



SOCIO DEMOGRAPHIC RISK FACTORS AMONG DELIBERATE SELF-HARM IN YOUNG WOMEN WITH TERTIARY CARE

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ABSTRACT

A high suicide rate in any society is an index of social disorganization. About one million people commit suicide each year. More than one lakh lives are lost every year to suicide in India. The prevalence is due to various socio-cultural stigmas, religious sanctions, legal issues, and insufficient registration systems. Suicide is the second most important cause of death in the younger age group (15-19years), second only to vehicular accidents. So the present study is to identify the risk factors in socio demographic characteristics involved in Deliberate Self-Harm in young women attending a tertiary care hospital in South India. 50 patients those who are female patients aged between 12 – 24 years presenting with deliberate self harm using purposive sampling technique. Socio demographic data and Kuppaswamy's Socio Economic Status Scale (Modified for 2007) were used for the tools. The study concluded that the young women from Hindu religion, rural background, low SES, educated, school students and house wives are more prone to indulge themselves in the act of deliberate self harm.

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INTRODUCTION

A high suicide rate in any society is an index of social disorganization (Gouda NM & Rao SM, 2008). About one million people commit suicide each year (WHO, 2008). Suicide is the second most important cause of death in the younger age group (15-19years), second only to vehicular accidents (Ajay R Singh, Shakuntala A Singh, 2004). In the last two decades the suicide rate has increased from 7.9 per lakh in 1985 to 10.3 per lakh in 2005 (Accidental deaths and suicides in India, 2006). The number of suicides in the country during the decade (1999-2009) has recorded an increase of 15% (from 1, 10, 587 in 1999 to 1, 27, 151 in 2009) (National Crime Records Bureau, 2011).

Although suicide can be interpreted as a deeply personal and an individual act, suicidal behavior is determined by a number of individual and social factors. Ever since it was proposed that suicide was an outcome of social / societal situations (Vijayakumar L, 2006). Findings from different countries reveal that suicide attempts can be 10-40 times more frequent than completed suicides and 15-23% of those who attempted suicide will receive treatment for a subsequent attempt within one year (Schmidtke A, Bille Brahe U, De Leo D, et al. 1996). However, since there are no Indian data on attempted suicide,

the actual magnitude of the problem in our country is unknown.

Nearly 80% of suicide completers are men, whereas the majority of lifetime attempters are women (Moscicki EK, 1994) whereas the lifetime prevalence in adults ranges from 1.1 to 4.3 per 100; estimates of 12 month prevalence of attempts range from 0.3 to 0.8 per 100 (Moscicki EK, 1997). The majority was females and most was between 20-24 years of age, male: female ratio was 0.87:1 and the mean age was 36.9 ± 12.8 years (Casey PR, 1989). National representative survey and reported that female sex, being married, age less than 25 and low educational level were related to the risk of attempt (Suominen K et al., 1996). It is well recognized that males tend to use violent means of both suicide and DSH more often than do females. Greater suicidal intent, aggression, knowledge regarding violent means and less concern about body disfigurement, are all likely explanations for the excess of violent suicides in males (Hawton K, 2000).

Unemployment, retirement, being single, sickness were significant risk factors for men, whereas having a child <2 years old was significantly protective for women. The relative risks for suicide differed significantly between genders according to psychiatric admission status and being the parent of a child <2 years. However, adjustment for these factors did

not eliminate the gender difference in suicide risk (Qin P, Agerbo E, 2000). Lower socio-economic status youths tended to be more likely to attempt suicide than higher socio-economic status youths (Selma A, 1988). These studies indicate that people from lower socioeconomic status are more vulnerable for deliberate self-harm than people from other socioeconomic class. There are very few studies on women attempting suicide and there are only countable numbers of studies in young women attempting suicide. Considering the above facts, there is definitely an urgent need to look for the Socio demographic risk factors of deliberate self-harm in young women. In the present study, an attempt is made to find the risk factors, which would contribute to suicide prevention strategies and reduce the deaths of young women.

METHODOLOGY

Aim

To identify the risk factors in socio demographic characteristics involved in Deliberate Self-Harm in young women attending a tertiary care hospital in South India.

Objectives

To study factors such as socio-demographic profile including socio-economic status of young women presenting with deliberate self harm.

Sample

The study was conducted in Pondicherry Institute of Medical Sciences for a period of one and a half years after obtaining ethical clearance for the study from the institutional ethical committee. The casualty medical officer and staff nurses in charge of the emergency care department were informed about the study. They were requested to inform the investigator whenever a case of suicidal attempt which fulfilled the inclusion criteria was admitted. 50 patients those who are female patients aged between 12 – 24 years presenting with deliberate self harm. The patients were selected from the Pondicherry Institute of Medical Sciences, Pondicherry. It is a cross sectional study using purposive sampling technique. Patients who refused to give consent and patient who were critically ill and/or medically unstable that an interview was not possible were excluded.

Tools Used

Socio demographic data

Socio demographic data were documented in a specially designed proforma which includes age, education, income, religion, socio-economic status etc.

Kuppuswamy's Socio Economic Status Scale (Modified for 2007)

This scale is widely used to assess socioeconomic status. The scale assesses socioeconomic status on three parameters – education, occupation and family income. The original scale designed by Kuppuswamy in 1976 has undergone many modifications given the rapidly changing socioeconomic scenario in India. Modifications to this scale are made in terms of family income periodically.

Procedure

Assessment was done as early as possible during the hospital stay. The patients who underwent tracheostomy were assessed when tracheostomy was closed & when they were able to

communicate properly. Patients were explained about the nature of study & told that their non-participation will not affect the treatment in anyways. Confidentiality about the identity & data gathered was assured. After this those who consented to participate were assessed. Socio-demographic data, clinical details and social economic status were obtained using a preformed Performa and also with appropriate instruments.

RESULTS

The data collected was analyzed using descriptive statistics. Frequency and Percentage were performed to identify the Socio Demographic Risk Factors among Deliberate Self-Harm in Young Women with Tertiary Care.

Table – 1 shows the Frequency and Percentage among Socio Demographic Risk Factors among Deliberate Self-Harm in Young Women with Tertiary Care (N = 50)

Risk Factors		Frequency	Percentage
Age	12-18	17	34.0%
	19-24	33	66.0%
Religion	Hindu	43	86.0%
	Christian	6	12.0%
Domicile	Muslim	1	2.0%
	Rural	37	74.0%
Socio-Economic Status	Urban	13	26.0%
	Upper	2	4.0%
Education	Upper Middle	10	20.0%
	Lower Middle	15	30.0%
Occupation	Upper Lower	22	44.0%
	Lower	1	2.0%
Marital Status	Primary	2	4.0%
	High School	19	38.0%
Family Type	Intermediate	10	20.0%
	Graduate	19	38.0%
Occupation	School Student	13	26.0%
	College Student	9	18.0%
Marital Status	Employed	6	12.0%
	Unemployed	9	18.0%
Family Type	House-Wives	13	26.0%
	Single	36	72.0%
Family Type	Married	14	28.0%
	Nuclear	38	76.0%
Family Type	Joint	12	24.0%

In the sample of 50 patients, 34% of the patients were between the age group of 12-19 years and 66% of the patients were between the age group of 19-24 years. Majority of the subjects were Hindus (86%), 12% were Christians and only 2% were Muslims. Nearly three- fourths (74%) of the subjects came from rural background and one-third (26%) were from urban background. The socio-economic class (Based on Kuppuswamy's socio economic status scale-modified for 2007) was largely within upper lower (44%), lower middle (30%) and upper middle (20%) class. There were only 2% and 4% from lower and upper class respectively. Thirty eight percent of the subjects in our study sample were graduates and thirty eight percent had completed or were studying in high school, twenty percent had finished or were studying intermediate schooling. Only four percent fell in the category of primary school education. Thirteen patients (26%) of our sample were school students and housewives each, 9 patients (18%) were unemployed and college students each, only 6 patients (12%) were employed. 72% of the subjects were unmarried and 24% were married. A significant number of subjects were from nuclear family (76%) and others (24%) were from joint family.

DISCUSSION

Through this study, an attempt was made to study the risk factors in socio demographic profile and socio-economic status, associated with deliberate self-harm in young women. The mean age of the sample was 19.9. This is comparable to findings from another similar study done in India (Kumar CTS, Chandrasekaran 2000). Majority of the subjects (66%) were between the age group of 19- 24 years. This was similar to the observation made by Casey PR *et al* (1989), Rao (1965) and eighty six percent of the study sample was Hindus. This finding is similar to other previous studies (Sathyavathi K, 1971 & Pratha Pratin Das *et al.*, 2008).

This study was conducted in a tertiary care hospital (PIMS), which is located in the Outskirts of Union Territory of Pondicherry. The finding of large percentage (74%) of study sample from rural background is explained on the basis of this fact. However, a similar finding was reported by Sharma RC (1998).

As in our study, the majority of the patients from another Indian study were from the lower socio-economic class (Nagaraj, R., Mishra, B., & Mphan, N, 2000). Similar finding was noted by two western authors (Moscicki EK *et al.*, 1988 & Selma A. Lewis, 1988).

House-wives and students accounted for 26% and 44% of occupational categories of deliberate self-harm respectively. Sethi *et al.*, (1978) found 29.3% of students and 18.7% of house-wives in his study (Sethi,B.B, Gupta,S.C and Sing, 1978) whereas Gupta and Singh (1981) noted 31% of students and 16% of house-wives among his sample. One other Indian study, noted that 23.2% of house-wives (Chandrasekaran R *et al.*, 2003). 39.9% of his study samples were unemployed, where as our sample has only 18% unemployed subjects, which is contrary to the above study. Two more Indian studies have noted a higher percentage of unemployed subjects in their study samples (Srivatsava, M *et al.*, 2004 & Kumar C T S & Chandrasekaran R A, 2000).

Education of the participants was not discussed, considering the age group of the participants in this study, as many of the subjects planned to continue their education after discharge. However, majority of the subjects in our study sample were literates and only four percent of patients discontinued their education at primary school level. More percentage of educated subjects in our study sample is similar to the findings of Sathyavathi (1971). This finding is contrary to the findings of Srivatsava *et al.*, (2004).

Our finding of single individuals outnumbering those who were married is similar to the observation made by Aghanwa (2000) and Kumar CTS, Chandrasekaran (2000). However, other Indian studies had a study population of predominantly married individuals (Srivatsava *et al.*, 2004 Lal and Chandrasekaran *et al.*, 2003). Among our study sample, majority (76%) was from nuclear family and this is comparable to the findings from another Indian study. However, other Indian study by Kumar CTS, Chandrasekaran (2000) had more number of subjects from joint family in their study population, which is contrary to our findings.

CONCLUSION

Young women from Hindu religion, rural background, low SES, educated, school students and house wives are more

prone to indulge themselves in the act of deliberate self harm. Hence, public education against deliberate self-harm and timely psychosocial management of the vulnerable cases through a protracted community based mental health program may help to reduce the frequency of deliberate self-harm. There is also need to develop clear policy for sale and possession of insecticides.

Limitations of the Study

One of the main limitations of this study was the relatively small size of the study sample. The small sample size limits the generalization of the finding of this study. Applicability of these findings to the community is uncertain, as this was a hospital based cross-sectional study. This study did not have a control group to compare with the cases and this is another limitation of the study. This study also did not look at the suicidal intent of the subjects at the time of deliberate self-harm, stressors and psychiatric morbidity.

Suggestions for Further Study

Increasing the sample size and having a control group could help us in finding new risk factors and to confirm the importance of known risk factors for deliberate self-harm.

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