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Report

Psychiatric diagnosis in attempted suicide

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ABSTRACT

This is a retrospective study which assesses the various socio-demographic correlates, the methods adopted to commit suicide and the psychiatric disorders in patients attempting suicide. The most common psychiatric diagnosis was found to be Adjustment disorder followed by Depressive disorder. Organo-phosphorous compounds were the most frequent agent used among suicide attempt patients.

Key words- attempted suicide, adjustment disorder, organo-phosphorous compounds, depressive disorder, and socio-demography

INTRODUCTION

Suicide is a major cause of mortality and use of health resources. It is also a tragic and serious preventable public health problem all over the world. (1, 20)

Suicide rates among young people appear to be rising in both developed and developing countries more quickly than all other age groups. In recent times adolescent suicides have been on the increase.(1,2,3,12, 16).Exams, peer pressure and emotional issues are said to be the triggers (16). If the young generation of today have already run out of hope, the challenge lies in the hands of the adult society to make them realize that life is worth living (1,3).

Suicide is the human act of self inflicting, self intentioned cessation, committed out of constricted thinking, tunneled logic and acute anguish.

Attempted suicide is defined as a potentially self injurious action with a non-fatal outcome for which there is evidence, either explicit or implicit that the individual intended to kill himself or herself. The action may or may not result in injuries.(4) Para suicide is a term introduced to describe patients who injure themselves by self-mutilation but who usually do not wish to die (21).

Suicide because of its low base rate is virtually impossible to predict on a case by case basis (13). Prevalence studies show between 4 – 12% of the general population have made at least one attempt and the repetition ratio (persons who attempt suicide again) is 50 %.(5, 14)

According to National Crime Records Bureau, in India every 5 minutes a person commits suicide, 7 attempts to kill themselves forming about 100,000 suicide death per year in India. South India formed by four states (Kerala, Tamil Nadu, Andhra Pradesh, and Union Territory of Pondicherry) records around 50,000 suicide deaths per year. The discrepancies in suicide rates between Southern India and other parts of India could be attributed to different reporting and classification systems (22). Regarding the incidence of suicide in Kerala, the report of the Government of India shows that the suicide rate is highest in the State of Kerala, ninth year in a row, when compared to other states in India (6, 14).

Financial difficulties, psychosocial problems, failure in exams, defamation are the major stressors that lead to suicide in males. Females found harassment, family problems, diseases, unemployment etc. as the major stressors that they were forced to kick the bucket.(6) Consumerism, spending beyond resources pushing people in to debt is claimed to be major factor. Low frustration tolerance, problems in education system, parenting attitudes, weakening protective values of social institutions like family, increased use of alcohol all contributes to the stressor ultimately leading to suicide.

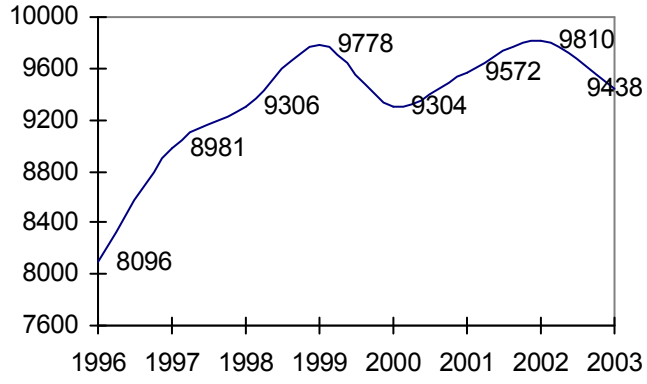

Fig 1 Number of suicide deaths in Kerala

YEAR	KANNUR DISTRICT			KERALA STATE		
	MALE	FEMALE	TOTAL	MALE	FEMALE	TOTAL
2001	542	228	770	6787	2785	9572
2002	558	197	783	7165	2645	9810
2003	528	195	721	6935	2503	9438

Table 1 Figures for suicide death during the last three years

Biological studies suggest that low serotoninergic activity is associated with suicidal behaviour. Data from work with monoz gotic and dizygotic twins indicate that the clustering of suicide in a family may represent a genetic predisposition to the psychiatric disorders that are associated with suicide (5).

MATERIALS AND METHODS

This was a retrospective study conducted at Academy of Medical Sciences, Pariyaram, Kannur, Kerala, India, which is a 1000 bedded medical college hospital catering to the health requirements of the people of Kannur District. The district has a number of private hospitals in addition to the Medical College which provide health care facilities to patients.

All attempted suicide patients admitted in the Medical wards during the period 1/January/03 to 01/June/04 were included in the study. The patients who died after reaching the hospital and those died during the recovery phase from physical ill health following attempted suicide were excluded from the study.

After admission, patients were treated in the wards or in the ICU. These patients were referred to the consultant psychiatrists for evaluation after the physical condition was stabilized. The Hospital encourages psychiatric evaluation of all attempted suicide cases before discharge.

A detailed clinical interview of each patient was conducted after the toxic effect of the substances ingested has subsided. The psychiatric assessment was done by consultant psychiatrists and a psychiatric diagnosis according to the ICD-10 was reached. The information regarding pre-morbid personality and illness was cross checked with a close relative or a reliable informant.

Data was collected for the study purpose from clinical notes made by the consultant, IP charts and psychiatric case records.

The present study included 206 cases of attempted suicide patients who were admitted in the medical wards or ICU.

RESULTS

a) Socio-demographic variables of the study sample-
During the one and a half year study period 206 patients were admitted in the medical wards for treatment of attempted suicide which throws light on the fact that out of every 1000 in-patient admissions 5 of them were for attempted suicide.

The age of the subjects ranged from 14 to 82 years. 68% of the patients were in the age group of 15 to 44years. Hindus constituted almost 3/4th of the total study sample.

Christians slightly less than 1/5th and Muslims numbered only 15. Regarding the marital status, majority of the subjects (n=137, 67%) were married.

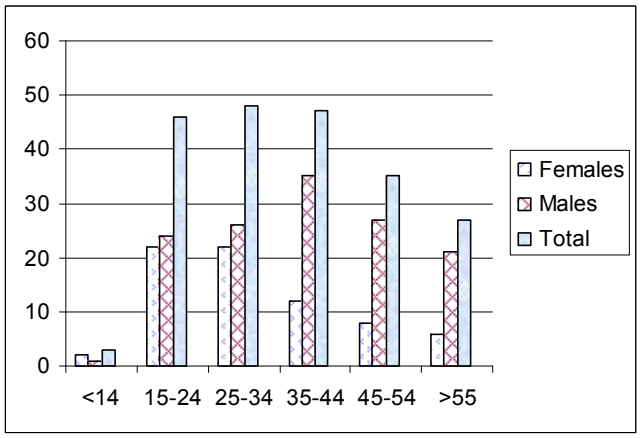

Fig 2 Age distribution

b) Characteristics of the suicidal behavior-
Majority of the patients (58%) consumed organo-phosphorous compounds in an attempt to put an end to their lives. This was followed by drug over dosage (20%) and rodenticide (8%). The remaining patients either consumed other chemical agents or used physical methods like hanging.

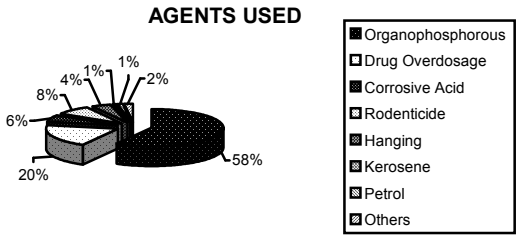

Fig 3 Agents used

In most cases stressors could not be identified,

of the identified sressors most common was problems in the family or primary support group coded as Z63 in ICD 10.(18,7) (See table)

Categories	Problems related to suicide	Number
Z55	Education	3
Z58	Employment / Unemployment	2
Z59	Housing / Economic circumstances	19
Z63	Primary support group / Family	47
Z65	Other psychosocial factors	14
Z85	Diseases of circulation	1

Table 2 Identified stressors for attempted suicide

c) Psychiatric diagnosis in people committing suicide-
Of the the 206 patients admitted during the study period 65% (n=134) were referred for psychiatric assessment. Of these 134 cases referred for psychiatric consultation 73% (n=98) had identifiable stressors that prompted them to make this decision to commit suicide.

Majority of the subjects had a psychiatric diagnosis except for a few, numbering 12. Among the patients who had a psychiatric diagnosis Adjustment disorder comprised the major bulk (40%, n=54). Depression (28%, n= 38) formed the next most common diagnosis followed by Alcohol Dependant syndrome (≈1%, n-13).

	MALE	FEMALE	TOTAL
COMPLETED SUICIDE	245 (66%)	125 (34%)	370
ATTEMPTED SUICIDE	134 (65%)	72 (35%)	206

Table 3 Completed suicide

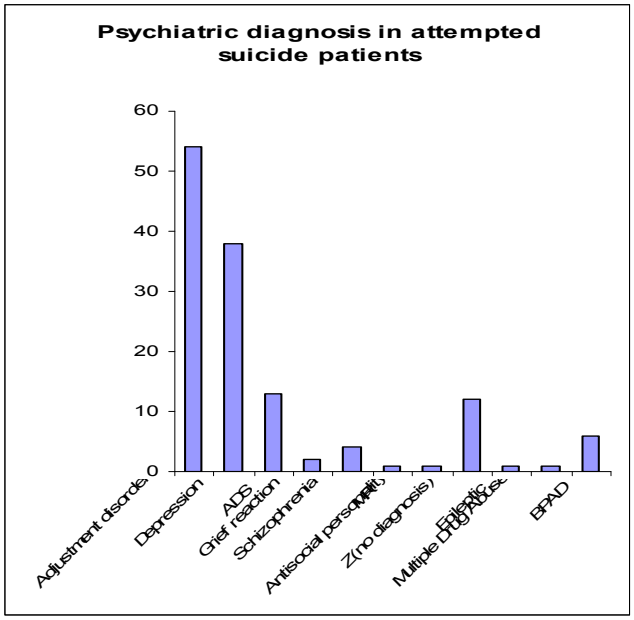

Fig 4 Psychiatric diagnosis

DISCUSSION

As the study was retrospective in nature it had it's own inherent limitations and weaknesses. The clinical diagnosis was cross sectional and not by consensus. The study sample was fairly large. The Psychiatric referral rate was only 65% and was comparable to a study done at St.Johns Medical College, Bangalore (7). The reasons for not referring could be due to the stigma associated with psychiatric referral which could not be assessed since this was a retrospective study.

In this study 45.6% (n=94) patients belonged to the age group 15 to 34 years, which was comparable to other studies done in Kerala (8).

In the present study males constituted 65% (n=134) of the total sample and females 35% (n=72). Comparing these figures with the number of completed suicide cases that underwent medico legal autopsy at the Forensic Department at Academy of Medical Science, Kannur, Kerala, India, it was found that males constituted 66% (n=245) and females 34% (n=135) of the completed suicide group during the same time period(9).

Organo-phosphorus and Organo-carbamate poisoning was the most frequent method used by patients to attempt suicide and it was supported by other studies from India (7,8). This is explained by the easy availability of insecticides and pesticides in most households. Over dosage with prescription drugs such as barbiturates and anti-depressants were next most common employed methods.

Adjustment Disorder 40% (n=54) constituted the most common psychiatric diagnosis followed by Depressive

disorder which is comparable to other studies(7). The next major psychiatric diagnosis contributing to attempted suicide cases was substance abuse especially Alcohol Dependant Syndrome (n=13, 10%). The fourth most common group of patients had no psychiatric diagnosis (n=12, 9%). The diagnosis of Schizophrenia, Personality disorder, Mental Retardation were comparable to other studies (7,8,9,10,11).

IMPLICATIONS FOR PREVENTION

Suicide is a complex, long-term outcome that requires complex theoretical models for appropriate study and complex interventions for effective prevention. The highest likelihood of success in saving lives in the long run lies in well designed, comprehensive programs focused on prevention, identification and appropriate treatment of Mental and Addictive Disorders particularly in Primary care.(15,16,20) This could be facilitated by Continuing education for health care professional to identify and treat Mental illness and by making Psychiatric consultation mandatory for all patients admitted following attempted suicide.(7) At the policy and public health level, increased restrictions on access to most commonly used lethal methods of suicide especially insecticides (organo-phosphorus and organo-carbamate compounds) and prescription medications and improving control of facilitatory factors such as alcohol, influencing the media in their portrayal of suicide and reporting of method may contribute to a reduction in suicide rates.(17,19)

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