

Sociodemographic Profile of Suicide Attempters in a Tertiary Health-care Setup

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Abstract

Introduction: According to the World Health Organization, globally (2012) suicide is the second leading cause of death between 15 and 29 years of age with one person committing suicide every 40 s. In 2012, India accounted for the highest suicidal rate. Hence, we decided to establish the sociodemographic profile of suicide attempters in our hospital.

Aim: The aim of our study was to establish the sociodemographic profile of suicide attempters who were referred from other departments of our hospital to psychiatry outpatient department for opinion.

Materials and Methods: The study was conducted in the Department of Psychiatry at Government Kilpauk Medical College, Chennai, over a period of 6 months from March 2015 to August 2015. One hundred and ten consecutive suicide attempters referred from other departments to psychiatry outpatient department were enrolled for this study and their sociodemographic profile was established.

Results: Highest number of suicide attempts was present in age group between 20 and 30 years. Percentage of suicide attempts was higher in females when compared to males. Among educated people, highest number of suicidal attempts was present in those who have completed below twelfth standard education. Individuals with no formal education accounted for the lowest percentage of suicide attempts. Suicide attempts were more common in employed persons, while housewives had the least number of attempts. Highest percentage of suicide attempts was seen among those individuals with a monthly income of less than Rupees 10,000, while the lowest percentage was seen in individuals with monthly income of more than Rupees 25,000. Slightly, higher rate of suicidal attempts was present in married population when compared to unmarried population.

Conclusion: Establishing sociodemographic profile of suicide attempters would help us to identify sections of population prone for suicidal tendency, and hence, we can prevent those individuals from making such attempts by professional counseling.

Key words: Professional counseling, Sociodemographic profile, Suicide attempters

INTRODUCTION

Suicide is a complex, multidimensional phenomenon that has been studied from philosophical, sociological, and clinical perspective. Suicidal behavior and suicidality can be conceptualized as a continuum ranging from suicidal ideation to suicide attempts and completed suicide. Attempted suicide is defined as a potentially self-injurious action with a nonfatal outcome, for which there is evidence, either explicit or

implicit that the individual intended to kill himself or herself. The action may or may not result in injuries.^[1]

Suicidal and self-harm tendencies are widely prevalent among the population. More than one lakh lives are lost every year due to suicide in India. In the three decades (from 1975 to 2005), the suicide rate increased by 43%. 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. 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.^[2]

Suicide, attempted suicide, and different form of suicidal behavior are on the rise worldwide. Suicide is the leading

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cause of death globally among all the age groups. According to the World Health Organization (WHO) 2002 on violence on health, about 815,000 people died due to suicide all over the world in the year 2000 itself.^[3]

There is a wide disparity about incidence of suicide and gender. Some western countries show higher incidence in males, and in developing countries, more incidence was seen in females. The studies by Garfinkel *et al.*^[4] Otto^[5] and Kotila *et al.*^[6] showed that the higher incidence of suicide occurs in adolescent females. There is male-female disparity in completed suicides among various nations of the world. Female suicide completion rate is high in Sri Lanka, China, and also in India. Suicide attempts in women are less violent, less lethal and have less disfigurement. One theory says that lower rate of suicide in women is due to lower rate of alcohol dependence and abuse in women. Women are more likely to seek medical attention when they are depressed and they are more accommodative than men, having a better network with friends and family. Suicidal attempts before puberty are rare.

Married persons had lesser incidence of suicides, while single individuals, individuals who never got married, divorced, and widowed individuals had a higher incidence of suicide. Unmarried persons had a higher percentage of suicide according to Ponnudurai *et al.*^[7] and Latha *et al.*^[8] Family history of suicide is a risk factor for suicide. Homosexual men and women also had a higher suicidal tendency. A study by Fleischmann *et al.*^[9] showed that most of the suicide attempters were married than single in India.

Lewis and Sloggett found no association between educational attainment and suicide risk.^[10] Shah and Chatterjee^[11] and Shah and Bhandarkar^[12] found a curvilinear relationship between educational attainment and suicide risk, while Pompili *et al.* concluded with a high risk of suicide among the better educated.^[13] Lusyne and Page also found higher risk of suicide among the better educated, but merely for women.^[14] According to a study by Ramdurg *et al.*, 63% of the suicide attempts were present in individuals with educational level up to matriculation or beyond matriculation.^[15]

Higher the social status higher is the suicidal risk. Professionals and physicians had a high risk for suicide. Furthermore, other occupations such as law enforcement, dentists, artists, mechanics, lawyers, and insurance agents also had a higher risk. At the same time, unemployment also had significant role in suicide. According to Ramdurg *et al.*, employed individuals had a higher suicidal rate than the unemployed persons, and also, the level of stressors

were more in employed persons.^[15] A study by Tara *et al.* found that 55% of the suicide attempts were present in individuals with unskilled workers.^[16]

According to a previous study by Sudhir kumar CT and Chandrasekaran,^[17] most of the suicide attempts occurred in low socioeconomic status.

Aims and Objectives

The aim of the study was to establish the sociodemographic profile of suicide attempters who were referred from other departments of our hospital to psychiatry outpatient department for opinion.

MATERIALS AND METHODS

The study was an observational study conducted in the Department of Psychiatry at Government Kilpauk Medical College and Hospital. It was conducted for 6 months from March 2015 to August 2015. All the suicidal attempters, referred from other departments to psychiatry outpatient department for opinion, have been selected for this study. Hundred and ten consecutive samples were selected for this study. The study was approved by the Institutional Ethics Committee. Informed written consent was obtained from all the participants and for those below 18 years, consent was obtained from their respective parents also.

Inclusion Criteria

All self-injurious behavior cases, referred from other departments to psychiatry outpatient department for opinion, were included in the study. All such subjects aged 15 and above.

Exclusion Criteria

Acutely ill subjects, subjects aged <15 years, were excluded from the study.

Each individual was interviewed with a semi-structured pro forma for about half an hour to one hour in the psychiatry outpatient department. Individuals' sociodemographic profile was registered, and each was enquired about mode of attempt, reason for attempt, whether any intent or not, and any previous suicide attempts, history of illness, history of substance abuse, if present its pattern, family history of suicide and substance abuse, any physical and psychiatric illness of the life partner. Counseling was given on the same session of the day and if needed medications were also given with their consent.

Semi-structured Pro forma

A semi-structured pro forma was prepared for this study. It consisted of name, age, sex, place, educational

status, occupational status, income status, and marital status.

RESULTS

Data were collected according to aforementioned pro forma and the sociodemographic profile was established.

Table 1 shows that highest number of suicide attempts was present in age group between 20 and 30 years. This accounts for 49.1% ($n = 54$) of cases. Lowest percentage of suicide attempts was present in age group 40 and above accounting for 8.2% ($n = 9$) of cases. This is depicted in Figure 1.

Table 2 shows that the frequency of suicide attempts ($n = 59$) was higher in females. As shown in Figure 2, the percentage of suicide attempts was 53.6% in females compared to 46.4% ($n = 51$) in males.

Table 3 shows that highest number ($n = 70$) of suicidal attempts was present in those who have completed <12th standard and its percentage was 63.6%. Individuals who had no formal education ($n = 13$) accounted for lowest percentage (11.8%) of suicide attempts. This is depicted in Figure 3

Table 4 shows that suicide attempts were more common in employed persons ($n = 63$), the percentage was 57.3%, while housewives ($n = 12$) had the least number of attempts accounting for only 10.9% of attempts. This is depicted in Figure 4.

Table 5 shows that highest percentage of suicide attempts was present in individuals with monthly income of <10,000 per month, they contribute to 65.5% ($n = 72$) of total attempts. Lowest percentage (3.6%; $n = 4$) was seen in individuals with monthly income of more than 25,000 per month. This is depicted in Figure 5.

Table 6 shows that there was a slightly higher rate of suicidal attempts present in married population than that in unmarried population. The percentage of suicidal attempts in unmarried population ($n = 54$) was 49.1%, compared to percentage in married population ($n = 56$) 50.9%. This is depicted in Figure 6.

DISCUSSION

Age

In our study, self-injurious behavior most commonly occurred between the age groups of 20 and 30 years

Table 1: Age group variation of suicide attempters

Age	Frequency	Percent	Valid Percent	Cumulative Percent
15–20	30	27.3	27.3	27.3
20–30	54	49.1	49.1	76.4
30–40	17	15.5	15.5	91.9
40 and above	9	8.1	8.1	100.0
Total	110	100.0	100.0	

Table 2: Gender variation of suicide attempters

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	51	46.4	46.4	46.4
Female	59	53.6	53.6	100.0
Total	110	100.0	100.0	

Table 3: Educational status of suicide attempters

Education	Frequency	Percent	Valid percent	Cumulative percent
No formal education	13	11.8	11.8	11.8
Up to 12 th	70	63.6	63.6	75.4
>12 th	27	24.6	24.6	100.0
Total	110	100.0	100.0	

Table 4: Occupational status of suicide attempters

Occupation	Frequency	Percent	Valid percent	Cumulative percent
Student	16	14.5	14.5	14.5
Housewife	12	10.9	10.9	25.5
Employed	63	57.3	57.3	82.7
Unemployed	19	17.3	17.3	100.0
Total	110	100.0	100.0	

Table 5: Income status of suicide attempters

Income per month	Frequency	Percent	Valid Percent	Cumulative Percent
<10,000	72	65.5	65.5	65.5
10,000–25,000	34	30.9	30.9	96.4
>25,000	4	3.6	3.6	100.0
Total	110	100.0	100.0	

Table 6: Marital status of suicide attempters

Marital status	Frequency	Percent	Valid Percent	Cumulative Percent
Unmarried	54	49.1	49.1	49.1
Married	56	50.9	50.9	100.0
Total	110	100.0	100.0	

(49.1%). Most of the studies related to suicide had shown that common age groups for suicide attempt were between

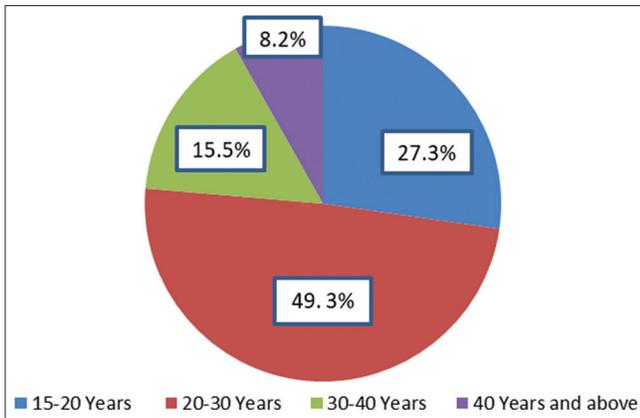


Figure 1: Age group of suicide attempters

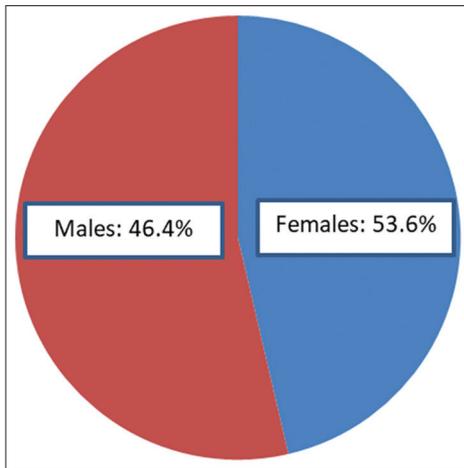


Figure 2: Gender distribution of suicide attempters

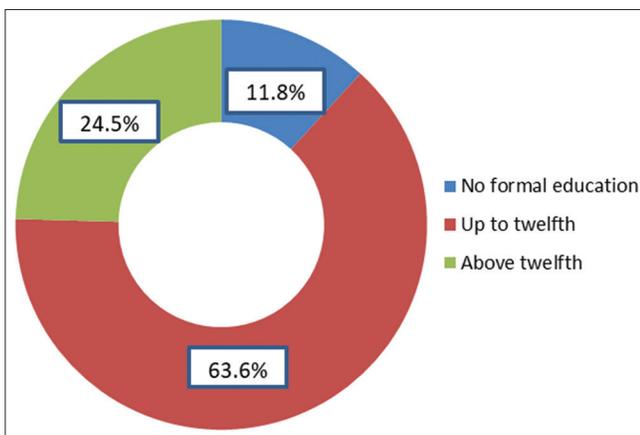


Figure 3: Educational status of suicide attempters

15 and 30 years. Tara and Ramana Rao^[16] had shown that common age groups for suicides were between 15 and 35 years, so our study had similar findings to these previous studies. Lewinsohn *et al.*^[18] had shown that adolescents had more risk factors for suicide such as hopelessness, recent stressful events, family violence, and lower academic achievement. The previous study by Shaffer and Fisher^[19]

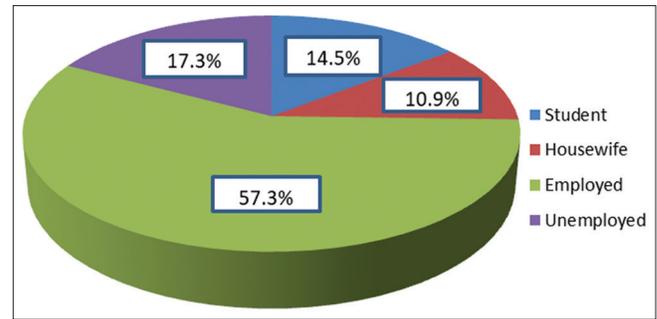


Figure 4: Employment status of suicide attempters

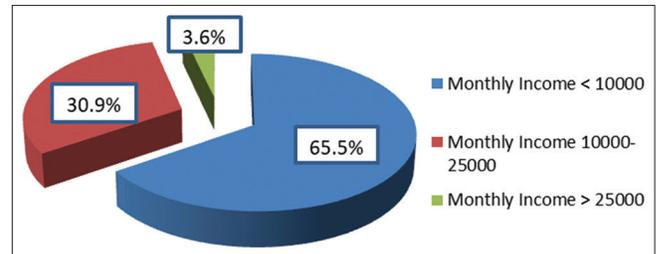


Figure 5: Income status of suicide attempters

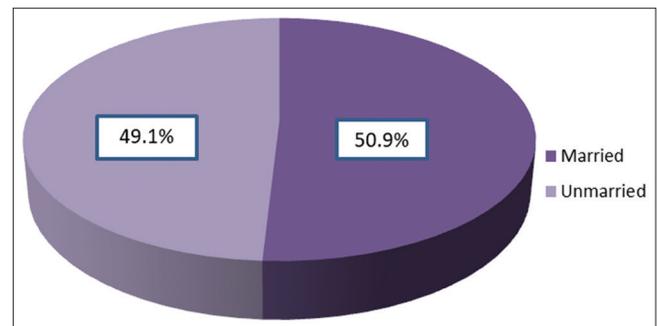


Figure 6: Marital status of suicide attempters

had shown that suicidal behavior increases markedly during adolescence. It has been found in a study by Morgan *et al.*^[20] that the incidence of attempted suicide was greatest in young adults.

Gender

Our study showed that the frequency of suicidal attempts was commonly more in female gender (53.6%). Tara and Ramana Rao^[16] had shown that 60% of the suicidal attempters was female in their studies. White,^[20] Otto,^[5] and an Indian study by Sudhirkumar *et al.*^[17] had all shown that females were the common gender in suicide attempts. Girls outnumbered the boys in attempting suicide according to Garfinkel *et al.*,^[4] Otto,^[5] and Kotila *et al.*^[6] Our study also had findings similar to many previous studies.

Education

Our study revealed that educated individuals especially those who have completed below 12th standard had more vulnerability for suicidal behavior ($n = 7$) (63.6%).

A study by Lajos Bálint^[21] revealed that higher educational attainment was significantly associated with decreased risks of suicide. This result is akin to our study. According to a study by Pompili *et al.*,^[13] individuals with higher educational achievement may be more prone to suicide risk when facing failures, public shame, and high pre-morbid functioning. A study by Ramdurg *et al.*^[15] also found out that suicide attempts were present more in individuals with educational level up to matriculation or beyond matriculation. These two findings are contrary to our findings.

Occupation

Our study found out that, compared to unemployed participants, the participants with employment had a high suicidal rate (57.3%). Our study had findings similar to previous study results of Ramdurg *et al.*^[15] They had shown that more suicidal attempts were present in employed persons than unemployed persons and they assessed the stressor scores which were high in employed persons. When dealing with psychosocial stressors in relation to employed persons, the level of stressors was more in individuals with employment than individuals with unemployment. A study by Tara and Ramana Rao^[16] had shown that 55% of the participants attempted suicides were only unskilled workers. However, a study by Beautrais^[22] had shown that one of the risk factors for suicide was unemployment.

Marriage

Our study results showed that there was a slight increase in suicide attempts in married populations (50.9%) when compared to unmarried populations (49.1%). Fleischmann *et al.*^[9] showed that increased frequency of suicides were present in married than unmarried persons and Ramdurg *et al.*^[15] also showed similar findings. Our study had similar findings as these previous studies. However, unmarried persons had a higher percentage of suicides according to Ponnudurai *et al.*^[7] and Latha *et al.*^[8]

Economic Status

The frequency of suicidal attempts was more common in individuals with income of less than Indian National rupees 10,000 per month in our study. Morgan^[20] and White^[23] had shown, that most of the suicide attempts came under lower middle socioeconomic status not from very low socioeconomic status. Our study also had similar findings as previous studies. A study by Ramdurg *et al.*^[15] had also shown that participants with low socioeconomic status had a high suicidal rate.

CONCLUSION

In summing up, this study results show, that common age group for suicidal attempts was between 20 and 30 years.

Female gender had higher percentage of suicidal attempts than male population, those with educational level below 12th standard had a higher suicidal vulnerability. More suicidal attempts were seen among employed, regarding income status suicide commonly occurs in groups having income less than Rupees 10,000 per month. Married persons had high suicidal rate when compared to unmarried persons.

Thus, we have established the sociodemographic profile of suicide attempters among the cases referred to our psychiatric outpatient department. Greater emphasis and care to these vulnerable sections would go a long way in preventing suicidal attempts among them.

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