



SOCIO-DEMOGRAPHIC FACTORS AMONG SUICIDE ATTEMPTERS ATTENDING PSYCHIATRY DEPARTMENT OF A TERTIARY CARE HOSPITAL IN NORTH INDIA: A CASE SERIES

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ABSTRACT

Background: Suicide is an important, preventable global public health problem that is caused by interaction of numerous environmental, genetic and psychosocial factors. More than one lakh lives are lost every year due to suicide in India and this number is constantly on the rise because of the fact that people are stressed out in today's competitive world. Several studies have found that risk factors for attempting suicide are different for males and females.

Objective: Present study was done to describe the socio-demographic factors for suicide and also to determine the gender based differences in risk factors if any.

Methodology: We included 77 consecutive participants with attempted suicide who were referred to the Psychiatric department of Indira Gandhi Medical College (IGMC) Shimla. We used a self designed, structured, detailed interview schedule for collection of data regarding socio-demographic. We analysed data using Epi Info v7.0.

Results: We found that suicide attempts were more frequent among young participants (62.3%) and females (57.1%). 66.2% of the study participants were currently married and 87.0% were from the rural background. 54.5% belonged to nuclear family, most of the males (81.8%) were semiskilled, 50.0% of the females were unemployed or home-makers.

Conclusion: Young population is more vulnerable for attempting suicide. Initiatives need to be taken at the school and college level that focuses on the youth and especially females. Awareness campaigns regarding coping up with day-to-day stress should target nuclear families. Early identification of such individuals and psycho-social support to prevent suicide attempts is vital.

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INTRODUCTION

Suicide is the third leading cause of death among young adults worldwide.[1] It is an important, preventable global public health problem that is caused by interaction of numerous environmental, genetic and psychosocial factors. Every year close to 800,000 people take their own life and there are many more people who attempt suicide globally.[2] Every suicide is a tragedy that affects families, communities and entire countries and has long-lasting effects on the people left behind.[2] India's National Crime Report Bureau (NCRB) report suggests that more than one hundred thousand people (134,799) in the country lost their lives by committing suicide during the year 2013 making the suicide rate 11 per 100,000 population.[3]

These numbers could be an underestimation of at least 25% in men and 36% in women as suggested by Nationally Representative Mortality Survey (NRMS).[4] There could be a range of religious, legal and cultural factors affecting the willingness to report a death as a suicide and contributing to the underreporting and misclassification of suicides by NCRB.[5]

The southern states of Kerala, Karnataka, Andhra Pradesh and Tamil Nadu have a suicide rate of >15 while in the Northern States of Punjab, Uttar Pradesh, Bihar and Jammu and Kashmir, the suicide rate is <3. This variable pattern has been stable for the last 20 years. Higher literacy, a better reporting system, lower external aggression, higher socioeconomic status and higher expectations are the possible explanations for the higher suicide rates in the southern states.[6] Traditionally, in western literature risk factors associated with suicide, including suicidal attempts - include young age (15-24 years), female gender, low educational attainment, unemployment, living alone, and history of socioeconomic deprivation.[7] The

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risk factors, however, in India have been found to be age, gender, marital status, education, family structure, urban versus rural residence, occupation and various precipitating negative life events such as stress and object loss.[8] Despite the fact that the risk factors for suicide are different among men and women, the information about the causes and risk factors is insufficient. There is a growing recognition that prevention strategies need to be tailored to the region-specific demographics of a country and to be implemented in a culturally-sensitive manner.[1]The studies pertaining to psychological, social and demographic factors along with modes and causes of attempted suicide are helpful in formulating suicide prevention strategies at state and national level.[9]

The present study was done with an objective to describe the various socio-demographic factors associated with suicide attempts and also to describe the gender based differences in these factors if any.

METHODOLOGY

We collected information from all the consecutive patients with attempted suicide who were referred to the Psychiatric department of Indira Gandhi Medical College (IGMC) Shimla, Himachal Pradesh from March, 2017 through August, 2017. For the purpose of present study, a case of attempted suicide was defined as “A person who had made deliberate act of self harm consciously aimed at self destruction, irrespective of his or her intention to die, with non fatal outcome”.[10]We included adult patients irrespective of the previous history of suicide attempts in present study. The patients who did not give informed consent were excluded from our study. We used a self designed, structured, detailed interview schedule for collection of data regarding various socio-demographic characteristics. The interview was administered by a resident doctor from the department of psychiatry. We collected, entered, and cleaned the data using Microsoft Excel spreadsheet and analyzed it using software Epi Info v7.0. The qualitative variables were presented as frequencies, proportions and their 95% Confidence Interval, whereas the quantitative variables were presented as means and standard deviation.

RESULTS

We collected data from 77study participants whose mean age was30.8 years (SD= 9.9 yrs, Range = 25-50 yrs). The majority of participants were female (57.1%) and married (66.2%). Most of them had obtained their education between Class Tenth and Twelfth (42.9%). Almost one-fifth(22%) of the patients had attained a degree of graduation and above. 87%of the participants belonged to the rural background, 54.5%were from nuclear families and 96.1% were Hindus (Table 1)

Table 1 Distribution of Study Participants According To Socio demographic Characteristics (n=77)

Variables	Frequency (n)	Percentage (%)	95% CI ¹
Age			
≤30 Yrs	48	62.3	50.9-72.6
>30 Yrs	29	37.7	27.4-49.1
Sex			
Male	33	42.9	32.2-54.3
Female	44	57.1	45.7-67.8
Religion			

¹95% Confidence Interval

Hindu	74	96.1	88.4-98.8
Others	3	3.9	1.2-11.6
Education			
Illiterate	8	10.4	5.2-19.6
<10 th	19	24.7	16.2-35.7
10 th -12 th	33	42.9	32.2-54.3
Graduate and Post Graduate	17	22.0	14.1-32.9
Type Of Family			
Nuclear	42	54.5	43.2-65.4
Joint	35	45.5	34.6-56.8
Locality			
Urban	9	11.7	6.1-21.2
Rural	67	87.0	77.3-93.0
Occupation			
Professional	9	11.7	6.1-21.2
Semiskilled/Shop/ Clerk	34	44.2	33.4-55.5
Unemployed/ Homemaker	24	31.2	21.7-42.5
Student	7	9.1	4.3-18.0
Marital Status			
Never Married	26	33.8	24.0-45.2
Currently Married	51	66.2	54.8-76.0
Living With			
Family	71	92.2	83.5-96.5
Friends	5	6.5	2.7-14.9
Alone	1	1.3	0.2-8.9

Table 2 describes the gender based differences of the socio-demographic variables among the suicide attempters. It was seen that 57.6% of males and 65.9% of females were of age less than 30 years. In our study, while most of the males (81.8%) were semiskilled, 50.0% of the females were unemployed or home-makers. In comparison to 100% of the females,81.8% of the males were living with their families.

Table 2 Gender Based Comparison of Socio-Demographic Variables

Variables	Males (%)		Females (%)	
	N	%	N	%
Age (in years)				
≤30	19	57.6	29	65.9
>30	14	42.4	15	34.1
Religion				
Hindu	32	96.9	42	95.4
Others	1	3.1	2	4.6
Education				
Illiterate	1	3.0	7	15.9
<10 th	10	30.3	9	20.5
10 th -12 th	15	45.5	18	40.9
Graduate and above	7	21.2	10	22.7
Type of family				
Nuclear	17	51.5	25	56.8
Joint	16	48.5	19	43.2
Locality				
Urban	2	6.1	7	15.9
Rural	30	90.9	37	84.1
Occupation				
Professional	3	9.1	6	13.6
Semiskilled	27	81.8	7	15.9
Unemployed/ Homemaker	2	6.1	22	50.0
Student	1	3.0	6	13.6
Living With				
Family	27	81.8	44	100.0
Friends	5	15.2	0	0.0
Alone	1	3.0	0	0.0

DISCUSSION

In our study we found that the majority of the participants who had attempted suicide were of less than 30 years of age, females, well educated and belonged to nuclear families. A study by Gururaj *et al* shows that suicide rates were the highest in the 15-29 years age group followed by the 30-44 years

group which lies in tune with our study.[11]A study by Banerjee *et al* states that there is a higher female predisposition for attempting suicides which is in concordance with our study probably due to the social and family pressure for the woman to stay married even in an abusive relationship which may increase the risk of suicide in women.[12,13]

NCRB data reveals that 25.3% of suicide victims were educated up to primary level, 23.7% had a middle-school education, 21.4% were illiterate, and 3.1% were graduates or postgraduates.[14] In our study, the majority of the participants had attained the education between classes 10th and 12th.

In India, a trend has been seen that the people are switching from the joint towards the nuclear families. A study by Srivastava *et al* shows that the majority of the suicide attempters were from nuclear families which is also seen in our study.[10] This could be possibly due to the fact that the social integration plays an important role in relieving the apprehension and stress related to day-to-day activities.

In our study we found that the majority of the suicide attempters hailed from the rural background, the findings of which do not coincide with the study done by Khan *et al*.[15] This could be due to the reason that in Himachal Pradesh, a 90% of the population resides in the rural areas.[16]

In our study we found that the majority of the female participants were of younger age group. Possible explanation could be that the personality traits are more common in younger females which may affect their ability to cope up with day to day activities, thus predisposing for a tendency towards self-harm.

In comparison with the males, more females were unemployed in our study. This can be due to the fact that in our set up females are not much encouraged to engage in employment.

CONCLUSION

From our study we conclude that initiatives need to be taken at the school and college level that focuses on the youth and especially females. Awareness campaigns regarding coping up with day-to-day stress should target nuclear families. Couples should be enlightened with the role of marriage counselors in case they face any trouble in their marriage. Measures need to be taken to detect mental health problems among them as early as possible so that appropriate measures can be taken to prevent them from committing such grievous act. This requires a strong inter-sectoral collaboration between the government and public health services so that steps will be taken to facilitate our vision of 'Health for All'.

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