



A STUDY INTO THE PSYCHO-SOCIO-DEMOGRAPHIC PROFILE AND SUICIDAL INTENT IN THE PERSONS MAKING SUICIDE ATTEMPT

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ABSTRACT

Suicide always has a major impact on the survivors. Attempted suicide is one of the main predictor of completed suicide and is more common than completed suicide. The present study has been undertaken with the intention of deeper insight into the mental health of suicide attempters. Aims & Objectives: 1. To evaluate the socio-demographic profile of subjects admitted for suicide attempt. 2. To assess the suicidal intent of the suicide attempt. 3. To evaluate the nature of psychiatric morbidity in patients who have attempted suicide. 4. To study the association of the suicide intent score with the various socio-demographic factors. 5. To study the association between the socio-demographic characteristics, psychiatric diagnosis, and suicidal intent in suicide attempters. Materials and Methods: The study was conducted in the Department of Psychiatry, Mamata General Hospital, Khammam, Telangana from 1st September 2015 to 1st August 2016. Tools used Beck's suicide intent scale, Mini International Neuropsychiatric Interview Plus (M.I.N.I. PLUS). Results: High intent score was found more in Alcohol dependence syndrome and lowest in deliberate self-harm. Study includes a significant proportion of the individuals who attempt suicide have psychiatric morbidity, and deliberate self-harm was present. Conclusion: Suicide attempters are more among the groups of young age, male gender, married, belonging to nuclear family and low socio economic class. Majority of the suicide attempters are suffering with psychiatric illness.

Keywords :- Attempted suicide, Suicidal intent, Psychiatric illness.

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INTRODUCTION

The word 'suicide' is derived from the Latin word for "self murder". It is a fatal act that represents persons wish to die. One of the earliest scientific classifications was given by Emil Durkheim who

divided suicide in to egoistic, anomic and altruistic types [1]. Kreitman et al introduced the term 'para suicide' to refer a non-fatal act of deliberate self-injury or self-poisoning [2].

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Suicide attempt rates are found to be 10–40 times higher than rates for completed suicides [3]. Being female, younger, less educated, unmarried and having a mental disorder [4]. The strongest diagnostic risk factors were found to be mood disorders in high-income countries but impulse control disorders in low- and middle-income countries.

Human beings are unique, as are their reasons for suicide. National Crime Records Bureau statistics state that social and economic causes have led most of the males to commit suicide whereas emotional and personal causes have mainly driven females to end their lives [5]. Suicide attempters of almost 90% have mental disorders [6]. Subjects with high levels of psychiatric co morbidity had markedly high risk of serious suicide attempts as observed by Beautrais *et al* [7].

MATERIALS AND METHODS

The current study is a cross-sectional study done among 72 volunteers. The study was conducted in the Department of Psychiatry, Mamata General Hospital, Khammam, Telangana from 1st September 2015 to 1st August 2016. The study was approved by the research ethics committee. Subjects were briefed in detail about the nature and purpose of the study. Confidentiality was assured and informed consent was taken.

INCLUSION CRITERIA

- Age group of 15-65 years.
- All patients who attempted suicide.
- Both genders were included in the study.
- All patients should be medically cleared to participate in study.
- All patients should have reliable informants for collateral information.
- Patients should be competent to give consent for the study.

EXCLUSION CRITERIA

Socio demographic risk factors included

- Patients who were not medically cleared to participate in study.
- Patients admitted with alleged history of attempted suicide but died in the hospital prior to the assessment.
- Patients without reliable informants.

STATISTICAL ANALYSIS

Data entry was done in MS-EXCEL and after reviewing the data it was exported into SPSS version 20.0. The data was analyzed by SPSS 20.

TOOLS

Socio demographic profile:

Consists of name, age, gender, region, religion, education, occupation, type of family, marital status, socio-economic status.

Beck's suicide intent scale:

For assessing suicide intent in suicide attempters. It consists of 15 items each scored on a scale of 0-2 (total score range 0-30)

Score	Interpretation
1. 15-19	Low intent
2. 20-28	Medium intent
3. >29	High intent

Mini International Neuropsychiatric Interview (M.I.N.I. Plus) [8]

English Version 5.0.08: Mini International Neuropsychiatric Interview is a short structured diagnostic interview, developed jointly by psychiatrists and clinicians for DSMIII/IV and ICD10 based psychiatric disorders. M.I.N.I. Plus was designed for clinical practice and research in psychiatric primary care setting and takes less time to administer when compared to other similar structured interviews.

Table 1. Socio Demographic Variables In Comparison With Gender

		SEX		TOTAL	RESULT
		MALE (n=38)	FEMALE (n=34)		
AGE	15-25yrs	16(59.3%)	11(40.7%)	27	P =0.0001 S
	26-35yrs	7(23.3%)	23(76.7%)	30	
	36-45yrs	7(100%)	0(0%)	7	
	46-55yrs	3(100%)	0(0%)	3	
	>55yrs	5(100%)	0(0%)	5	
DOMICILE	Rural	32(52.5%)	29(47.5%)	61	P=0.898 NS
	Urban	6(54.5%)	5(45.5%)	11	
RELIGION	Hindu	31(51.7%)	29(48.3%)	60	P= 0.774 NS
	Muslim	4(66.7%)	2(33.3%)	6	
	Christian	3(50%)	3(50%)	6	
EDUCATION	Illiterate	13(43.3%)	17(56.7%)	30	P=0.490 NS
	Primary	9(56.2%)	7(43.8%)	16	
	Secondary	7(70%)	3(30%)	10	
	Graduate	9(56.2%)	7(43.8%)	16	

TYPE OF FAMILY	Nuclear	35(54.7%)	29(45.3%)	64	P=0.359 NS
	Joint	3(37.5%)	5(62.5%)	8	
OCCUPATION	Employed	18(46.2%)	21(53.8%)	39	P=0.221 NS
	Unemployed	20(60.6%)	13(39.4%)	33	
SOCIO ECONOMIC STATUS	Lower class	29(50%)	29(50%)	58	P=0.091 NS
	Middle case	9(75%)	3(25%)	12	
	Upper class	0(0%)	2(100%)	2	
MARITAL STATUS	Married	22(52.4%)	20(47.6%)	42	P= 0.293NS
	Widow	0(0%)	2(100%)	2	
	Unmarried	16(57.1%)	12(42.9%)	28	
SUBSTANCE ABUSE	Present	12(85.7%)	2(14.3%)	14	P=0.001 S
	Absent	26(44.8%)	32(55.2%)	58	
PAST PSYCHIATRIC DISORDERS	Present	9(81.8%)	2(18.2%)	11	P=0.036 S
	Absent	29(47.5%)	32(52.5%)	61	
PAST SUICIDAL HISTORY	Present	8(57.1%)	6(42.9%)	14	P=0.715 NS
	absent	30(51.7%)	28(48.3%)	58	
FAMILYHISTORY OF SUICIDE	Present	2(40%)	3(60%)	5	P=0.553 NS
	Absent	36(53.7%)	31(46.3%)	67	
REASONS	Financial problems	11(100%)	0(0%)	11	P=0.0001 S
	Family problems	12(27.9%)	31(72.1%)	43	
	Under the influence of psychoactive substance	4(100%)	0(0%)	4	
	others	11(78.6%)	3(21.4%)	14	
METHODS	Hanging	3(75%)	1(25%)	4	P=0.448 NS
	Poisoning	24(47.1%)	27(52.9%)	51	
	Drowning	3(75%)	1(25%)	4	
	Others	8(61.5%)	5(38.5%)	13	

Table 2. Relation between suicide intent score and socio-demographic variables and clinical variables

		LOW INTENT	MEDIUM INTENT	HIGH	TOTAL	RESULT
AGE	15-25yrs	2(7.4%)	15(55.6%)	10(37%)	27	P=0.002 S
	26-35yrs	12(40%)	5(16.7%)	13(43.3%)	30	
	36-45yrs	0(0%)	2(28.6%)	5(71.4%)	7	
	46-55yrs	0(0%)	1(33.3%)	2(66.7%)	3	
	>55yrs	0(0%)	0(0%)	5(100%)	5	
DOMICILE	Rural	14(23%)	21(34.4%)	26(42.6%)	61	P=0.044 S
	Urban	0(0%)	2(18.2%)	9(81.8%)	11	
RELIGION	Hindu	10(16.7%)	20(33.3%)	30(50%)	60	P=0.415 NS
	Muslim	1(16.7%)	2(33.3%)	3(50%)	6	
	christian	3(50%)	1(16.7%)	2(33.3%)	6	
EDUCATION	Illiterate	11(36.7%)	4(13.3%)	15(50%)	30	P=0.0001 S
	primary	0(0%)	12(75%)	4(25%)	16	
	secondary	1(10%)	2(20%)	7(70%)	10	
	graduate	2(12.5%)	5(31.2%)	9(56.2%)	16	
TYPE OF FAMILY	Nuclear	14(21.9%)	23(35.9%)	27(42.2%)	64	P=0.009 S
	Joint	0(0%)	0(0%)	8(100%)	8	
OCCUPATION	Employed	11(28.2%)	8(20.5%)	20(51.3%)	39	P=0.031S
	Unemployed	3(9.1%)	15(45.5%)	15(45.5%)	33	
SOCIO ECONOMIC STATUS	Lower class	12(20.7%)	19(32.8%)	27(46.6%)	58	P=0.884 NS
	Middle class	2(16.7%)	3(25%)	7(58.3%)	12	
	Upper class	0(0%)	1(50%)	1(50%)	2	
MARITAL STATUS	Married	3(7.1%)	11(26.2%)	28(66.7%)	42	P=0.0001 S
	Widow	2(100%)	0(0%)	0(0%)	2	
	Unmarried	9(32.1%)	12(42.9%)	7(25%)	28	
SUBSTANCE ABUSE	Present	3(21.4%)	0(0%)	11(78.6%)	14	P=0.012 S
	Absent	11(19%)	23(39.7%)	24(41.4%)	58	
PAST PSYCHIATRIC DISORDERS	Present	1(9.1%)	3(27.3%)	7(63.6%)	11	P=0.495 NS
	Absent	13(21.3%)	20(32.8%)	28(45.9%)	61	
PAST SUICIDAL HISTORY	Present	3(21.4%)	1(7.1%)	10(71.4%)	14	P=0.073 NS
	absent	11(19%)	22(37.9%)	25(43.1%)	58	

FAMILY HISTORY OF SUICIDE	Present	0(0%)	0(0%)	5(100%)	5	P=0.058 NS
	Absent	14(20.9%)	23(34.3%)	30(44.8%)	67	
REASONS	Financial problems	0(0%)	0(0%)	11(100%)	11	P=0.0001S
	Family problems	14(32.6%)	16(37.2%)	13(30.2%)	43	
	Under the influence of psychoactive substance	0(0%)	0(0%)	4(100%)	4	
	others	0(0%)	7(50%)	7(50%)	14	
METHODS	Hanging	0(0%)	3(75%)	1(25%)	4	P=0.097 NS
	Poisoning	14(27.5%)	15(29.4%)	22(43.1%)	51	
	Drowning	0(0%)	1(25%)	3(75%)	4	
	others	0(0%)	4(30.8%)	9(69.2%)	13	

Table 3. Relation between M.I.N.I Plus Diagnosis and Socio-demographic Variables and Clinical Variables

Variables		A	B	C	D	E	F	G	H	TOTAL	RESULTS
AGE	15-25yrs	6	0	0	3	2	2	1	13	27	P=0.0001 S
	26-35yrs	8	2	0	6	0	1	2	11	30	
	36-45yrs	3	0	1	2	0	1	0	0	7	
	46-55yrs	1	0	0	2	0	0	0	0	3	
	>55yrs	4	0	0	1	0	0	0	0	5	
SEX	Male	12	0	1	12	2	3	0	8	38	P=0.0001 S
	Female	10	2	0	2	0	1	3	16	34	
DOMICILE	rural	18	2	1	10	2	4	2	22	61	P=0.0001 S
	urban	4	0	0	4	0	0	1	2	11	
RELIGION	Hindu	18	2	1	10	2	4	3	20	60	P=0.0001 S
	Muslim	2	0	0	2	0	0	0	2	6	
	christian	2	0	0	2	0	0	0	2	6	
EDUCATION	Illiterate	12	0	0	7	0	1	1	9	30	P=0.0001S
	primary	6	1	1	0	0	1	1	6	16	
	secondary	2	0	0	4	0	1	1	2	10	
	graduate	2	1	0	1	2	1	0	7	16	
TYPE OF FAMILY	Nuclear	18	2	1	11	2	4	3	23	64	P=0.624 NS
	joint	4	0	0	3	0	0	0	1	8	
OCCUPATION	Employed	13	1	1	7	1	2	2	12	39	P=0.980 NS
	Unemployed	9	1	0	7	1	2	1	12	33	
SOCIO ECONOMIC STATUS	lower	16	2	1	11	1	4	3	20	58	P=0.719 NS
	middle	6	0	0	3	1	0	0	2	12	
	upper	0	0	0	0	0	0	0	2	2	
MARITAL STATUS	Married	16	2	1	9	1	3	2	8	42	P=0.513 NS
	Widow	0	0	0	0	0	0	0	2	2	
	Unmarried	6	0	0	5	1	1	1	14	28	
SUBSTANCE ABUSE	Present	0	0	0	14	0	0	0	0	14	P=0.0001 S
	Absent	22	2	1	0	2	4	3	24	58	
PAST PSYCHIATRIC DISORDERS	Present	5	1	1	4	0	0	0	0	11	P=0.023 S
	Absent	17	1	10	10	2	4	3	24	61	
PAST SUICIDAL HISTORY	Present	7	0	0	2	0	1	1	3	14	P=0.571 NS
	absent	15	2	1	12	2	3	2	21	58	
FAMILY HISTORY OF SUICIDE	Present	2	1	0	0	0	0	0	2	5	P=0.355 NS
	Absent	20	1	1	14	2	4	3	22	67	
REASONS	Financial problems	7	0	0	2	0	1	0	1	11	P=0.048 S
	Family problems	11	2	1	4	1	3	3	18	43	
	Under the influence of psychoactive substance	0	0	0	4	0	0	0	0	4	
	others	4	0	0	4	1	0	0	5	14	
METHODS	Hanging	1	0	1	1	0	0	0	1	4	P=0.013 S
	Poisoning	14	0	0	9	1	4	3	20	51	
	Drowning	3	1	0	0	0	0	0	0	4	
	others	4	1	0	4	1	0	0	3	13	

A=Depression, B=Dysthymia, C=BPAD, D=Alcohol Dependence Syndrome, E=Schizophrenia, F=Anti-social Personality, G=Adjustment Disorder, H=Deliberate Self Harm

DISCUSSION

In our study most of the attempters were in the age group of 26-35 years (41.6%). There was male (52.8%) predominance in the sample shown in table 1.

Gender has significant association with age, alcohol substance abuse, past psychiatric history and reasons for attempting suicide. More males (59.3%) are in the age group of 15-25 years, past history of psychiatric disorder was found in (81.8%) males, with substance abuse problems in (85.7%), and stated financial problems (100%) and chronic medical illnesses (78.6%) as a reason for the attempt when compared to the females shown in table 1.

These finding is in agreement with the Bansal et al¹⁰ and Nagendra et al¹¹ where males outnumbered females. Here, more number of males attempted suicide in 20 to 39 year age group.

High suicide intent score was present in majority of the sample (48.6%), followed by medium intent present in (31.9%) of the sample.

High suicide intent score had a significant relationship ($p < 0.05$) with age, gender, domicile, education, type of family, occupation marital status, substance abuse, and reasons for attempting for suicide seen in table 2.

Similar study shown in Harris L et al¹² found that high suicide intent was associated with increase in age in both genders, divorced, low socio economic status, unemployed, financial problems.

Psychiatric diagnosis had a significant relationship ($p < 0.05$) with sex, alcohol substance abuse, past history of psychiatric disorder, reasons for attempting suicide, and methods adopted for suicidal

attempt. Majority (66.7%) had a psychiatric diagnosis. The most common psychiatric diagnosis found in the sample was depression (30.6%), followed by alcohol dependence syndrome (19.4%) and anti-social personality was seen (5.6%) shown in table 3.

Similar study shown in Jain et al¹⁹ reported depression is most common followed by alcohol dependence, schizophrenia.

CONCLUSION

- Patients with psychiatric illnesses should be given utmost care. They should not be left alone, should be given periodic counseling and treatment.
- Availability of pesticides mostly organ phosphorous compounds & household chemicals can also be restricted.
- Culturally compatible interventions, such as the community based educational program to reduce alcohol misuse reported by should be considered in this regard.
- Mental health service should be made on integral part of community health programs.

LIMITATIONS

- This was a hospital based study; hence may not be representative of general population.
- Follow-up information was not available for the patients in the study sample.
- Some suicides might have been missed owing to their non attending psychiatric department out of stigma.

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