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# **RESEARCH ARTICLE**

## SOCIODEMOGRAPHIC PROFILE IN SUICIDE ATTEMPTERS

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## **ARTICLE INFO**

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## **ABSTRACT**

These just gory newspaper headlines we avidly read but quickly gloss over. This explains multidimensional aspect of Suicide, a complex, multidimensional phenomenon that has been studied from socio-demographical perspective. This study examine socio-demographic characteristic of these subjects. The study was conducted in multi specialty hospital during the period of one year after obtaining ethical clearance for the study from the institutional ethical committee, all unit chiefs of clinical side, casualty medical officer and staff nurses in charge of the emergency care department are informed about this study. They were requested to inform investigator whenever a case of suicidal attempt is admitted. Housewives and student formed majority in the study. Poisoning (73%) was the most common method used for suicidal attempt, followed by drug overdose (21%). Benzodiazepine was most commonly used drug for overdose.

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## INTRODUCTION

A woman burns herself to escape daily harassment by in-laws over inadequate dowry. Finance Dealer ends his life to fend off the horde of creditors. The scion of an industrial empire kills himself after an uneasy marital relationship. Buddhist monks immolate themselves over Vietnam. Roop Kunwar commits Sati at Deorala. Somehow, the diagnosis helps us place the event in perspective and accept it as justified, even if undesirable. It does not shock us, or benumb us, as much as the others. These just gory newspaper headlines we avidly read but quickly gloss over. This explains multidimensional aspect of Suicide, a complex, multidimensional phenomenon that has been studied from socio-demographical perspective.

## Magnitude of problem

More than 4,00,000 people commit suicide all around the world every year. It is amongst the top ten causes of death for all ages in most countries of the world. In some, it is amongst the top three causes of death in the younger age group (15-34 years). Moreover, it is the second most important cause of death in the age-group 15-19 yrs., second only to vehicular accidents. If this were not enough, we must note that suicide is under reported by 20-100%. If we take the 1994 figure reported above as the base, this figure in 2000 was projected

as 5,00,000 plus. Even if we take 60% under reporting (average of 20-100%), we are talking of around 8,00,000 lives all around the globe getting exterminated in this manner every year. Moreover, this is the figure of successful suicides. Attempted suicides are around ten times the figure i.e. 80,00,000 people attempt suicide, out of which 8,00,000 succeed in ending their lives. Attempted suicides involve a great effort on the part of medical and paramedical professionals and health care delivery systems, the immediate caregivers, the NGOs, and society at large to manage this colossal burden of morbidity and mortality. Moreover, research studies have found that 1-2% of attempted suicides become successful suicides every year. This means 10-20% attempted suicides will end their lives in a decade. Therefore, prevention and treatment of both potential and attempted suicides and identifying the population at risk has to become a major public health priority area.<sup>1</sup>

Wide variation in the frequencies of psychiatric disorder reported in Indian studies ranging between 5.5 to 93%. Great majority of people who attempt are actually ambivalent about taking their lives. The irreversible choice is made when they are alone and in a state of severe psychological stress, unable to see their problems objectively and evaluate an alternative course of action. Hence factors leading to that state needs to be studied in order to aid suicide prevention. In recent years attempted suicide has become the focus of research as it has been found to be the predictor of suicide.<sup>2</sup>

## **Aims and Objectives**

- \* To examine socio-demographic characteristic of these subjects.
- \* To elicit the stressors, a year prior and a month prior to the suicidal attempt.

## **MATERIALS AND METHOD**

This study is conducted in a Ttertiary care multi-specialty teaching hospital and it is Cross sectional study.

**Study Sample:** 100 consecutive patients of suicide attempt during June 2006 To May 2007.

# **METHODOLOGY**

The study was conducted in multi specialty hospital during the period of one year after obtaining ethical clearance for the study from the institutional ethical committee, all unit chiefs of clinical side, casualty medical officer and staff nurses in charge of the emergency care department are informed about this study. They were requested to inform investigator whenever a case of suicidal attempt is admitted.

## **Inclusion Criteria**

- Patients admitted for treatment of attempted suicide whose physical condition was stable & could undergo detailed assessment.
- **2.** All patients of 16yrs of age and above.

#### **Exclusion Criteria**

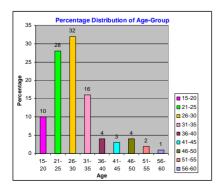
- 1. Patients who refused to give consent.
- 2. Pt who were critically ill and/or medially unstable that an interview was not possible.

Socio-demographic data are assessed using a specially designed performance drawn up for this purpose. Appropriate scales were used to fulfil the objectives of the study.

## **RESULTS**

Table 1: Frequency distribution of data by age group (n=100)

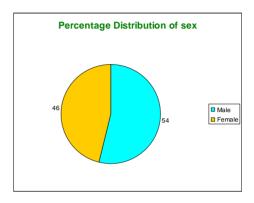
AGE-GROUP	FREQUENCY	PERCENTAGE
15-20	10	10.0
21-25	28	28.0
26-30	32	32.0
31-35	16	16.0
36-40	4	4.0
41-45	3	3.0
46-50	4	4.0
51-55	2	2.0
56-60	1	1.0
TOTAL	100	100



Mean age of the sample was 28.35 years ( $\pm$  8.29). The youngest patients were sixteen years of age. The oldest patient was fifty-seven years of age. Majority of patients, 70% belonged to 15-30 years of age group.

Table 2: Frequency distribution of data by sex-wise (n=100)

SEX	FREQUENCY	PERCENTAGE
MALE	54	54
FEMALE	46	46
TOTAL	100	100

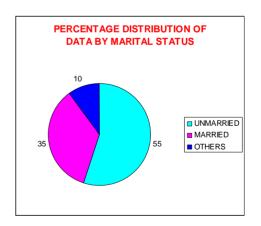


Of 100 patients, 54 were male and 46 were female. This shows suicidal attempts were more common in males than females.

#### **Marital Status**

Table 3: Frequency distribution of data by marital status (n=100)

VARIABLES	FREQUENCY	PERCENTAGE
UNMARRIED	55	55
MARRIED	35	35
OTHERS	10	10
TOTAL	100	100



55% of study population was constituted by unmarried patients, 35% were married and 10% belonged to others (separated, divorced and widowed).

## Socio – Economic Status

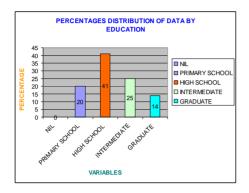
The socio-economic status was assessed depending on

- 1. Education
- 2. Per capita monthly family income
- 3. Occupation.

#### **Education**

Table 4: Frequency distribution of data by education (n=100)

VARIABLES	FREQUENCY	PERCENTAGE
NIL	0	0
PRIMARY SCHOOL	20	20.0
HIGH SCHOOL	41	41.0
INTERMEDIATE	25	25.0
GRADUATE	14	14.0
TOTAL	100	100



All patients had some form of formal education. 61% of the patients had education below intermediate and 39% educated above intermediate.

#### **Economic status**

Table 5: Monthly income of family (n=100)

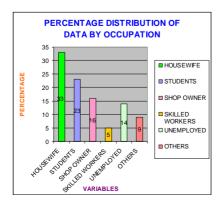
S/NO.	SOCIAL CLASS	NUMBER OF PATIENTS
1.	Higher (≥ 1000/head/ month)	29
2.	Higher middle (500 – 999)	57
3.	Middle (300 – 499)	14
4.	Lower middle (150 – 299)	0
5.	Lower (< 150)	0

Most of the patients (86%) belonged to higher (29%) and higher middle (57%) class according to modified Prasad's scale. 14 (14%) patients were from middle socio economic class.

## Occupation

Table 6: Frequency distribution of data by occupation (n=100)

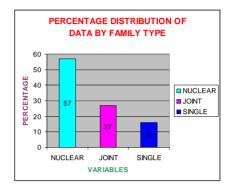
VARIABLES	FREQUENCY	PERCENTAGE
HOUSEWIVES	33	33.0
STUDENTS	23	23.0
SHOP OWNER	16	16.0
SKILLED WORKERS	5	5.0
UNEMPLOYED	14	14.0
OTHERS	9	9.0
TOTAL	100	100



## **Family Type**

Table 7: Frequency distribution of data by family type (n=100)

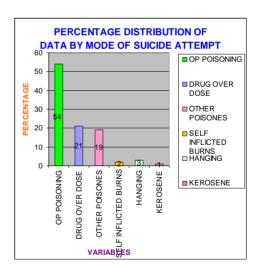
VARIABLES	FREQUENCY	PERCENTAGE
NUCLEAR	57	57
JOINT	27	27
SINGLE	16	16
TOTAL	100	100



## Mode Of Suicidal Attempt

Table 8: Frequency distribution of data by mode of suicide attempt (n=100)

VARIABLES	FREQUENCY	PERCENTAGE
OP POISONING	54	54.0
DRUG OVER DOSE	21	21.0
OTHER POISONES	19	19.0
SELF INFLICTED BURNS	2	2.0
HANGING	3	3.0
KEROSENE	1	1.0
TOTAL	100	100



Of 100 patients, 73(73%) patients used poisoning as method of attempting suicide, 54 of them used organophosphorous (OP) compounds, 19 used other poisons (phenyl, rodenticide). 21 (21%) patients adopted drug over dosage as the method of attempting suicide. Hanging (3%), self-immolation (2%), kerosene consumption (1%) were the rare methods adopted by our population.

## **DISCUSSION**

Mean age of the sample was 28.35 years ( $\pm$  8.29). The youngest patients were sixteen years of age. The oldest patient

was fifty-seven years of age. Majority of patients, 70% belonged to 15 – 30 years of age group. All over world the attempted suicide rate among adolescents and young adults is alarmingly increasing. This is in accordance with other Indian studies. The particular vulnerability in adolescents and young adults may due to emotional turmoil, interpersonal problems, increase in alcohol and substance abuse, breakdown in extended family, job difficulties and academic setbacks. Thus as large number of this high-risk group enters the phase of life associated with greatest risk. Of 100 patients, 54 were male and 46 were female. This shows suicidal attempts were more common in males than females. This is similar to most of Indian studies,<sup>4</sup> but in contrast with other studies<sup>5</sup> where female predominance is noted. This can be explained by the fact that, the study site being a tertiary referral center, only cases of high medical/surgical seriousness are seen. As its known that, men are less likely to seek help, admit the severity of symptoms, or accept treatment, increasing their likelihood of using lethal means of suicidal attempt. Where as, women tend to have more social support, more willing to seek help and lower rates of alcohol and substance use disorders, all of which may have protective effects. 55% of study population was constituted by unmarried patients, 35% were married and 10% belonged to others (separated, divorced and widowed). Similar to findings reported by other studies.<sup>3</sup> One of the probable reasons contributing to increased unmarried population attempting suicide is lack of social support. 23 out of 55 unmarried patients were students contributing to the rise in attempted suicide rate seen among unmarried patients group in the present study.

Probable protective factors in married individuals were greater likelihood of social integration, feeling of a sense of responsibility towards others, presence of children, increased adaptability to stressful circumstances. All patients had some form of formal education. 61% of the patients had education below intermediate and 39% educated above intermediate. There is a possibility of higher level of education is offering better ways of thinking and perceptual processing, which forms a protective factor. Socio-economic factor and unemployment in aetiology of suicide have been recognized as important. Employment status directly reflects on the socioeconomic status of the person, being unemployed causes major financial burden and pushes the patients to lower socioeconomic class. In the present study, 14 patients were belonging to middle class having per capita income of family between 300-499 rupees. They were unemployed and attributed suicidal attempt for being jobless. In the present study, housewives constituted 33%, students 23%, shop owners 16%, skilled workers 5%, unemployed 14%, and others (laborers, farmer, retired) 9%. In the present study, students and housewives also formed the majority; which is in accordance with the above study.

In the present study, housewives constituted 33%, students 23%, shop owners 16%, skilled workers 5%, unemployed 14%, and others (laborers, farmer, retired) 9%. Narang et al 2000, reported 30% were housewives, 23% were students, 8% were unemployed, 14% were shop owners in their study at medical college Ludhiana. In the present study, students and housewives also formed the majority; which is in accordance with the above study. Housewives and students are more likely to be exposed to interpersonal problem with parents,

in-laws, spouse and other family members this could be probable reason for attempting suicide in these population. As observed by other studies <sup>3</sup>, we also found that people from nuclear family constituted majority (57%) in the present study. socio-psychological perspective the structural classification into nuclear and joint, exerts great influence on the individual. Nuclear family is an autonomous unit on which the impact of stressors is more than the extended family. Joint family provides a protective environment to individual where he can deal with stressors and his individual problems in a better way, with the help of several others where in this is not possible in nuclear family. 16% of the study population were staying single. Majority of them were students (16 patients) staying in hostel. Of 100 patients, 73(73%) patients used poisoning as method of attempting suicide, 54 of them used organophosphorous (OP) compounds, 19 used other poisons (phenyl, rodenticide). 21 (21%) patients adopted drug over dosage as the method of attempting suicide. Hanging (3%), self-immolation (2%), kerosene consumption (1%) were the rare methods adopted by our population.

There has been gradual increase in the rates of poisoning from 22.6% to almost 100% due to easy accessibility various agents in India. The results from the present study are in keeping with Indian studies where other modes combined together formed approximately 20% of individuals. Michel et al 1994, found a 46% usage of benzodiazepine in suicide attempters, often in combination with other drugs and alcohol. Serfaty and Masterson drew attention to the neglected problem of toxicity of benzodiazipine in over doses. In the current study, 21(21%) subjects used benzodiazepine for suicidal attempts, 4 of them had consumed it in combination with TCA's, probably attributed to free availability of these drugs without prescription.

## Conclusion

Attempted suicide is the burning issue as it is 10 - 25 times more than completed suicide and the most important public health concern. Wide variation in the frequencies of psychiatric disorder reported in Indian studies ranging between 5.5 to 93%. We decided to evaluate psychiatric morbidity along with other important aspects of attempted suicide. The study was carried at a tertiary care multispeciality teaching hospital, 100 consecutive patients of suicidal attempt were evaluated during june 2006 to may 2007. Data was collected on a specifically designed Performa for socio-demography, mode of suicidal attempt, past history of suicidal attempt. The following results were observed. Suicidal attempt was commonly seen in unmarried male. Housewives and student formed majority in the study. Poisoning (73%) was the most common method used for suicidal attempt, followed by drug overdose (21%). Benzodiazepine was most commonly used drug for overdose.

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