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. Organophosphorous compounds were the most frequent agent used among suicide attempt patients.

Key words- attempted suicide, adjustment disorder, organophosphorous 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, tunnelled 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
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.
of the identified stressors most common was problems in the family or primary support group coded as Z63 in ICD 10.(18,7) (See table)

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

Table 2 Identified stressors for attempted suicide

c) Psychiatric diagnosis in people committing suicide-
Of 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).

<table>
<thead>
<tr>
<th></th>
<th>MALE</th>
<th>FEMALE</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPLETED SUICIDE</td>
<td>245</td>
<td>125</td>
<td>370</td>
</tr>
<tr>
<td>(66%)</td>
<td>(34%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ATTEMPTED SUICIDE</td>
<td>134</td>
<td>72</td>
<td>206</td>
</tr>
<tr>
<td>(65%)</td>
<td>(35%)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 Completed suicide

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 (organophorus 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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