SUICIDAL IDEATORS IN THE PSYCHIATRIC FACILITY OF A GENERAL HOSPITAL - A PSYCHODEMOGRAPHIC PROFILE

K.E. SADANANDAN UNNI & ANNIE J. MANI

SUMMARY

As a part of the basis for planning of prevention of suicide and suicide attempt, 154 suicidal ideators registered between 1988 and 1991, were recruited for an analysis of their psychiatric morbidity pattern. 59.74% had depression. The representation of substance abuse disorder and psychoses were 9.74% each 7.14% had neurotic disorders. 9.09% had bipolar affective disorder and 0.65% had normal mental status. 40% of the sample were housewives. Majority of them were between the age group of 16 and 45 years, having an educational status below 10th Standard. The four year follow up findings showed that 8 of the sample completed suicide, of which four were suffering from psychosis. Repeaters suffered from disociation disorder. 15 of the depressives had resistant depression with nonremittent suicidal ideas. Psychotic patients and patients with somatic complaints were not free communicators of their suicidal idea. Implication of the results in the clinical management and further research on these patients are discussed.

Key words: suicidal idea, suicidal ideator, depression, psychiatric morbidity.

INTRODUCTION

The overall annual rate of suicide (average of the states) in India was 6 to 9 per 100,000 in the late 1970s (Venkoba Rao, 1983) and around 12 per 100,000 in the late 1980s (Govt of India Statistics, 1988). 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 causes are largely social (Govt of India Statistics, 1988.)

Every doctor should be able to assess the risk of suicide through his willingness to make tactful but direct enquiries about a patient's intentions. He should also be aware of the general factors that contribute to an increased risk (Gelder et al, 1989). Patients may express their suicidal ideas freely. Some of them reveal it only on direct questioning during the mental status examination. Asking the patients about suicidal behaviour does not increase their likelihood of suicidal behaviour. If the patient has already thought of suicide he will feel better understood when the doctor raises the issue, and this feeling may even reduce the risk (Gelder et al, 1989). If the person has not thought of suicide before, tactful questioning will not make him behave suicidally (Gelder et al, 1989; Hawton, 1987; Hawton and Catalan, 1987)

In assessing suicidal risk the most important warning sign is direct statement of intent (Gelder et al, 1989). Though few repeated threateners kill themselves, freely and repeatedly expressed suicidal idea may be considered as threats intended to manipulate other people (Gelder et al, 1989). Oblique hints given by the patient are to be clinically considered seriously as the ultimate events before the patient's act of attempted suicide (Gelder et al, 1989).

Answers to questions about current and previous suicidal ideas, behaviour and perception of what makes life worth loving may be useful in the prediction of deliberate self harm (myers, 1982) Computer interview, (consisting of self rating of modification of Hamilton Depression Rating Scale and a novel questionaire developed to assess suicidal ideation), rather than an interview by a psychiatrist, predicted suicidality in 102 patients admitted in a hospital in U.K. following an episode of deliberate self harm. The patients were more comfortable and prepared to confide to a computer than to a
psychiatrist (Levine et al, 1989). People who talk of suicide do sometimes act and the popular notion that those who really commit suicide do not give any warning, is a myth. 8 out of 10 had communicated suicidal intent before the act (Resnik, 1980).

In a study on the course of depressive symptoms in suicidal versus non suicidal depressed inpatients, it was found that four months after discharge the groups who had suicidal ideas remained depressed and took more time for recovery than the non suicidal group (Overholser et al., 1987). In a ten year prospective study of 207 hospitalised suicidal ideators 14 patients committed suicide and the predictors for suicide were presence of hopelessness and pessimism (Beck et al, 1985). Degree of helplessness as an indicator of long term suicidal risk was pointed out by several authors (Beck et al, 1985).

Breier and Astrachan (1984) had shown that schizophrenic patients failed to communicate their suicidal intent directly and had advised case by case clinical assessment of potential suicidal ideator while dealing with schizophrenic patients.

In adolescents it was shown that in response to psychic discomforts like depression and selfderogation men turned more to alcohol and drugs whereas women turned to consider suicide. But in response to feelings of lack of purpose in life, women turned to substance abuse and men turned to suicidal ideation (Harlow et al., 1986). Salmon and Harrington (1989) had shown that a high proportion (55%) of university students and general practice group (45%) admitted to some suicidal ideation in their life time and in both groups, females predominated over males.

Tripartite approach (Beck et al, 1973) classifies suicidal individuals into ideators, attempters and completers. The suicidal ideators are not studied as extensively as the other two groups (Hawley et al, 1991). The authors felt that the results of the present study could form part of the basis on which programmes to prevent suicide attempt and suicide are planned.

**MATERIAL AND METHOD**

**POPULATION**

Division of Psychiatry of Faculty of medicine, Annamalai University caters mainly for 143 villages of the Chidambaram Taluk. Though Chidambaram, Zirkazhi, and Mayavaram towns are close in proximity to the above said facility, the rural population represents the majority of the service utilisers. Cases referred from other divisions of the faculty also are routinely included in the departmental new case register. In 1988 the total new cases registered was 502; in 1989, 654; in 1990, 711 and in 1991, 675.

**SAMPLE**

It was decided to enquire of all patients attending psychiatry outpatient services, about any suicidal intent, if they did not freely express it. Strict confidentiality was assured to the patients and relatives regarding the details collected. Detailed history taking and mental status examination were done for each of the patients. 154 consecutive cases of suicidal ideators irrespective of diagnosis were recruited between March 1988 and December 1991, treated and followed up till December 1992, for the present study. Freely expressing suicidal ideators and also those who expressed the suicidal intention on enquiry took part in the study.

**METHOD**

To participate in the study, an informed consent was obtained from each of the patients. The free ideators were heard fully without interruption, but with stimulating questions, in an atmosphere of patient and attentive listening by the therapist. Those who did not have free suicidal idea were directly asked “do you harbour any suicidal idea in your mind currently or did you have suicidal ideas during your illness.” If they answered “yes”, they were also included in the study. Information given by the patients were corroborated by interviewing close family members. This interviewing, was made com-
prehensive specifically for finding out whether the patient had shown any suicidal intent in idea or behaviour. If they had expressed their suicidal intent to the relatives, they were also included in the study.

The authors filled up a separately designed pretested proforma for each of the patients. Diagnosis for each patient was arrived by consensus method (K.E.S. and A.J.M.). The proforma included sociodemographic profile and psychiatric symptom check list. ICD 10 was utilised to classify the patients according to their history and clinical picture.

**Treatment:**

It was decided to admit all suicidal ideators in the in-patient facility for a hospital stay with the relatives for a minimum period of 4 to 6 weeks for quick hiking up of antidepressant or neuroleptic drug dosage and / or for instituting electro convulsive therapy, as the case may be.

**Follow up:**

Follow up was done from entry to completed suicide or upto December 1992 as the case may be, with weekly once recording of findings and complaints if any, during the symptomatic phase and monthly once recording of findings and complaints if any, if it is in a period of remission. The same symptom checklist used during the intake was utilised to record the date of follow up. Relatives were also interviewed to corroborate the findings and follow up history, mainly for eliciting suicide behaviour. The relatives of patients who completed suicide were requested to come to the department with a view to helping them to express their feelings. During such sessions the relatives were requested to find out what exactly happened with regard to family interaction (e.g: oblique hints, change in behaviour and talk of the patient, if any) during the period prior to the suicide. All patients who had a relapse of symptoms and suicidal ideas were admitted for adjustment of dosage of drugs or for consideration of electro convulsive therapy during follow up. The full symptomatology of suicidal ideators were also explored (symptomwise approach). Sociodemographic variables and clinical data pertaining to the sample were tabulated and analysed.

**RESULTS**

Analysis of the data brought out the following salient features. On an yearly average 6% of new cases registered had suicidal ideation. Out of the 154, 49 patients expressed suicidal ideas freely and 105 expressed suicidal ideas on probing (Table 1).

**TABLE 1**

| Year | No of new cases | No of suicidal ideators | Percent of Suicidal ideators |
|------|-----------------|-------------------------|-------------------------------|
|      |                 | F.I. | O.P. | Total |                      |
| 1988 | 502             | 9    | 16   | 25    | 5.0                 |
| 1989 | 654             | 12   | 18   | 30    | 4.6                 |
| 1990 | 711             | 15   | 41   | 56    | 7.9                 |
| 1991 | 675             | 13   | 30   | 43    | 6.4                 |

Total 2542 49 105 154 Average 6%

F.I. - Free ideators. O.P. - Ideators identified on probing.

The sample consisted of predominantly Hindus from rural background. Females who constituted majority of the ideators were predominantly housewives. The majority of ideators were employed as farmers, labourers and government / self employed. 16 to 35 age group was a majority (Table 2).
TABLE 2
SUICIDAL IDEATORS - SOCIO DEMOGRAPHIC PROFILE
(n-154)

| SEX          | No | PERCENT |
|--------------|----|---------|
| MALE         | 60 | 39      |
| FEMALE       | 94 | 61      |

| AGE           | No | PERCENT |
|---------------|----|---------|
| Below 15      | 2  | 1.2     |
| 16 to 25      | 51 | 33.11   |
| 26 to 35      | 44 | 28.6    |
| 36 to 45      | 37 | 24.02   |
| Above 46      | 20 | 12.98   |

| MARITAL STATUS | No | PERCENT |
|----------------|----|---------|
| Married/Widowed| 111| 72.07   |
| Single         | 43 | 27.9    |

| EDUCATIONAL STATUS | No | PERCENT |
|--------------------|----|---------|
| Illiterate         | 20 | 12.9    |
| Below 10th Std     | 106| 68.8    |
| Above 10th Std     | 20 | 18.2    |

| OCCUPATIONAL STATUS | No | PERCENT |
|---------------------|----|---------|
| Housewives          | 62 | 40.02   |
| Employed            | 34 | 22.00   |
| Labour/Daily wage earner | 23 | 15.00   |
| Farmers             | 22 | 14.30   |
| Unemployed/Refugee/Beggar/Student | 13 | 8.40    |

Out of the 34 patients referred from other departments with somatic symptoms, 31 expressed suicidal ideas only on probing. These patients were from divisions of Medicine (13), Orthopedics (11), Obstetrics and Gynaecology (5), and Surgery (2). Out of the 3 free suicidal ideators, 2 were from Medicine and 1 was from Orthopaedics.

Among the 15 psychotic patients 9 (5.8%) were paranoid schizophrenics with post psychotic depression. 3 (1.9%) were catatonic schizophrenics. Schizoaffective disorder, acute poly-morphic psychotic disorder with symptoms of schizophrenia and undifferentiated schizophrenia were represented by 1 (0.65%) each.

Among the depressives, severe depressive episode without psychotic features were a majority - 39 (25.3%). 16 (10.4%) out of the 92 depressives were having moderate depressive episode while 8 (5.19%) were diagnosed as having mixed anxiety and depressive disorder. 6 (3.9%) of the depressives were having bipolar affective disorder current episode moderate depression. Only 2 (1.3%) of the depressives had dysthymia. 3 (1.95%) had recurrent depression and 6 (3.9%) had single episode of depressive reaction (Table 3).

TABLE 3.
SUICIDAL IDEATORS-PSYCHIATRIC PROFILE (n-154)

| Diagnosis                                      | No | PERCENT |
|------------------------------------------------|----|---------|
| Psychosis                                      | 15 | 9.74    |
| Depression                                     | 92 | 59.74   |
| Alcohol/Multiple drug abuse related disorders  | 15 | 9.74    |
| Prolonged grief                                | 2  | 1.3     |
| Neurotic disorders                             | 11 | 7.14    |
| Dementia                                       | 2  | 1.3     |
| Myxoedema with organic depressive disorders    | 1  | 0.65    |
| Epilepsy with mental retardation and behavioural impairment | 1 | 0.65 |
| Bipolar affective disorder:                    |    |         |
| Mania with cyclothymia and marital problem     | 1  | 0.65    |
| Mania with episodic alcohol use                 | 13 | 8.44    |
| Normal mental status                           | 1  | 0.65    |

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Neurotic disorders included 8 (5.19%) patients with dissociative convulsions, 2 (1.3%) with hysterionic personality disorder and 1 (0.65%) with obsessive compulsive disorder with predominantly compulsive acts.

All the free suicidal ideators had ideas of hopelessness and majority had ideas of worthlessness and physiological shifts, in comparison to the ideators identified on probing (Table 4).
TABLE 4
SYMPTOM WISE APPROACH TO THE SAMPLE OF 154 SUICIDAL IDEATORS

| SYMPTOM                     | F.I.(n-49) | O.P.(n-105) |
|-----------------------------|------------|-------------|
|                             | No Percent | No Percent  |
| Hopelessness                | 49 100     | 26 24       |
| Worthlessness               | 30 61      | 24 22       |
| One or more physiological shifts | 40 81      | 48 45       |
| Agitation                   | 6 12       | 2 0.02      |
| Somatic Complaints         | 3 6        | 31 29       |
| Psychotic features         | 9 18       | 15 14       |

F.I.-Free ideators O.P.-ideators identified on probing.

DISCUSSION

As shown by a western study, 8.9% of people in a general population survey had suicidal ideas in the year prior to the interview (Paykel et al, 1974). On an yearly average only 6% of the newly registered cases of the present clinical population had suicidal ideas (Table - 1). 25% of the sample had endogenous depression with diurnal variation of mood, insomnia, anorexia and weight alterations. According to ICD 10 they came under the category of severe depressive episode without psychotic symptoms. There is general agreement that depressives with biological symptoms form a high risk group. There is also general agreement that suicide may happen when patient comes out of depression and when the psychomotor status is normal. Such patients might have had suicidal ideas during preceding more severe depressive phase, but lacked the energy and initiative to carry it out. In fact, every depressive is a potential suicide and 3 to 30% of endogenous depressives ultimately die of suicide (Venkoba Rao, 1983). Majority of suicidal ideators referred over a period of one year to the emergency services in St Mary's hospital, inner London, were having personality disorders, criminality and substance abuse than depression (Hawley et al, 1991). This sharp contrast to the findings of the present study with over-representation of depressives could be explained on the basis of the differences of habitat.

The authors agree with the views of Costello (1992) and Venkoba Rao (1993), regarding symptomwise approach in assessing suicidal ideators. Venkoba Rao (1993) has rightly pointed out that the 26 different forms of depression as per ICD 10 is of no use in understanding the causes or in the assessment of predisposition to suicide. Symptomwise approach showed that in the present sample all the free ideators expressed hopelessness, more than 60% of them had ideas of worthlessness, and 81% of them had physiological shifts (Table 4). Psychotic patients did not express suicidal ideas as freely as the depressives. Only few of their suicidal intent was demonstrated even after repeated probing. In this regard the authors felt that the abnormality of the higher mental functions might have interfered with their free expression of subjective distress and suicidal intent. On adequate neuroleptic therapy they improved with regard to their mental symptoms and insight and could express their suicidal on questioning at a later period. Follow up data showed that they were suffering from post psychotic depression. Verghese & Abraham (1983), had pointed out that hallucination and impulsive behaviour are common causes of suicide in schizophrenia and their methods are cruel, bizarre and successful. It is also generally agreed that post psychotic depression is another cause of suicidal behaviour in schizophrenic patients. Post psychotic depression is the most under appreciated and misdiagnosed aspect during the management of schizophrenic patients (Kaplan et al, 1994). Because of these reasons the approach to the suicidal risk assessment in psychotics should be different from that of the depressives.

During the follow up between 1988 and 1992, 8 of the 154 committed suicide. Of them 2 had depression, one had dermatological illness, one had Hansen's disease and 4 had psychoses.
These four psychotic patients committed suicide after 2 years of follow up in the outdoor service during the period of remission. Two depressives committed suicide just after coming out of the second of their depressive episode. Two others with dermatological illness committed suicide after one year of repeated consultations, in different hospitals, one of them being in the university hospital. 15 out of the 92 patients had resistant depression. They had non remitting suicidal ideas. Rest of the depressives had suicidal ideas during the periods of relapse. The patients with dissociation disorder attempted several times with non lethal methods and so at the end of the year 1992, they were concluded to be a group of threatened. While the patients with a dissociation disorder freely expressed "fleeting suicidal ideas", the authors failed to consistently record with surety whether some of the psychotic patients had continued suicidal ideas or not, because of their poor communication. 18 of the free suicidal ideators and 4 of the ideators detected on probing attempted suicide, but were saved after hospitalisation. All of them had ideas of hopelessness, worthlessness and physiological shifts along with suicidal ideation, as per their follow up records. 9% of the sample were having bipolar affective disorder. Some of them had episodic alcohol abuse. Initially they had isolated suicidal ideas along with the manic clinical presentation. On further follow up they had revision of diagnosis to mixed affective state.

With this study the authors had a framework within which the risk groups could be targeted for organising specific clinical and social management with a view to primary prevention of suicide. As a part of this programme, the housewives who were friends and neighbours of ideators in the villages from which the patients hailed, were requested to attend psychoeducative classes held in the hospital outpatient services. The method of early detection of behavioural changes in common psychiatric illnesses, the importance of early reporting to the hospitals about any ideators etc were highlighted. They were specifically advised not to try to assess the degree of seriousness of the suicidal ideation, but to report at the earliest to the hospital with the patient. Staff nurses in the wards, attended similar lecture classes along with the relatives of the admitted patients. During these sessions importance of careful observation of patient's behaviour in the wards, and addressing the suicidal ideation by early institution of somatic treatment, pharmacotherapy and psychotherapy were highlighted, apart from suicidal risk assessment. For better co-ordination with the physicians and intensive care unit doctors, intermittent multidisciplinary group discussions were conducted whenever occasion arose, with a view to saving any ideator who got admitted with suicide attempt. Family members of the completed suicide cases underwent grief workup, emotional ventilation and follow up supportive psychotherapy. In all the psycho education sessions the unpredictable nature of psychotic suicidal behaviour and the comparative lack of freely expressed suicidal ideas in psychotic patients were pointed out. Following Beck et al (1985), freely expressed suicidal ideas along with hopelessness, worthlessness and biological symptoms of depression were pointed out to be few of the indicators of increased risk.

Majority of psychotic patients and patients who report to non psychiatric departments with somatic complaints are not free communicators or their suicidal ideas. These are to be considered as major obstructions in the primary prevention of suicide. Further systematic research on the suicidal behaviour of larger samples of these two categories of patients, is a suggestion arising from the present study.

REFERENCES:
Beck, A.T., Davis, J.H. & Frederick, C.J. (1973) Classification and nomenclature - In Suicide Prevention in the Seventies (eds H.L.P. Resnick and B.C. Hawthorne) pp 7-12. Washington D.C, U.S. Government Printing Office.
Beck, A.T., Steer, R.A., Kovacs, M., Garrison, B. (1985) Hopelessness and Eventual
Suicide: a 10 year prospective study of patients hospitalised for suicidal ideation. American Journal of Psychiatry, 142, 559-209.

Breier, A. & Astrachan, B.M. (1984) Characterisation of Schizophrenic patients who commit suicide. American Journal of Psychiatry, 141, 206-209.

Costello, C.G. (1992) Research on symptoms versus research on syndromes. British Journal of Psychiatry, 160, 304-308.

Gelder, M., Gath, D., Mayou, R. (1989) Oxford text book of Psychiatry - (2nd edn.) London: English Language Book Society / Oxford University Press.

Harlow, L.L.,Newcomb, M.D., Bentler, P.M. (1986) Depression, Self derogation, Substance abuse and Suicidal ideation, lack of purpose in life as a mediational factor. Journal of Clinical Psychology, 42,5-21.

Hawley, C.J., James, D.V., Birkett, P.L., Baldwin, D.S.,de Ruiter,M.J., Priest,R.G.(1991) Suicidal ideation as a presenting complaint - Associated diagnosis and characteristics in a casuality population. British Journal of Psychiatry, 159,232-238.

Hawton,K.E.(1987) Assesment of suicide risk. British Journal of Psychiatry, 150,145-153.

Hawton, K.E. & Catalan, J.(1987) Attempted suicide: a practical guide to its nature and management (2nd edn). Oxford: Oxford University Press.

Kaplan,H.I., Sadock,B.J., & Grebb,J.A. (1994) Synopsis of Psychiatry - Behavioural Sciences and Clinical Psychiatry. (7th edn.). Baltimore: Williams and Wilkins.

Levine,s., Ancill, R.J. & Roberts, A.P. (1989) Assesment of suicide risk by computer delivered self rating questionnaire: preliminary findings. Acta Psychiatrica Scandinavica,80,216 - 220.

Myers, E.D.(1982) Subsequent deliberate self harm in patients referred to a psychiatrist: a prospective study. British Journal of Psychiatry, 140, 132-137.

Overholser, J.C., Miller, I.W., & Norman, W.H. (1987). The course of depressive symptoms in suicidal and non suicidal depressed inpatients. Journal of Nervous and Mental Disease, 175, 450-456.

Paykel,E.S.,Myers,J.K., Lindenthal, J.J.(1974) Suicidal feeling in the general population : A prevalence study. British Journal of Psychiatry, 124, 460-469.

Resnik,H.L.P. (1980) Suicide. In Comprehensive Text Book of Psychiatry, 3rd edn (Eds.Kaplan, H.I., Freedman, A.M., Sadock, B.J. Baltimore : Williams and Wilkins.

Salmon ,P.H. & Harrington, R. (1984) Suicidal ideation in University Students and other groups. International Journal of Social Psychiatry, 142, 559-563.

Venkoba Rao, A. (1983) Attempted suicide (Parasuicide) and Suicide. An Introduction to Psychiatry (2nd edn.) (eds. Verghese, A and Abraham, A) Madras : Christian Literature Society.

Venkoba Rao, A (1993) Trends in Suicidology Research. Indian Journal of Social Psychiatry, 9:43-46.

Verghese ,A & Abraham, A. (1983) Psychiatric emergencies. An Introduction to Psychiatry (eds.Authors), Madras: Christian Literature Society.

World Health Organisation (1992). The ICD-10 Classification of Mental and Behavioural Disorder : Clinical description and diagnostic guidelines (10th edn.) Geneva : World Health Organisation.