to them in a classroom setting after obtaining consent. The data from fully completed proforma were entered in Microsoft Excel 2017 and then processed for cleaning and coding. The cleaned data were exported to SPSS version 25 and were analyzed.

Results: Mean age of the sample was 20.49 years. Internal consistency was present in the scoring. The maximal response was positive on twelve statements and negative on two statements. Favorable response was expressed on eleven statements out of total fourteen statements. Better attitude was observed in BSc Nursing students than GNM students.

Conclusions: Majority of nursing students had positive attitudes on most of the statements of the scale. A health professionals' attitude towards suicide develops during their early years of training. Hence, timely focus on developing their attitudes and educating them about suicidal patients needs

organized efforts. There is further need to correct negative attitudes and strengthen positive attitudes at various levels. It is urgent need of the hour to incorporate suicide prevention strategies in the core component of health care service delivery.

Keywords: Suicide, suicidal, positive attitude, nursing student, public health.

Introduction:

Suicide is a major public health problem affecting individuals and society at large. According to national crime record bureau (NCRB), a total of 1,39,123 suicides were reported in India during 2019[1]. According to WHO, more than 7,00,000 people die by suicide every year[2]. Furthermore, for each completed suicide, there are more than 20 suicide attempts. A suicide attempt is regarded as an indicator of further attempts. Not all suicidal attempts result into death, many such attempts are done in a way that makes the rescue possible. So, these attempts are the person's cry for help. Timely and empathetic intervention can save lives. Suicides and suicide attempts have a ripple effect that impacts on families, friends, colleagues, communities and societies. Most of suicides are preventable. Much can be done to prevent suicide at individual, community and national levels. Majority of suicides occur in low- and middle-income countries. Many of those who attempt suicide require medical attention and they are at high risk for completing suicide. According to the WHO report 2012, India ranked first in the world in the number of completed suicides[3]. There are several barriers in management of suicide attempters such as improper knowledge about suicide, negative attitude toward suicide attempters, incompetence in assessing and managing suicidal risk, inadequate manpower and other resources, insufficient time and setting, inadequate supervision and support, and lack of clear treatment protocols[4].

Patients with suicide attempts interact with health care professionals at various levels in health care system such as the entry point (emergency department and intensive care units), inpatient care (ward care), discharge and continuity care. So, one way to reduce suicide in the general hospital setting could be education and training of broad range of "front-line" professionals in suicide prevention. As todays' nursing students are tomorrows' nursing staff, who will serve the society at various levels in providing health care service, identifying their attitudes regarding suicide prevention is of paramount importance in achieving successful suicide prevention.

The current study may help to understand the attitudes of nursing students towards suicide prevention. In the future, the results may be used to target and measure the effectiveness of suicide prevention activities and awareness programs. It also has enormous implications on the development of policies and programmes at various levels. The objectives of the current study are to assess the attitudes of nursing students towards suicide prevention and to find its association

with socio demographic profile of the sample.

Material and Methods:

Study Design and Site: A cross-sectional study was conducted on all the nursing students pursuing either General Nursing Midwifery (GNM) or Bachelor of Sciences (BSc Nursing) course who have been enrolled at Ananta Institute of Medical Science and Research Centre, Rajsamand, Rajasthan. The study was approved by central research committee and institutional ethical committee.

Instrument: The Attitudes to Suicide Prevention Scale (ASP)[5] was used to assess the attitudes of nursing students towards suicide prevention. The scale is having good internal consistency (Cronbach's alpha = 0.77) and high test-retest reliability. The scale is a 14 item self-reported measure of attitudes towards suicide prevention. Items are rated on a five-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. In scoring the questionnaire, a strongly negative attitude was scored 5, while a strongly positive attitude was scored 1. An overall score was calculated by adding the scores from each item (higher score indicated more negative attitudes). Reverse coding was done for item number 4 and 14 as they were positive statements. The maximal response on each item was taken into account for the interpretation. Maximal response was drawn from maximum frequency of response on a statement on five-point Likert scale. Additionally, responses on strongly disagree and disagree were added and, same was done for responses on agree and strongly agree. Favorable response was concluded if majority (50% or more) of students disagreed with negative statements or agreed with positive statement on added frequency. So, students may show favorable response on some statements and unfavorable response on some statements.

Study Population: The study population included all the nursing students who have been enrolled in nursing courses at Ananta Institute of Medical Science and Research Centre, Rajsamand, Rajasthan. Those students who consented to participate in the study were included.

Study period: January 2022 to February 2022.

Sample size and sampling: All the nursing students pursuing either General Nursing and Midwifery (GNM) or Bachelor of Sciences (BSc Nursing) course who have been enrolled at Ananta Institute of Medical Science and Research Centre, Rajsamand, Rajasthan were approached in their classroom. Those students, who consented to participate, were included. The minimum sample size was calculated on assumption of 95% level of significance, 80% power of the study and 35.3 anticipated mean score of ASP scale in the study group while keeping population mean score± Standard Deviation of ASP 36.4 ± 5.9. [(5)] Hence the minimum sample was 226. After 10% adjustment of non- responders' students the final sample size was 250. The proforma was distributed among 256 students, of these, 249 students returned the proforma back. Out of these, 22 proforma were incomplete, so finally data of 227 samples were analyzed.

Study Procedure: Nursing students pursuing either General nursing and midwifery (GNM) or Bachelor of sciences (BSc Nursing) course were approached in their classroom at Ananta institute of medical sciences and research centre Rajsamand. An explanation was given to them regarding objectives of the study, consent, sociodemographic variables and the scale. The study proforma containing consent proforma, sociodemographic variables and the attitudes to suicide prevention scale (ASP) was distributed to them. Students were asked to read the scale and to ask any

problem in understanding any item of the scale. This all took nearly 45 minutes. Socio-demographic variables included age, sex, year of education, marital status, background, information about suicide prevention activity, seen a person who has attempted suicide and, seen a person who has committed suicide.

Statistical analysis:

Socio demographic data were summarized using frequencies and percentages. Modal/ maximal response on each item was taken into account for the interpretation. The differences in the attitude scores in different independent variables having two categories were determined by independent sample t-tests. To accomplish this, fully completed questionnaire was entered in Microsoft Excel 2017 and then processed for cleaning and coding. The cleaned data were exported to SPSS version 25.

Results:

Mean age of the sample was 20.49 years (±2.65 years, two standard deviation). Other socio demographic variables are shown in table 1.

Table 1: Socio Demographic Profile

Variables	Frequency (%)
Sex	
Male	135(59.5%)
Female	92(40.5%)
Education	
BSc (Nursing)	147(64.8%)
GNM	80(35.2%)
Marital Status	
Married	27(11.89%)
Unmarried	200(88.11%)
Religion	
Hindu	219(96.5%)
Islam	7(3.1%)
Others	1(0.4%)
Background	
Rural	177(78%)
Urban	50(22%)
Attended Suicide prevention Programme or activity	23(10.1%)
Yes	204(89.9%)
No	
Had seen a person who attempted suicide	
Yes	97(42.7%)
No	130(57.3%)
Had seen a person who committed suicide	
Yes	103(45.4%)
No	124(54.6%)

Table 1 shows sociodemographic profile of the sample. Majority of the sample represented males (59.5%), pursuing B.Sc. Nursing (64.8%), unmarried (87.7%), from Hindu religion (96.5%), from rural

background (78%), not attended suicide prevention programme or activity (89.9%), had not seen a person who has attempted suicide (57.3%) and had not seen a person who committed suicide (54.6%).

Mean total ATP scale score for the collected sample was 34.06. The sample of 14 item ATP scale (n=227) was subject to the internal consistency analysis in order to ascertain reliability. The scale yielded Cronbach's alpha value of 0.86 which is slightly higher to the value obtained by the authors (0.77) in their validation study[5]. This indicated that internal consistency was present in the scoring.

Table 2: Attitudes towards Suicide Prevention

Statements	Maximal response	Frequency (%)				
		Strongly disagree	Disagree	Uncertain/ can't say	Agree	Strongly agree
		Strongly disagree + Disagree			Strongly disagree + Disagree	
1. I resent being asked to do more about suicide#	**Disagree**	55 (24.2%)	85 (37.4%)	8 (3.5%)	42 (18.5%)	37 (16.3%)
		140 (**61.7%**)			79 (34.8%)	
2. Suicide prevention is not my responsibility#	**Strongly disagree**	107 (47.1%)	73 (32.2%)	5 (2.2%)	21 (9.3%)	21 (9.3%)
		180 (**79.3%**)			42 (18.4%)	
3. Making more funds available to the appropriate health services would make no difference to the suicide rate	**Disagree**	31 (13.7%)	73 (32.2%)	36 (15.9%)	51 (22.5%)	36 (15.9%)
		104 (45.8%)			87 (38.3%)	
4. Working with suicidal patients is rewarding#	**Agree**	8 (3.5%)	7 (3.1%)	9 (4%)	103 (45.4%)	100 (44.1%)
		15 (6.6%)			203 (**89.4%**)	
5. If people are serious about committing suicide, they don't tell anyone	Agree	7 (3.1%)	33 (14.5%)	28 (12.3%)	88 (38.8%)	71 (31.3%)
		40 (17.6%)			159 (70%)	
6. I feel defensive when people offer advice about suicide prevention#	**Disagree**	85 (37.4%)	116 (51.1%)	5 (2.2%)	15 (6.6%)	6 (2.6%)
		201 (**88.5%**)			21 (9.3%)	
7. It is easy for people not involved in clinical practice to	**Disagree**	65 (28.6%)	99 (43.6%)	10 (4.4%)	33 (14.5%)	20 (8.8%)
		164 (**72.2%**)			53 (23.3%)	

make judgments about suicide prevention#						
8. If a person survives a suicide attempt, then this was a ploy for attention#	**Disagree**	44 (19.4%)	97 (42.5%)	51 (22.5%)	25 (11.0%)	10 (4.4%)
		141 (**62.1%**)			35 (15.4%)	
9. People have the right to take their own lives#	**Strongly Disagree**	100 (44.1%)	85 (37.4%)	23 (10.1%)	14 (6.2%)	5 (2.2%)
		185 (**81.5%**)			19 (8.4%)	
10. Since unemployment and poverty are the main causes of suicide, there is little that an individual can do to prevent it#	**Disagree**	38 (16.7%)	80 (35.2%)	15 (6.6%)	69 (30.4%)	25 (11.0%)
		118 (**52%**)			94 (41.4%)	
11. I don't feel comfortable assessing someone for suicide risk#	**Disagree**	43 (18.9%)	124 (54.6%)	16 (7.0%)	36 (15.9%)	8 (3.5%)
		167 (**73.6%**)			44 (19.4%)	
12. Suicide prevention measures are a drain on resources, which would be more useful elsewhere#	**Disagree**	72 (31.7%)	80 (35.2%)	10 (4.4%)	49 (21.6%)	16 (7.0%)
		152 (**67%**)			65 (28.6%)	
13. There is no way of knowing who is going to commit suicide	Agree	26 (11.5%)	72 (31.7%)	20 (8.8%)	77 (33.9%)	32 (14.1%)
		98 (43.2%)			109 (48%)	
14. Significant proportion of suicides are considered preventable#	**Agree**	4 (1.8%)	11 (4.8%)	17 (7.5%)	118 (52.0%)	77 (33.9%)
		15 (6.6%)			195(**85.9%**)	

statements with favorable response.

Table 2 shows various attitudes among nursing students towards suicide prevention on five-point Likert scale of the statements of ATP scale. Students showed favorable response on some statements and unfavorable response on some statements. The maximal response was positive (strongly disagreed/ disagreed with negative statement or strongly agreed/ agreed with positive statement) on twelve statements and negative on two statements. Favorable response was

expressed on eleven statements out of total fourteen statements.

Associates of attitudes

Table 3 Difference in attitude score by socio-demographic characteristics

Characteristics	M(SD)	Diff.*(95% CI)	p-value
Sex		0.817(-.807,2.436)	0.32
Male	34.39(6.18)		
Female	33.57(5.92)		
Marital Status		0.174(-2.250,2.598)	0.88
Married	34.21(6.23)		
Unmarried	34.04(6.07)		
Place of residence		1.464(-0.449,3.378)	0.13
Urban	32.92(6.04)		
Rural	34.38(6.06)		
Education		-3.302(-4.91,-1.69)	**0.00**
BSc (Nursing)	32.89(6.25)		
GNM	36.20(5.12)		
Attended Suicide prevention Programme or activity:		-2.197(-4.823,0.428)	0.10
Yes	32.08(7.47)		
No	34.28(5.88)		
Had seen person who attempted suicide:		-1.656(-3.252,-0.059)	**0.042**
Yes	33.11(5.97)		
No	34.76(6.08)		
Had seen a person who committed suicide:		1.131(-0.463,2.725)	0.163
Yes	34.67(6.06)		
No	33.54(6.06)		

***Diff. =Difference in mean, (lower bound, upper bound)**

Table 3 shows associates of attitude scores. The statistically significant results were observed for two correlates i.e., better attitude was observed in BSc Nursing students than GNM students and, in those students, who had seen a patient who has attempted suicide than those students who had not seen a patient who has attempted suicide.

Discussion:

The current study was conducted to assess the various attitudes of nursing students towards suicide prevention. Majority of our participants were Hindu unmarried males from rural background doing BSc nursing and had never attended any suicide prevention programme. In our study, we had 65 % BSc nursing students and rest were GNM students. In a similar study by Nebhinani N et al[7] on nursing students, 88% were BSc nursing students.

A health professionals' attitude towards suicide prevention develops during their early years of training. Hence, timely focus on developing their attitudes and educating them about suicidal patients needs organized efforts. Majority of our students expressed positive attitudes on most of the statements.

In our study results, the maximal response was positive on twelve statements (statement number 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12 and 14) and negative on two statements. Similar

to our study, Nebhinani et al.[6] also in their study on nursing students found positive maximal response on statement numbers 1, 2, 3, 4, 7, 8, 11, 12 and 14. Brunero et al.[7] also in their study on health professionals (nurses, midwives and allied health professionals) found positive maximal response on statement numbers 1, 2, 3, 6, 8, 10, and 12. Singh et al.[8] also in their study on non-mental health care providers found positive maximal response on statement numbers 1, 2, 3, 4, 6, 8, 9, 10, 11, and 12. Nebhinani et al.[9] also in their study on medical students found positive maximal response on statement numbers 1, 2, 9, 10, 11 and 13.

Favorable response was expressed on eleven statements out of total fourteen statements (statement number 1, 2, 4, 6, 7, 8, 9, 10, 11, 12 and 14). Similar to our study, Nebhinani et al.[6] also in their study on nursing students found favorable response on statement numbers 1, 2, 4, 11 and 14. Singh et al.[8] also in their study on non-mental health care providers found favorable response on statement numbers 1, 2, 4, 6, 8, 9, 10, 11 and 12. Nebhinani et al.[9] also in their study on medical students found favorable response on statement numbers 1, 2, 9, 10, 11 and 12.

In our study majority of nursing students expressed favorable response i.e., they liked to being asked to do more about suicide, they considered suicide prevention their responsibility, expressed that working with suicidal patient is rewarding, they didn't feel defensive when people offer advice about suicide prevention, they reported that it is not easy for people not involved in clinical practice to make judgements about suicide prevention, they reported that suicidal attempt is not a ploy for attention, they disagreed to statement that people have right to take their own lives, they responded that unemployment and poverty are not the main cause, they expressed that they are comfortable in assessing someone for suicide risk, they responded that using suicide prevention measures is fruitful and significant proportion of suicide are preventable. These results are in line with studies conducted earlier. According to NCRB data 2019, unemployment and poverty cumulatively accounted for only 2.8% cases of suicides[1]. One report has mentioned that social factors are major determinants of suicide and suicide as a personal matter[10]. However, majority of suicide attempters manifest impaired problem-solving skills at least for time being, as they fail to recognize alternative solutions to their concerned problem[10].

In our study, students expressed that if people are serious about committing suicide, they don't tell anyone, and that there is no way of knowing who is going to commit suicide. These responses show that they need to correct such belief because most of the people who attempt or commit suicide later, really have communicated their intent through words or actions beforehand to other persons. There are almost always some warning signs which they express to someone verbally or non-verbally including telling others that they want their lives to end, giving away possessions, behaving more aggressively or recklessly, experiencing dramatic mood swings, abusing substances and withdrawing socially.

Difference in attitude score between BSc and GNM students showed that BSc Nursing students scored less [more positive attitude] than GNM students and the difference was statistically significant [$p<0.05$]. This could be due to difference in their course. Better attitude was observed in those students who had seen a patient who has attempted suicide than those students who had not seen a patient who has attempted suicide [$p<0.05$]. This may be due to the personal exposure to such patients.

The index study had few limitations like attitude toward suicide prevention scale is not adapted for our Indian population. Since a specific subpopulation was studied, the present findings cannot be generalized for other settings. We found only few students had exposure to educational programmes on suicide prevention and identification of potential suicide attempters. Our participants had limited experience of managing this population, thus we could not establish any association between the knowledge and expertise with their attitudes.

Conclusion:

The current study assessed various attitudes of nursing students towards suicide prevention and found that majority of students had positive attitudes on most of the statements. The maximal response was positive on twelve statements and favorable response was expressed on eleven statements out of total fourteen statements. There is further need to correct negative attitudes and strengthen positive attitudes at various levels. It is urgent need of the hour to incorporate suicide prevention strategies in the core component of health care service delivery.

Implications of the study:

The results of current study will help in understanding the attitudes of nursing students towards suicide prevention. The results may be helpful to target and measure the effectiveness of suicide prevention activities and awareness programs. Results also have implications on the development of policies and programmes at various levels.

Acknowledgements:

Our sincere thanks to Dr. Pramila Bajaj, Dr. Yogesh, Dr. Manoj Jani, Dr. Manish Jain, Dr. Kalika Gupta and all participants.

Financial support and sponsorship: Nil.

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