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PSYCHIATRIC MORBIDITY IN PATIENTS OF ATTEMPTED SUICIDE ADMITTED IN A RURAL AREA HOSPITAL OF NORTHERN ANDHRA PRADESH

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ABSTRACT

World Health Organization estimates about one million people die of suicide each year. Approximately one suicide occurs every minute, and a suicidal attempt every 3 seconds. In India the rate of suicide is 12 per lakh and more than 100,000 people die of suicide every year.

Aims and Objectives: To study the demographic profiles and other related details of attempted suicides in rural area. To investigate for the presence of any physical or psychiatric morbidity in the subjects. To assess increase in psychosocial stress, in any specific area, preceding the event

Material and methods: Fifty patients who have survived the attempt and as defined by Dorpat and Boswell (1963) and Morgan (1975) were taken up for study after taking informed consent. All the subjects were subjected to detailed psychiatric interview and are assessed on different scales.

Results: In the present study, the most common Psychiatric disorders are depressive disorder 42% followed by Alcohol abuse 14% and Anxiety disorders 8%, No psychotic disorders were noted. 68% of the subject's common mode of Attempt was organo-phosphorous, and 60% of the attempts were impulsive in nature

Conclusion: In a country like ours, where literacy is low and poverty is high, the biggest challenge will be to dispel the stigma and superstitions associated with mental illness and explode the myths shrouding 'suicide'.

Keywords: Attempted suicide, Psychiatric morbidity, Suicidal ideation, Stress

INTRODUCTION

Global mortality due to suicide has increased by about 60% in the last five decades. According to World Health Organization estimates about one million people die of suicide each year. Approximately one suicide occurs every minute, and a suicidal attempt every 3 seconds ^[1]. In India the rate of suicide is 12 per lakh and more than 100,000 people die of suicide every year. Though 70 to 90% of suicide cases have a treatable underlying psychiatric illness, only less than 10% seek mental health care, because 'attempted

suicide' continues to be a punishable offence in our country ^[2].

AIMS AND OBJECTIVES

- To study the demographic profiles and other related details of attempted suicides in a rural setting.
- To investigate for the presence of any physical or psychiatric morbidity that led the subjects to the extreme step.
- To assess increase in psychosocial stress, in any specific area, preceding the event that could be contributive to the attempt.

METHODOLOGY

Hospital based study, 50 patients between 15 years and 65 years are included. Variables related to Socio-demographic features, family dynamics, suicide characteristics, Psychiatric morbidity were studied. All the subjects who attempted suicide as defined by Dorpat and Boswell (1963) ^[3] and Morgan (1975) ^[4] were taken up for study, Dorpat and Boswell's definition of attempted suicide includes all willful, self-inflicted, life threatening acts which have not led to death. Morgan's definition which is restricted to self poisoning includes all the deliberate, nonfatal acts done in the knowledge that it was potentially harmful and the amount taken was excessive in the case of drug over dosage.

Tools

- Structured Pro forma for collecting demographic data and details of suicide attempts.
- Socio-economic scale by O.P Aggarwal.
- Alcohol use disorders identification test (AUDIT).
- Becks depression inventory (BDI).
- Hamilton Anxiety rating scale (HARS).
- Brief Psychiatric Rating Scale (BPRS).
- Family Interaction Scale - NIMHANS Scale I-Bhatti (1982).
- Family and Social Integration Schedule - Venkoba Rao (1989).
- Presumptive Stressful Life Event Scale Gurmeet singh, Dalbir Kaur and Harsharan Kaur (1981).

RESULTS

Table-1: Socio demographic features of attempted suicide patients n=50(%)

AGE					SEX		MARITAL STATUS		
15-25	26-35	36-45	46-55	56-65	M	F	MARRIED	UNMARRIED	DIVORCED
25(50)	13(26)	7(14)	3(6)	2(4)	18(36)	32(64)	37(74)	12(24)	1(2)
RELIGION			EDUCATION					TYPE OF FAMILY	
HINDU	MUSLIM	CHRISTIAN	PRIMARY	HIGH	INTERMEDIATE	DEGREE	UNEDUCATED	NUCLEAR	JOINT
45(90)	3(6)	2(4)	29(58)	5(10)	7(14)	5(10)	4(8)	44(88)	6(12)
OCCUPATION					SOCIO-ECONOMIC STATUS				
STUDENT	HOUSEHOLD	UNSKILLED LABOURER	SKILLED LABOURER	PROFESSIONAL	HIGH	UPPER MIDDLE	LOWER MIDDLE	POOR	VERY POOR
8(16)	8(16)	28(56)	4(8)	2(4)	-	8(16)	10(20)	32(64)	-

Table-2: Family dynamics of attempted suicide patients n=50(%)

INTEGRATION LEVEL			INTERACTION STATUS				
WELL INTEGRATED	MODERATELY INTEGRATED	NOT INTEGRATED	CORDIAL	INDIFFERENT	ANTAGONISTIC		
29(58)	11(22)	10(20)	25(50)	20(40)	5(10)		
INTERPERSONAL PROBLEMS				PSYCHIATRIC ILLNESS IN FAMILY			
PARENTS	IN-LAWS	SON	HUSBAND	NIL	ALCOHOL	SUICIDE	NIL
2(4)	5(10)	1(2)	5(10)	37(74)	28(56)	4(8)	18(36)

Table-3: Suicide details of attempted suicide patients n=50(%)

SUICIDE NOTE		TIME OF ATTEMPT				DISCOVERY OF ATTEMPT	
PRESEN T	ABSEN T	MORNIN G	AFTERN OON	EVENI NG	NIG HT	SELF	SPOTTED BY ATTENDENTS
2(4)	48(96)	15(30)	8(16)	12(24)	15(30)	15(30)	35(70)
NATURE OF ATTEMPT		PRESENCE OF OTHERS DURING ATTEMPT		MODE OF ATTEMPT			
PLANN ED	IMPULSIV E	PRESENC E OF OTHERS	IN SOLITU DE	ORGANO PHOSPHORO US	DRUG OVERD OSE	POISONO US PLANTS	HOUSEH OLD CLEANE R
20(40)	30(60)	15(30)	35(70)	34(78)	8(16)	6(12)	2(4)
SUICIDAL IDEATION		PAST HISTORY OF SUICIDE		MEDICAL CONSULTATION BEFORE ATTEMPT			
PRESEN T	ABSENT	PRESENT	ABSENT	PSYCHIAT RY	MEDIC AL	NO CONSULTATI ON	
20(40)	30(60)	4(8)	46(92)	2(4)	7(14)	41(82)	
AWARENESS OF LEGAL CONSEQUENCES OF ATTEMPT				ATTITUDE TOWARDS ATTEMPT			
PRESENT		ABSENT	VAGUE	GUILTY		NOT GUILTY	INDIFFERE NT
7(14)		41(82)	2(4)	40(80)		9(18)	1(2)

Table- 4: Psychiatric morbidity in patients of attempted suicide (%)

MAJOR DEPRESSIVE DISORDER	ALCOHOL DEPENDENCE	ANXIETY DISORDERS	PSYCHOTIC DISORDERS
42%	14%	8%	Nil

DISCUSSION

Socio- Demographic Features

Peak occurrence of suicides was observed in the age group of 15 to 25yrs, the youngest and the oldest being 15yrs and 70yrs respectively. Nagendra Gouda, Sambaji (2008) showed similar results^[5]. Female predominance of 64% in the sample is in conformity with the earlier studies reported on attempted suicides. WHO studies hold unmarried, divorced, widowed and single people at a high risk than married people. But in the present study 74% of the subjects were married. This may be due to the nature of the institution of marriage in India, which is more of a social obligation, performed by elders,

irrespective of the individual's preparedness for it. Marital partners in India are virtually strangers to each other, and so are the families. Hence, several adjustment problems can arise after marriage. The study of Nagendra Gouda, Sambaji M Rao (2008)^[5] also reported similar results. As most of the studies in India are from Hindu residential areas it is very difficult to make any observation from the religious perspective. Majority of the sample in this study had only school education, while in the study of Nagendra Gouda, Sambaji (2008)^[5] majority had college level and above education. Different domiciliary backgrounds of the samples could be a reason for this observation. Underdeveloped rural

background with low educational and employment opportunities could be a reason for the poor socio economic status

Features of suicide Attempt

60% of the suicides were impulsive in nature in the present study and it is in accordance to the study done by Kretman (1975) ^[6]. The commonest method was ingestion of organo-phosphorous compounds, followed by self poisoning with over dosage of drugs and other substances. The area of study being agrarian, the subjects have an easy access to these compounds both at home and at local markets. This could be the reason for the high choice of this method. Diurnal variation is observed in this study. In general, planned and highly motivated attempts occur in solitude and nights and it in accordance to the study done by B.S. Chavan, Gurvinder pal singh (2008) ^[7]. In the present study suicidal ideation was observed in 40% of the subjects. Suicidal ideation is a high risk factor and dependable indicator. Paykel reported 8.9 % ^[8] in his study In the present study 8% of the subjects had past history of suicide attempt, it in similar line with the study done by B.S. Chavan, Gurvinder pal singh(2008) ^[7] who had 8.9% Suicidal behaviour in the past is a very high risk factor in the predictability of future attempts.

Current psychopathology

On Beck Depression Inventory (BDI) 42% of the sample were found to be suffering from depressive disorder. The result in the present study is comparable with those of Barraclough et al (1974) ^[9], A Roy et al. ^[10]. Hamilton Anxiety Rating Scale (HARS) was used to assess anxiety. In contrast to the present study, T.Pettri, Taraja k. Melartin (2003) ^[11] reported 63 %. Indians, more so the villagers take life in their stride with a philosophical fortitude and hence have a high threshold to anxiety. This might have reflected as low anxiety levels in the present study Brief Psychiatric Rating Scale (BPRS) was used to evaluate psychotic disorders. In the present

sample none had psychosis. However few subjects scored high on depression related questions of BPRS. Brain A. Palmer (2005) ^[12] in a Meta analysis reported a life time prevalence of 4.9% in schizophrenia. Assessment of subjects was done using Alcohol Use Disorders Identification Test (AUDIT). In this study 14% were found to be having alcohol use disorder. B.S.Chavan, Gurvinder Pal singh (2008) ^[7] noted 23.7 % H. Gethinin noted 12% ^[13].

Other observations

On Gurmeeth singh's Presumptive Scale of Life Events, the subjects in the present study scored a total of 189 life events during the past one year and 115 life events during the life time. The corresponding mean scores are 3.78 and 2.3 while the standard deviations are 2.38 and 2.18 respectively. These results show that subjects had increased psychosocial stress preceding the attempt. Failures in the examination, frustration in love affairs were the common causes in the 15-25 year age group. In married females persecution in the family topped the list. Financial problems were the cause of stress in the male subject. Only 14% of the samples were aware of the ensuing legal complications beforehand. This can be explained on the basis of low education level in the rural area.

CONCLUSION

By and large ingestion of pesticides, indigenous substances and drugs in excess is the commonest method of attempt in the rural areas, perhaps due to their easy availability. A free access to these substances poses a great threat to the villagers. Conducting awareness programmes regarding the use and safety of these substances may help prevent suicides to a greater extent in the rural areas. In our country, where people can freely purchase drugs of any quality and quantity without an authorized prescription, it is high time the Government impose strict rules making the prescription of a Medical practitioner mandatory for dispensation of drugs. Total prevention of

suicides is never possible. In a country like ours, where literacy is low and poverty is high, the biggest challenge will be to dispel the stigma and superstitions associated with mental illness and explode the myths shrouding 'suicide'. This is possible with a multi dimensional and well concerted approach under a National Community Health Program.

Limitations

As the study was conducted in a rural area and the sample size being small the study results cannot be generalized to the overall population though personality disorders carry a substantial risk for suicide, personality was not assessed for the current sample.

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Ethical Issues

Institutional ethical clearance was obtained for the study. Confidentiality of participant's personnel information was maintained throughout the study.

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