

A Clinical Study of Attempted Suicide by Self-Poisoning

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Abstract: *Self - poisoning refers to the intentional taking of too much of a poisonous substance believing that it will be noxious. Patients who attempt suicide seem to suffer from a wide variety of psychiatric illnesses including personality disorder. The annual rate of suicide in the cities of India ranges from 3.2 per 100, 000 in Calcutta, to 25.6 per 100,000 in Bangalore*

Keywords: *Self – poisoning, suicide in the cities.*

1. Introduction

Self - poisoning refers to the intentional taking of too much of a poisonous substance believing that it will be noxious. There are three essential components of the act :

1. That it must be deliberate not accidental;
2. That the quantity must be known to be excessive and
3. That it is realized that this may be harmful

As regards to methods adopted, self - poisoning seems to be the most common followed by hanging and drowning.

On the basis of intent and lethality of act, those patients whose purpose was other than death have been referred to as attempted suicide, Para suicide, and pseudocide.

Attempted suicides are more common as compared to completed suicide.

Patients who attempt suicide seem to suffer from a wide variety of psychiatric illnesses including personality disorder.

Since 1960, the mean death rate from suicide made available to WHO has remained at about 10 per 100,000 [WHO 1974]. currently the rate varies from 5 to 40 per 100,000. In India, there is a suicide rate approximately 12 per 100, 000 though different rates were reported in different study as 38 per 100,000 , 43 per 100,000

The annual rate of suicide in the cities of India ranges from 3.2 per 100, 000 in Calcutta, to 25.6 per 100,000 in Bangalore.

The Hill report recommended that all patients who are brought to hospital after deliberate self poisoning should be admitted, preferably to a poisoning treatment center and that they should be seen by an experienced psychiatrist after recovery of consciousness. The interview with the psychiatrist may reduce the frequency of repetition of self-poisoning and even the rate of subsequent suicide.

2. AIMS AND OBJECTIVES

The study aimed of finding out :

1. To study the socio-demographic factors associated with self-poisoning patients.
2. To compare the certain precipitating factor in these patient.
3. To assess the various psychiatric morbidity of these patients according to DSM IV
4. To study the differences between male & female group of these patients.

3. MATERIALS AND METHODS

The study was conducted in a teaching general hospital, situated in an urban area. 50 consecutive patients admitted with self-poisoning, in emergency ward were evaluated.

The Inclusion Criteria

1. The act must be deliberate and not accidental.
2. Quantity must be known to be excessive.
3. It is realized that this may be harmful.

The Exclusion Criteria

1. Poisoned patients who did not satisfy these criteria were excluded.eg. Hanging, Drowning, Accidental Poisoning and Burns.

These patients were assessed after emergency medical care and resuscitation as done usually between 2nd and 5th day after the attempt.

All the patients were explained about the investigation, its purpose and were assured of confidentiality of the information. After the initial resistance and difficulties because of fear of

police and court appearance and social reason, all patients offered co-operation.

The patients and their relatives were interviewed and data was entered in a predetermined performa. All the data obtained were tabulated and whenever necessary, subjected to statically analysis.

INSTRUMENT USED IN THE STUDY :

1. Semi structured Performa for recording socio-demographic variables, details of suicide attempt, medical and psychiatric hisotry.
2. Suicide intent scale [Beck et al 1979]
3. Kuppuswami's socio-economic status scale (urban) 1981 - Revised.
4. Hamiltion Depression Rating Scale (HDRS)
5. Presumptive stressful Life Events Scale [Gurmeet Singh et al 1984]

HAMILTON RATING SCALE FOR DEPRESSION (HRSD)

The Hamilton Rating Scale for Depression (HRSD) developed by M. Hamiltion, is the most widely utilized rating scale to assess saymptoms of depression & severity of depression. It takes hardly 20-30 minute to complete scale. HRSD is an observer rated scale consisting 17 to 24 items. Rating are made on the basis of the clinical interview, plus any additional available information such as nursing or family member report.

The items are rated on either a 0 to 4 spectrum (0 = none & for most severe) or a 0 to 2 spectrum (0 = none & 2 = severe)

The toal score on the Hamilton Rating Scale for Depression generally consists of only the sum of the first 17 items.

Its use is limited in individuals who have psychiatric disorders other than primary depression.

BECK SUICIDAL INTENT SCALE

This scale used to measure the degree of suicidal intent. This consists of 15 - items, each rated on three point score, and allows, both the circumstances of the suicide item and self reported suicidal intent, as well as a total suicidal intent score, to be recorded.

KUPPUSWAMI SOCIO-ECONIMIC STATUS SCALE (1981 REVISED)

This scale is developed by Kuppuswami's, which was revised in 1981.

The scale consist of three part : Education, Occupation and Income and each part have 7 items.

The score range from 0 to 29 according to this socio-economic class was evaluated.

SESS Class I	26 - 29
SESS Class II	16 - 25
SESS Class III	11 - 15
SESS Class IV	5 - 10
SESS Class V	Below 5

PRESUMPTIVE STRESSFUL LIFE EVENTS SCALE (PSLES)

Gurmeet Singh, Dalbir Kaur and Harsharan Kaur develop this scale in 1984. This scale is assessing the stressful situation in patients' life. There are 51 items related to various issues of life like family problem. Marital problem, financial problem etc.

4. RESULT AND DISCUSSION

During the study period of 50 patients with attempt suicide by self-poisoning, sociodemographic factors discussed as following.

AGE AND SEX :

TABLE NO. 1
Age and Sex Distribution

Sr. No.	Age in Years	Males	Females	Total	%
1	Below 15	0	2	2	4
2	16 to 25	12	17	29	58
3	26 to 35	6	7	13	26
4	36 to 45	2	1	3	6
5	Above 45	0	3	3	6
	Total	20	30	50	100

Mean age of all the patients : 26.60
 Mean age of male patients : 26.35
 Mean age of female patients : 24.62

The above table shows that the highest number of cases is reported between 16 and 25 years age group, which have 58%. Next in frequency comes in age group 26 to 35, which has 26%. The total number of cases belongs to adolescents & youth between 16 and 35, which is 84%. There only 4% of patient having below 15 yrs of age ^ 6% of patient having above 45 years of age groups.

This is supported by most of studies from our country.

Sunil Srivastava and Namita Kalshreeshta (2000) reported the majority the patient belonged to the age group of 20-29 yrs and 30-39 yrs of age these consist 63.3% of all number of patients.

M. Pavan Kumar, S. K. Subbegowda & C. R. J. Khes, Maysore, Ranchi, (1999) in a study of Assessment of socio-demo graphic profile and associated factors in attempted suicide. Found peak incidence between 15 and 24 year of age, which consist of 65% of the cases.

Attempted suicide in Srilanka, D.R.R. Abeyasinghe, CI. Bulumulla University of Peralenia, Srilanka, (1998) show highest incidence in age group 15-24 years. Constituted 44.5% of the sample.

R. L. Narang, B. B. Mishra and Nitesh Mohan (2000) reported. Mean age of the sample 25.11 % Mean age of the female 24.75 % Subject between 20-29 years constituted 41% of the sample. Between age group 30-39 yrs is 22%. There are only 5% of patients were above the age of 40 years.

Keith Hawton (1992) reported 25.5% patients in the age group of 10 to 19 years suicide attempts very less in above 65 years of age.

R. L. Narang, B. P. Mishra & Nitesh Mohan 2000 reported overall mean age of the sample was found to be 25.11 +- 8.17. There were more males (58%) than females (42%). Mean age of 24.74 +- 8.55 for males and 25.61 / 17.58 for females' subjects between 20-29 years constituted 41% of the sample with another 32% below 20 years. There were only 5% above the age of 40.

Though it is difficult to work out precise factors. It seems but potential risk factory for according to Lewiston et al 1994.

Suicide attempts in adolescent & youth include female gender, major depression, previous suicide attempts, and recent stressful life events. According to Hawton et al (1982) precipitating events, which have led to a suicide attempt, are most often interpersonal problem between the adolescent and his parents or peers J.J.P. 1996 38 (2) 79-85

K. E. Saidanandan Unni & Anne J. Mani Majority of patients was from 16 to 35 years of age group. Sunil Srivastava and Namia Kuilshreshtha (2000) reported majority of patients' i.e. 33.3% belonged to the age group of 20-29 years. 30% patients were from age group of 30-39 23.3% being in age interval of 50-59 & remaining 13.3 were in 40-49 years interval.

MALE : FEMALE RATIO :

In our study male female ratio is 1:1.5 (20:30). is not concurrence with finding of other Indian studies in past (Venkoba Rao, 1965, Satyawathi and Murti 1961) In their study work a M:F ratio was 1:1.06

D.R.R. Abeyasinghe, CI Bulumulla, University of Peralenia, and Srilanka (1998) have the male-female ratio was 1:4

RELIGION :

TABLE NO. 2
Distribution of religion

Sr. No.	Religion	Males	Females	Total	%
1	Hindu	19	25	44	88
2	Muslim	1	5	6	12
	Total	20	30	50	100

$X^2 = 1.54$ df = 1; p is > 0.05 so statistically insignificant difference.

Table No. 2 shows details about religious status of the sample. These show 88% of the patients were Hindu and rest 12% were from Muslim community.

Gupta [1981] found that 76% of patients were Hindu and rest 24% were from other religions.

D. Mondal, K D Sen, J. Roy Chaudhary, Calcutta, April 1998, reported that strong religious belief, social stigma about suicide and thoughts about depends prevented conversion of suicide impulses into suicidal attempts.

SOCIO ECONOMIC CLASS :

TABLE NO. 3
Distribution of Socio - Economic Class

Sr. No.	Social Calss	Males	Females	Total	%
1	I	-	-	-	-
2	II	6	5	11	22%
3	III	6	9	15	30%
4	IV	7	10	17	34%
5	V	1	6	7	14%
	TOTAL	20	30	50	100%

According to Table No. 3, In our sample, most of the patients were from social class IV (34%). Next came social class III (30%). In our sample, there was no patients of social class I.

C. T. Sudhir Kumar & R. Chandrasekaran, 2000, found that all patient of attempted suicide among these 4.2% of patient were from higher and higher middle socio economic class. 24.2% of patients were from middle socio-economic class whereas 58% of patient coming from lower and lower middle socio-economic class.

R. L. Narang, B. P. Mishra and Nitesh Mohan, 2000. reported that 35% of the subject was from low socio-economic group with income less that Rs. 1600 per month and a total of 30% below Rs. 3200 per month. Only 9% subjects had

income more than Rs. 64000 per month.

In another study, Morgan (1975) found that of all patients who attempted deliberate self-harm. 1.6% came from social class I. 10.1% from Class II. 48.6% from Class III. 22.3% from Class IV and 14.1% from Class V.

This is in conformity with our study as in the reference studies also, more attempters were from middle and lower social class (III, IV, V)

MARITAL STATUS :

TABLE NO. 4
Marital Status Distribution

Sr. No.	Marital Status	Males	Females	Total	%
1	Married	10	18	28	56%
2	Unmarried	10	11	21	42%
3	Widow / Widower	0	1	1	2%
	TOTAL	20	30	50	100%

Above table No. 4 shows that 56% of patient were married and 42% were unmarried or single whereas 2% of patients were widow / widower.

R. L. Narang, B. P. Mishra & Nitesh Mohan, 2000, found that 66.7% of patients were married whereas 33.7% of patients were unmarried or single.

K. E. Sadanandan and Anne J. Mani, 1996, found that 72.07% of patients were from Married / Widowed group whereas 27.9% were single or unmarried.

T Sudhir Kumar & R Chandrasekaran, 2000, found that 87.9% Single and 8.0% married and 3.0% Separated / Divorced.

Kessel (1965) found 12% divorced men & Pallis D. J. (1982) found 14% patients were divorced or widow or separated.

The more number of married people may reflect the early age of marriage in India, as compared to western countries.

Less number of separated and absence of widow and divorced persons in our sample may be due to smaller group of patients as compared to other large studies.

FAMILY CONFIGURATION :

TABLE NO. 5
Distribution of Family Configuration

Sr. No.	Family Configuration	Males	Females	Total	%
1	Nuclear	14	23	37	74
2	Joint	5	7	12	24
3	Alone Person	1	0	1	2
	TOTAL	20	30	50	100%

The above table shows the details of family configuration. 74% patients were from Nuclear Family and 24% were from Joint Family.

R. L. Narang, B. P. Mishra & Nitesh Mohan, 2000, found in their study that 57% of attempted suicide patients were from nuclear family & among this female were 46%.

C. T. Sudhir Kumar and R. Chandrasekaran, 2000, shows 56.8% of samples were from nuclear family and 43.2% were from joint family.

These studies are concomitant with our study but one study is not concomitant with ours is that K E Sadanandan and Annie J. Mani, 1996, possible reason behind this is less number of patient samples.

MAIN PRECIPITATING FACTOR :

TABLE NO. 6
Main Precipitating factor, which lead to patient for self - poisoning:

Sr. No.	Family Configuration	Males	Females	Total	%
1	Family Problem	8	10	18	36
2	Marital Problem	0	11	11	22
3	Financial Problem	8	0	8	16
4	Presence of Psy. Illness	2	2	4	8
5	Chronic Physical Illness	1	2	3	6
6	Love affair going badly	1	1	2	4
7	Examination related Problem	0	2	2	4
8	Other	0	2	2	4
	Total	20	30	50	100

$\chi^2 = 33.44$; $df=7$; p is < 0.001 , so statistically highly significant difference.

The above table shows the details of main precipitating factor. Significance difference was observed between male and female group. The common precipitating factors in males were financial problem (16%), family problem (16%), presence of psychiatric illness (4%), physical illness (2%) and problems in love (2%).

While in females common precipitating factors were family problem (20%), marital problem (22%), presence of psychiatric illness (4%), Physical illness (4%), examination related problem (4%) and love problem (2%).

Kessel (1965) in his study of self-poisoning reported that in males unemployment, monetary worries and drinking problems were more commonly associated while in females a broken or a breaking love affairs and marital disharmony are more common precipitating factors.

Sethi et al (1978) reported that main precipitating factor for male subjects were financial stress, rejection in love and strained family relations, while for female marital friction and friction with in laws were more common.

R. B. Galgali, Sanjeev Rao, M. V. Ashok, A. Appaya and K. Srinivasan (1998) reported problem in primary support group like family are more common in female and physical abuse is next common to above. And in male, unemployment & economic circumstances are more common.

In many cases bad relationships with the key individual - spouse, other relative or friend was the dominant theme in the story.

In some cases chronic debt and job problem played a part.

In few cases (two) attempt of self-poisoning occurred some times after the attempt by key individual who had done it due to interpersonal conflict.

SUBSTANCE :

TABLE NO. 7
Substance Used

Sr. No.	Substance	Males	Females	Total	%
1	Organ phosphorous Compound	11	11	22	44
2	Prescribing Drugs	2	11	13	26
3	Acid Compound	1	4	5	10
4	Aluminum Phosphide	1	1	2	4
5	Other Compound (eg Phenyl & Emery)	5	3	8	16
	Total	20	30	50	100

$\chi^2 = 6.77$; $df = 3$; p is > 0.05 , so statistically insignificant difference.

Above table shows 44% patients had used organophosphorous compound, 26% patients had used drugs prescribing from physician, 10% had used acid compound. 4% had used Alluminium Phosphide and 16% of patient used other compound like phenyl and emery etc.

R. L. Narang, B. P. Mishra and Mitesh Mohan, 2000, reported that among 91 patients, 33 used Alluminium Phosphide, 24 of

organophosphorous compounds and 20 used other insecticide. And few patients also used psycho pharmacological agents.

C. T. Sudhir Kumar and R. Chandrasekaran, 2000, reported the commonest method of suicide attempt was by O. P. Poisoning. 40.4% patients followed by yellow oleander poisoning 32.4%, prescription drugs over dosage 5.4%, used this method.

Venkoba Rao (1971), Badrinarayan (1977) and Bagadia et al (1979) found that an organophosphorous compound was the most commonly used substance by attempters. (74%, 74% and 67.4% respectively)

According to R. B. Galgali, Sanjeev Rao, M. V. Ashok, P. Appaya and K. Srinivasan, (1998), In India, the use of organophosphorous compound is relative high due to their easy availability without any restriction whereas the use of non-opiate analgesics drugs has steadily increased for suicidal attempt in the west countries. (Keith Hawton 1992)

DURATION OF SUICIDAL IDEAS :

TABLE NO. 8
Duration of Suicidal Ideas

Sr. No.	Duration of Suicidal Ideas	Males	Females	Total	%
1	Sudden impulsive	11	20	31	62
2	Up to 1 week	7	4	11	22
3	1 to 2 week	1	3	4	8
4	1 to 4 week	0	1	1	2
5	4 to 12 week	0	1	1	2
6	Up to 10 week	1	0	1	2
7	Up to 20 week	0	1	1	2
	Total	20	30	50	100

$\chi^2 = 5.84$; $df=6$; p is > 0.05 , so statistically insignificant difference.

The above table shows details about duration of suicidal ideas, 62% patient has sudden impulsive attempts. 22% had suicidal ideation up to 1 week, 8% had for 1 to 2 week and 2% each for 2 to 4 week, 4 to 12 week, up to 10 week and up to 20 week of duration.

There is no much study found on duration of suicidal ideation but Kessel (1965) found in his study at self - poisoning that two - thirds of all acts were impulsive.

Bagadia et al (1979) found that behavior was impulsive in 52% patients, 17% had suicidal ideas up to 1 month, 12% up to 1 year, and 2% for more than a year and in 11% of the patients the exact duration of suicidal ideas was not known.

SUICIDAL INTENT :

TABLE NO. 9

Distribution of Suicidal Intent Score

Sr. No.	Score	Males	Females	Total	%
1	16 and above	3	6	9	18
2	6 to 15	16	17	33	66
3	0 to 5	1	7	8	16
	Total	23	27	50	100

Mean suicidal intent score : 11.02
 Mean suicidal intent score for Male : 10.85
 Mean suicidal intent score for Female : 11.13
 Standard Deviation for Male : 0.92
 Standard Deviation for Female : 1.36

Earlier reports have shown that a high intent score increases suicidal risk. In this study an average score of 11.02 was found and for male the score was 10.85 and for female 11.13.

C. T. Sudhir Kumar and R. Chandrasekaran, 2000, found that mean suicidal intent score was 11.82+6.68 for adolescents patients and 8.73 + 5.97 for adults.

David W. Pierce (1977) reported intent scores 8.07 + 5.06 for male and 7.19 + 4.75 for female.

PSYCHIATRIC ILLNESS (ACCORDING TO DSM IV) :**TABLE NO. 10 (A)**

Psychiatric Illness Distribution

Sr. No.	Psychiatric Illness	Males	Females	Total	%
1	Major Depression	6	9	15	30
2	Adjustment Disorder	0	4	4	8
3	Affective Disorder	0	1	1	2
4	Personality Disorder	0	1	1	2
5	Schizophrenia	1	0	1	2
6	Alcohol Abuse with Depression	1	0	1	2
7	No major Psy. Illness	12	15	27	54
	Total	20	30	50	100

SEVERITY OF MAJOR DEPRESSION ON HAMILTON DEPRESSION RATING SCALE :**TABLE NO. 10 (B)**

Severity of Major Depression on Hamilton Depression Rating Scale

Sr. No.	Score	Males	Females	Total
1	7 or less (Normal)	0	0	0
2	8 to 13 (Mild)	2	3	5
3	14 to 18 (Moderate)	0	5	5
4	19 to 22 (Severe)	4	4	8
5	23 or above (Very Severe)	2	0	2
	Total	8	12	20

Table No. 10(A) shows details about presence of psychiatric illness. Major Depression 30% was found to be the most common psychiatric disorder of thus, 12% patients were male and 18% were females.

Table No. 10 (B) shows that majority 10 patients were found to be having mild depression to moderate depression 2 patients and were found to be having severe depression.

In our study, 8% of patient had adjustment disorder, and other disorder like affective disorder borderline personality disorder, schizophrenia and major depression, Alcohol abuse consist 2% of patient for each.

In our study, no major psychiatric illness was found in about 54% of patients.

R. L. Narang, B. P. Mishra and Nitesh Mohan, 2000, reported the most common psychiatric disorders were found to be major depression (Mood Disorder) 35%, adjustment disorders 13%, substance dependence and schizophrenia 3% each and 1% each of personality disorder, panic disorders and dissociative disorders.

C. T. Sudhir Kumar and R. Chandrasekaran, 2000 reported the most common diagnosis was depression 37.7%, 6.8% had adjustment disorder, 1% each for Bipolar disorder and Anxiety disorder. 4% each for conduct disorder and personality disorder.

K. E. Sadanandan Unni and Annie J. Mani, 1996, reported 59.74 % were had depression, 9.78% had psychosis 9.74% had alcohol abuse other were not so much significant.

R. Chandrasekaran, J. Gnanaseelan, Ajith Sahai, R. P. Swami Nathan & Bojir Perme, 2003, reported that 47.2% of the suicide attempters suffered from mental disorder. Depressive syndrome represented the largest diagnostic group (31%) Alcohol dependence was present exclusively among males (8.7%). Neurotic, stress related and somatoform disorders were found in 14.5% of the attempters. No. significant gender differences in psychiatric disorders were observed except for alcohol dependence syndrome. 7% of the patients had a diagnosable personality disorder.

Kessel (1965) in his study of self poisoning, found that depression was the most common diagnosis with 26% in males and 43% in female next came personality disorder which was found in 32% of male and 16% of female patients other

psychoses were found in 5% male and 5% female patients. 26% of the men and 20% of women had no psychiatric illness. Kessel also reported that depression was preponderantly mild in severity.

PAST HISTORY OF SUICIDAL ATTEMPT :

TABLE NO. 11

Past history of suicidal attempt

Sr. No.	History of Attempt	Males	Females	Total	%
1	Positive History	1	2	3	6 %
2	Negative History	19	28	47	94 %
	Total	20	30	50	100

In the study, 6% had past history of suicidal attempts, by means of self - poisoning. Two female and one male had previous attempt. Most of the patients hide things regarding the past attempt.

In this study, 6% of samples have some serious medical illness while 8% of patient had some psychiatric disorder. Bagadia et al (1979) found 7% patients with one sethi et al (1978) observed that 14.6% patient had previous suicidal attempts.

C. T. Sudhir Kumar and R. Chandrasekaran, 2000, found 10.8% patient had a history of serious middle disorder, 32.4% had history of alcohol abuse and 1.4% patient had history of attempted suicide in past.

In our study, No alcohol abuse is found, that might be due to prohibition of alcohol in Gujarat State & fear play a major role to hide these things.

HISTORY OF SUICIDE IN FAMILY :

TABLE NO. 12

Family History of Suicide

Sr. No.	Family History	Males	Females	Total	%
1	History of Suicide	0	0	0	0

In our study, no patient found in whom history of suicide in family members. Many workers have come to a conclusion that positive family history of suicide is a risk factor of suicide or suicidal attempt in the proband. (Alec Roy 1989)

PARENTAL LOSS :

TABLE NO. 13

History of parental loss

Sr. No.	Parental Loss	Males	Age of the Patient	Females	Age of the Patient	Total
1	Paternal Loss	1	14 Years	0	-	2
		1	6 Years			
2	Maternal Loss	1	8 Years	1	7 Years	3
		1	8 Years			
3	Both Paternal & Maternal	1	P 14 Years M 15 Years	0	1	
	Total	5		1		6
	Absence of Parental Loss	15		29		44

The above table shows details about the early parental loss before 15 years age of parents.

In this study, we found that 12% patient had paternal loss before 15 years age of patient among this 10% were male and 2% were female sample.

Hill O. (1969) reported that suicide is more common in depressed women who experienced paternal loss when they aged 10 to 14 years and to a lesser extent at 15 to 19 years.

Men and women whose mother died in the first 10 years of life are also at increased risk of attempted suicide.

Pallis D. J. (1982) reported that among attempters, 13% had experienced parental death before 16 years of age.

STRESSFUL LIFE EVENTS IN THE PAST ONE - YEAR :

TABLE NO. 14

Stressful life events in the past one - year

Sr. No.	Life Events	Males	Females	Total
1	3 or more events	17	24	41
2	Less than 3 events	3	6	9
	Total	20	30	50

The average number of life events experienced by male over a period of one year prior to the act was 2.0 and for female was 1.93.

Studies from New Haven reported average number of life events as 3.3 in 6 months period by attempters. (Alec Roy 1989)

It is difficult to identify exact stressful life event because many times patients reveal & many times not.

SUMMARY & CONCLUSION

In this prospective study of attempted suicide by self - poisoning patients attending in general hospital initially admitted in medical emergency ward & then refer to psychiatry department for examination and evaluation purpose.

The data gathered was tabulated and analyzed for statically significant difference with result of earlier Indian & Western studies.

Summary and conclusion of this study is below.

1. Majority of patient among suicide attempter were adolescents and young 58% and 26% respectively, Most of have common age group of 16 to 25 and 26 to 35.

2. Ratio between Male and Female is 1:1.5

3. Most of the patients were from Hindu community, which belongs to 88% of sample, and Muslim was 12% rest.

4. The socio-economic status of these patients was IV and III were most common status (34% and 30% respectively) II had 22% of Patient and V has 14%.

5. Majority of patient were married (56%) and unmarried were 42% and widow / widower 2%

6. Suicidal attempts more common in nuclear family 74% followed by joint family 24% and alone person in family 2%

7. Majority of attempt suicide patient had family problem 36%, marital problem 20% and financial problem 18%, Most of the patient gives above precipitating factors behind their suicidal attempts.

8. Recent life disruption like family problems (36%), marital problems (22%) and financial problems (16%) were the cause given in majority of cases, More common problem with male financial problem (16%), family problem (16%) and female more common factors were family problem (20%) and marital problems (22%).

9. The most common substance used was organophosphorous compound (44%), which followed by prescribing drug over dosage (26%) and acid compound (10%)

10. Most of the person had done attempt sudden impulsively (62%) due to any recent stress whereas only 22% had suicidal ideation since / week of duration.

11. The mean suicidal intent score was 11.02 and it was for male 10.85 and for female 11.13

12. The most common psychiatric diagnosis was major depression 30%. And among depressive patient, most have mild to moderate depression (20%), according to Hamilton depression rating scale whereas 54% of sample had no any major psychiatric illness.

13. Previous history of self - poisoning was reported in (6%) of patients and 14% of patient already had some psychiatric illness and serious medical disorders.

14. No patient was found with family history of suicidal attempt.

15. Early parental loss was reported in 6 patients.

16. The average number of life events experienced by attempters over a period of one year prior to the act was 2.0 for male and for female it was 1.93.

Thus, attempted suicide is more complex study, further detail studies need to be done on stressful life events, psychiatric disorders in attempted and urban rural distribution.

REFERENCES

- [1] Adityanjee D. R. : Suicide attempts and suicide in India; Cross Cultural aspects : International journal of social Psych. 32:64-73, 1986.
- [2] Alec Roy, M. B. emergency psychiatry : Suicide : Comprehensive textbook of psychiatry, 5th Ed. II, 1414-1426, 1989.
- [3] Aryappan A & Jaydev, C. J. (1958) society in India. Madras, Social Science Publication.
- [4] Ayd FJ. Lexicon of Psychiatry, Neurology, and the neurosciences, New Delhi : I Waverly, 1995.
- [5] Bacchler, Suicide, New York : Basic Books, 1979
- [6] Badrinarayan A : Suicidal attempt in Gulburga, Indian J. Psychiatry, 19, 69, 1997.
- [7] Bagadia V. N. et al : Suicidal behavior : A clinical study : Indian J. Psychiatry. 21, 370-375, 1979.
- [8] Bancroft, Syrimshine and Simkin : The reasons people give for taking overdose, British J. Psychiatry 125:538-548, 1976.
- [9] Bertolote J. M. Ed. Guidelines for the primary Prevention of Mental, Neurological and psychological disorders. IV suicide. Geneva : World Health Organization, 1993
- [10] CT Sudhir Kumar and R. Chandrasekaran : A Study of psychosocial and clinical factors associated with adolescent suicide attempts. Indian journal Psychiatry, 2000, 42 (3) 237-242.
- [11] D. Mondal, K. D. Sen, J. Roy Chaudhary, Calcutta 1998 Religiosity and suicide, Indian J. Psychiatry 40 (suppl) : 75
- [12] D. Mondal, K. D. Sen, J. Roy Chaudhary, Calcutta : Religiosity and suicide : Indian Journal of Psychiatry, 1998, 409 suppl) 75.
- [13] David W. Pierce : Suicidal intent in self - injury. British J. Psychiatry. 130 : 3775 - 385, 1977.
- [14] DRR Abeyasinghe, CI bulumulla, University of Peradenia, Srilanka : A study of attempted suicide in Sri Lanka, Indian Journal of Psychiatry, 41 (Supple); 55.
- [15] Durkheim E. Le Suicide. Paris : PUF, 1990.
- [16] Farberow NL, Schneidman E. Eds. the cry for Help. New York : MacDraw Hill, 1961.
- [17] Greenhill LL, Waslick B. Management of suicidal behavior in children and adulexents. Psychiatr Clin N Am 1997 : 20 641-666.
- [18] Gupta S. C. Harjeet Singh : Psychiatric Illness in suicide attempters. Indian Journal of psychiatry. 23(a) 69-74. 1981.
- [19] Hendin H. Psychotherapy and Suicide. Am J psychother 1961, 35:469-480.
- [20] Hill O. 1969, 57, 278 the association of childhood bereavement with suicidal attempt in depressive illness. British Journal of psychiatry. 115, 301-304
- [21] Hornby A. S. Oxford Advanced learner's Dictionary of current English. Oxford : Oxford University Press, 1995.
- [22] Horton R. The crisis in Psychiatry, Lancet 1997; 349:965.
- [23] K. E. Sadanandan Unni and Anne J. Mani suicidal Ideators in the psychiatric facility of a general hospital

- A Psycho demographic profile : Indian Journal of Psychiatry. 1996, 38(2) 79-85
- [24] Kalpan and Sadock, Synopsis of Psychiatry 8th edition, reprinted 2001.
- [25] Kaplan HI, Sadock B.J. comprehensive Textbook of psychiatry III ed. Baltimore : Williams & Wilking, 1981.
- [26] Katsching H. Life events and psychiatric disorders : Controversial Issues. Cambridge : Cambridge university press 1986.
- [27] Keith Hawton, Joan Fugg : Deliberate self - poisoning and self injury in adolescents. A Study of characteristics and trends in oxford, 1976-89, British Journal of Psychiatry, 161:816-823, 1992.
- [28] Kennedy et al : The prevalence of suicide and Para suicide in Edinburgh. British Journal of Psychiatry, 124:36-41, 1974
- [29] Kessel N : Self - Poisoning : Br. M. J., 2:1265-1270, 1336-1340, 1965.
Government of India, 1988, methods of suicide
- [30] Kienhorst SWM, Wolters WHG : A study of the frequency of suicidal behavior in children aged 5 to 14. J. Child psychol psychiatry. 28, 153-165-1987.
- [31] Kreitman N. suicide and Para suicide in : Kendell RE, Zeally A. K. Eds. companion to psychiatric studies. London : Charchill Livingston 1988 pp 459-175
- [32] Lecomte D. Formes P, 1989 - 1996 PMID, Paris
- [33] Lemperiere T. President DSM IV une meilleure approche des troubles de l'humeur ? Symposium. l'encephale revue de psychiatry clinique biologique et therapeutique 1965; 21:1-67.
- [33A] Levey S. : Suicide, In : Blueglass R. Bowden P. Eds. Principles and practice of forensic psychiatry. pp 597 - 610
- [34] M. Pavan Kumar, S. K. Subbegowda & C.R.J. Khess Maysore, and Ranchi; An assessment of socio - Demographic profile and associated factors in attempted suicide patients in a general hospital setting. Indian Journal of Psychiatry. 41 (Supple) 55.
- [35] Middleton, G. D. Ashby, et al : An analysis of attempted suicide in an urban industrial district. The practioner, 187, 776-782, 1961
- [36] Morgan H. G. : Deliberate self-harm : Recent advances in clinical psychiatry 4, 3 : 47-74, 1982.
- [37] Murthy Rs. Urbanization and mental heath. Indian J. Soc. Psychiatry, 1993; 9:16-19
- [38] Narottam Lal, B. B. Sethi : Demographic and socio-economic variables in attempted suicide by poisoning. Indian J. Psychiatry, 17:100-107, 1975.
- [39] Neeleman J. Halpern D, Leon d, Lewis G. Tolerance of suicide, religion and suicide and suicide rates : an ecological and individual study in 19 western countries. Psychol med 1997; 27:1165-1171.
- [40] Nilamadhab Kar, Indubhusan Das, Gopal Chandra Kar, Cattack, Bangalore, 1977, Seasonality in suicide attempt Indian J. Psychiatry; 39 (Supple), 54.
- [41] Niraj Ahuja and J. N. Vyas 2nd edition reprint 2000 textbook of P. G. Psychiatry.
- [42] Pallis D. J. Barraclough B. M. et al : Estimating suicide risk among attempted suicide : Development of new clinical scale. British J. Psychiatry, 141:37-44, 1982.
- [43] Pfeffer CR childhood suicidal behavior : A development perspective. Psychiatry Clin N Am 1997; 20:551-562
- [44] Pfeffer CR. Suicidal behavior in children and Adolescents : causes and management, in : Lewis M. Ed. child and Adolescent psychiatry : A comprehensive textbook. Baltimore : Williams and Wilkins, 1996, pp 666-673.
- [44A] Paykal E. S. et al : suicidal feelings in the general population. A prevalence study, Br. J. Psy. 124 : 460-469, 1974.
- [45] Pitts F, Winokur F. Affective disorder. III. Diagnostic correlates and incidence of suicide. J Nerument Dis 1964; 139: 176-181.
- [46] R. B. Galgali, Sanjeev Rao, M. V. Ashok,. P. Appaya and K. Srinivasan : Psychiatric Diagnosis of self poisoning cases : A general hospital study, Indian J. Psychiatric, 1998, 40(3), 254-259.
- [47] R. Chandrasekaran, J. Gnanaseelan, Ajith Sahai, R. P. Swami Nathan and Bojir Perme; Psychiatric and personality disorders in Survivors following their first suicide attempt, Indian Journal of psychiatry, 2003, 45 (II), 45-48.
- [48] R. B. Galgali, Sanjeev Rao, M. V. Ashok, P. Appaya & K Srinivasan; Use of organophosphorous compound for self poisoning. Indian J. Psychiatry 1998, 40 (3) 254-259.
- [49] Rajtenberg S. L. suicide : death as a way - out world Psychiatry 1995; 3:2-5.
- [50] RL. Narang, BB Mishra and Nitesh Mohan : Attempted suicide in Ludhiana, Indian Jornal of psychiatry, 2000, 42 (1), 83-87.
- [51] Robins E, Schmidt E, O'Neal P. Some inter relations of social facotrs and clinical diagnosis in attempted suicide. Am J. psychiatry 1957; 114:221-231.
- [52] Roy A, Rylander G. Sarchiapone M, Genetic studies of suicidal behavior. Psychiatry Clin Am 1997; 20:595-611.
- [53] Satyawathi K., Marti Rao D.L.N. : Transactional of All Indian Institue of mental health, Bangalore Tr. : 2:1, 1961.
- [54] Saxena S. et al : Stressful life events in psychiatric out patients : A controlled study. Indian Journal of Psychiatry. 25 : 129 - 133, 1973
- [55] Schneidman Es. definition of suicide. New York : John Wiley, 1985, pp 214-219.
- [56] Sethi B. B. et al : psychosocial factors and personality characteristic in attempted suicide. Indian Journal of Psychiatry. 20:25-30, 1978.
- [57] Shabhangi Parkar, Arti Korgaonkar, Adwait padhye, Rupali shivalkar, Mumbai : A clinical study of attempted suicide in Schizophrenic patients, Indian J. Psychiat, 40 (suppl), 11
- [58] Shaffer D., Fisher P : The epidemiology of suicide in children and adolescents. J. Am. acad child Psychiatry 20 : 545 - 565
- [59] Shukla, G. D. Verma, B. L. & Mishra, D. N. (1990) suicide in Jhanshi city, Indian Journal of psychiatry, 32, 44-51
- [60] Stengel R. and Cook N. G. : Attempted suicide, oxford university Press, London, 1958.

- [61] Sunil Srivastava and Namita Kalshreshtha :
Expression of suicidal intent in depressives, Indian
Journal of Psychiatry, 2000, 42(2) 184-187.
- [62] Trivedi JK. Punishing attempted suicide :
Anachronism of twentieth century. Editorial. Indian J.
Psychiatry 1997; 39:87-89
- [63] Unni KES, Familial suicide. Indian J. Psychiatry
1996; 38:146-147.
- [64] Unni KES, Rotti SB, Chandrasekaran R. An
exploratory study of motivation in suicide attempters.
Indian J. Psychiatry 1995; 37:169-175
- [65] Urwin P and J. L. Gibbons : [1979] psychiatric
diagnosis in self poisoning patients. Psychological
medicine, 9 : 501 - 507
- [66] Venkoba Rao : Attempted suicide, Indian Journal of
Psychiatry 1965. 7 (4) : 253 - 264.
- [67] Venkoba Rao 1987 / 83
- [68] Venkoba Rao. A [1971] suicide attempters in
Madurai, Journal of Indian Medical Association.
- [69] Vyas JN, Ahuja n. 2nd edition Terminology
postgraduate Psychiatry, New Delhi 2000
- [70] WHO, 1974, mean death rate of suicide P. G.
Psychiatry Niraj Ahuja and J. N. Vays 2nd edition
reprint 2000.
- [71] Wilson EO. The Insect Societies. Cambridge : havard
university press 1971