



SUICIDAL ATTEMPTS AND ITS CLINICAL CORRELATES.

Dr Chandra Sekhar Tripathy

Associate professor, Dept of Psychiatry MKCG Medical College, Berhampur, Odisha.

Dr Bhabani Shankar Shit*

MD (Psychiatry) Associate professor, Dept of Psychiatry HTMC & Hospital, Rourkela, Odisha. *Corresponding Author

Dr Amrit Patojoshi

M.B.B.S., M.D, DPM. Professor, Dept of psychiatry Hi-Tech Medical College and Hospital, Bhubaneswar, Odisha,

Dr. Ajay Kumar Bakhla

M.B.B.S., M.D, DPM. Associate Professor of Psychiatry, Department of Psychiatry Rajendra Institute of Medical Sciences (RIMS), Ranchi, Jharkhand, India-834009

ABSTRACT

OBJECTIVE: To assess gender and socio demographic factors and its association with suicidal attempts.

METHODS: A total sample size of 70 persons who attempted suicide at a general hospital setup were included and investigated for the study. All subjects were assessed with their socio-demographic profile and all persons were subjected to standard psychiatry interview, mental status examinations and appropriate psychiatric diagnosis was given.

RESULTS: A total of 70 persons consisted of 28 males and 42 females, who attempted suicide were investigated for this study, mean age of total sample was 29.55 ± 8.35 years. Methods used for suicidal attempt in this study was using medication overdose or pesticide, that constitute as 51.4% of the sample, 30% attempted by wrist slashing, hanging by 8.6%, Neck slashing by 5.7% and finally 4.3% by drowning. Among the suicide attempters 32.9% had no diagnosis, Acute stress and adjustment problems were 35.75%, Depression constituted 20%, and personality disorders was among 11.4%.

CONCLUSIONS: The present study revealed female male ratio of 1.5: 1 in attempted suicide subjects with predominantly method of was using drug overdose or consuming pesticide, about 35 % of the reasons can be attributed to acute stress and adjustment issues.

KEYWORDS : Suicide, attempts, parasuicide.

INTRODUCTION

Every year, more than 1,00,000 people commit suicide in our country. Approximately 1,34,599 persons have ended their lives by their own hands in 2010. The numbers of suicides have steadily increased over the years outpacing the growth of population in proportion. The number of suicides in the country during the decade (2005–2015) have recorded an increase of 17.3% (1,33,623 in 2015 from 1,13,914 in 2005) [1]. Presence of a mental disorder is considered as an important risk factor associated with all suicidal phenomena, however there may be various other causes of suicides like professional/career problems, discrimination, sense of isolation, abuse, violence, family problems, mental disorders, addiction to alcohol, financial loss, chronic pain etc. [1]. Among the psychiatric disorders depression represents a major and a treatable psychiatric risk factor, in addition to substance abuse (among youths and adult) and with somatic illnesses (among the elderly) are important issues. [2,3]

In recent times a distinction is sought to be made between suicides and attempted suicides. Self destructive behavior and non fatal suicide attempts have been conceptualized as "Para Suicide" [4]. The ratio between attempted suicides and suicides was found to be as high as 10:1 [5]. However, in India the ratio was found to be 4:1 [6]. It is known that 50% of the persons attempting suicide once are likely to repeat within the next one year.

Gender remains a significant factors across many studies concludes that women outnumber men in suicide attempts, but completed suicide rates remain equal for both men and women in India [1]. A study by Singh and Rao found a predominant prevalence 64.10% of females over male prevalence of 35.9% [7]. A broad range of mental disorders are found to be associated with suicidal behavior along with the proximal mental events like acute stress and adjustment issues [4,6]. we planned this cross sectional observational study to assess the socio demographic variables associated with and gender difference among persons who attempted suicide.

MATERIALS AND METHODS

The study was conducted at a tertiary hospital having a full-fledged department of psychiatry, offering round the clock emergency services. The department also offers consultation liaison services to all other specialties, super specialty departments and general emergency services. All persons who were above 18 years of age, who were brought to the casualty department with history of self-destructive behavior were included in the study. The investigator assured the patient, as well as the caregivers, full confidentiality. Informed consent was obtained from all. The study was approved by institution's ethical committee. All persons were subjected to standard psychiatry interview and appropriate psychiatric diagnosis was given if any constellation of symptoms satisfied the criteria of ICD-10, diagnostic criteria for research.

TOOLS

Socio-demographic Data Sheet: The socio demographic data sheet included age, marital status, religion, education and occupation.

Statistical Analysis: The collected data of all Patients was statistically analyzed .X² test was used to test significance of categorical data. In case of continuous data Student's t test was used. However as the data were not balanced and platy kurtic data were transformed into log 10 as per Holmes et al 2006. Only percentages were used at places for drawing comparisons.

RESULTS:

A total of 70 persons who attempted suicide were investigated for this study. The sample consisted of 28 males and 42 females, (male:female ratio comes to 1:1.5) . The mean age of total sample was 29.55 ± 8.35 years. Mean age of the males was 28.21 ± 8.26 Years while that of females was 30.45 ± 8.39 years. There was no significant difference between mean ages of male and female patients. ($t=1.100$, $P=.275$) Table1. The mean years of education completed was 11.07 ± 4.67 for males and 8.83 ± 6.05 for females. Occupation wise

mostly were students 46.4% males and 50% females, followed by unemployed 42.9% and 35.7% respectively for male and female suicide attempters [Table 1].

The most common method used for suicidal attempt in this study was using medication overdose or pesticide, that constitute as 51.4 % of the sample, 30% attempted by wrist slashing, hanging by 8.6%, Neck slashing by 5.7% and finally 4.3% by drowning. On comparing modes of attempt males and females both were took overdose of medicines or consuming pesticides were 50% and 52.4% respectively. Similarly for Drowning it was 7.1 and 2.4%, for wrist slashing it was 21.4 and 35.7%, for hanging it was 14.3% and 9.5% respectively for males and females. Neck slasing was found exclusively among male patients and there was alcohol abuse found with these patients. (Pearson Chi-Square =8.161; df=4; p = 0.086) [Table-2]

On diagnostic evaluation 32.9% of the sample had no diagnosis, Acute stress and adjustment problems were 35.75 and it was most commonly associated problems. Depression constituted 20%, and personality disorders was found among 11.4% of suicide attempters.

Among males and female patients no diagnosis could be established in 11 (39.3 %) male patients and 12 (52.4%) females; 10 (35.7%) males and 15 (35.7%) females had stress / adjustment problems. Even depression was also high among females 11 (26.2%) in comparison to 3 (10.7%) male attempters. There were 4(14.3%) and 4 (9.5%) male and female attempters respectively. (Pearson Chi-Square=2.932;df=3;p=0.402) [Table-2]

DISCUSSION

In this study we reviewed the gender difference on occupational profile, diagnosis and modes of attempts among suicidal attempters, who were survived and admitted to ours hospital and psychologically evaluated and counseling. We evaluated a total of 70 attempters consisting of 28 males and 42 females, this reflects male:female ratio as 1:1.5. This found gender ratio is concurrent with many earlier studies, including the 16 centre European study reported same gender ratio [8]. Maharashtra is one of the leading suicide states of India. Among the completed suicides in our country a male: female ratio of 65:35 has been reported [1]. As far as attempted suicides are concerned a reverse trend has been reported by various workers [8-10].

The mean age of ours study was found to be 29.55 years, The age of suicide attempters ranged from 16 to 45 years. Many study reflects similar age related vulnerability, in India Srivastava and Kulshreshtha reported male under 35 were at risk [10]. While Lal and Sethi reported housewives below 30 years of age were at risk [9]. Globally parasuicide is generally considered as a problem in the young (under 35) while suicide as a problem in the old [4]. There was no significant difference in the mean age of male and female persons. So, it appears that mean age reflects the general trend. In India even completed suicide appears to be a problem of young as 70.1% of suicide victims are below 44 years of age [1].

In ours study we found male and female as 46.4 and 50 % of the present study samples were students, which is a serious concern of loosing young lives. Unemployment is also significant associated 42.9 % for males, though many were school dropouts. unemployment for females were 35.7%, which included housewives. These figures are quiet in contrast with those of completed suicide where 26.1% were unemployed and only 5.5% were students [1]. The preponderance of unemployed in men and women is striking and indicates that it constitutes suicidal constructs. The figures are comparable to those of completed suicides.

Regarding modes of suicidal attempts 50-52% of the sample used drug overdose or insecticide consumption, in contrast total 10 subjects attempted much violent or lethal methods like hanging or

neck slashing, additionally only 3 persons attempted drowning. More lethal means of attempt is usually found in completed suicide. We found neck slashing only among male attempters, which was also associated with alcoholism.

We established psychiatric diagnosis among 60% of male and 71% of female suicidal attempters, also stress and adjustment remained most common problems among both gender (35.7%). However it is reported that 90 to 94% of people who completed suicide had mental illness [11,12] and mood disorders were reported in 45-77% of suicides [13]; the figures for suicidal attempts are not known. But Adjustment Disorders and Personality disorders reported to be more likely in suicidal attempts while mood disorder, psychosis and substance use predominate in completed suicides [4]. Limitation of this present study includes hospital based, small sample size and observational design.

CONCLUSION

The present study revealed female male ratio of 1.5: 1 in attempted suicide subjects with predominantly method of was using drug overdose or consuming pesticide, about 35 % of the reasons can be attributed to acute stress and adjustment issues.

Table 1. Age and sex of the sample and socio occupational distribution. n=70

		Male (n=28)	Female (n=42)	t	Df	P value
Mean age (in Years)		28.21± 8.26	30.45± 8.39	-1.100	68	.275
Education (in Years)		11.07 ± 4.67	8.83 ± 6.05	1.654	68	.103
				Chi square		
Occupation	student	13 (46.4%)	21 (50%)	.433	2	.805
	employed	3 (10.7%)	6 (14.3)			
	unemployed	12 (42.9%)	15 (35.7%)			

Table 2 . Clinical variables methods of suicidal attempts and diagnosis.

		Male	Female	Pearson Chi- Square	df	p value
METHOD OF SUICIDAL ATTEMPT	overdose / Pesticide	14 (50 %)	22 (52.4%)	8.161	4	.086
	Drowning	2 (7.1%)	1(2.4%)			
	Wrist slashing	6 (21.4%)	15 (35.7%)			
	Hanging	2 (7.1%)	4 (9.5%)			
	Neck slashing	4 (14.3%)	00			
DIAGNOSES	No diagnosis	11 (39.3%)	12 (28.6%)	2.932	3	0.402
	Stress/ Adjustment	10 (35.7%)	15 (35.7%)			
	Depression	3 (10.7%)	11 (26.2%)			
	Personality disorder	4 (14.3%)	4 (9.5%)			

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