

A STUDY OF HOPELESSNESS, SUICIDAL INTENT AND DEPRESSION IN CASES OF ATTEMPTED SUICIDE

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ABSTRACT

The aim of the present study was to determine the severity and relationship of depression, hopelessness & suicide intent in individuals attempting suicides. Individuals admitted to a northern India hospital emergency services between 1st Jan.'94 to 31st Dec.'94 with suicide attempt were taken up for study and assessed with the help of different tools. 79 patients were screened for the study and 56 patients were included (33 male & 23 female). Majority of the sample was below 30 years of age (82.1%). Organophosphorus consumption and drug overdose was most common (75%) psychiatric illness was present in 57% cases, depression being most common 37.5% ($p < 0.001$) 22 subjects showed mild to moderate suicide intent (39.28%) & 16% subjects showed hopelessness score above 9. Variables taken up for the study have a highly significant correlation with each other i.e. suicidal intent, hopelessness and depression.

Key words : Suicide, depression, organophosphorus poisoning, SIQ, Beck hopelessness scale.

Suicide known since the birth of humanity, is becoming a matter of great concern on account of its increasing incidence in the present day society. There is a steep rise in the suicide attempts all over the world. Unfortunately it is not possible to predict suicide. The best that can be done is to identify groups at risk. Nearly, almost all suicide victims suffer from a treatable psychiatric disorder and the great majority of suicidal persons communicate their self-destructive intentions to those around them including their physicians. Since depression and suicidal behaviour are frequently linked, it is not surprising that depression is the most common diagnosis recorded accounting for 35% to 79% of all attempts (Weissman, 1974). But depression cannot be regarded simply, as a final sufficient cause of attempted suicide. Rather it would be expected to be related to degree of suicidal intent because of its close association with suicide.

A further development has been the

introduction of the concept of hopelessness and the study of its relationship to depression and suicidal intent. Beck (1963) noted on the basis of his observations during psychotherapy of depressed suicidal patient that "the suicidal preoccupations seemed related to the patient's conceptualization of his situation as untenable or hopeless.

Lifetime risk of suicide in major mood disorders has been estimated at 19% and the mortality risk from them is compatible to that of many severe medical illnesses (Goodwin, 1990). Endogenous depression is more commonly associated with serious suicidal behaviour and results mostly into completed suicide. Thus it tends to differ from attempted suicide, where reactive factors seem to be more preponderant with genesis of suicidal behaviour. Various clinical features of depression, several with relevance to treatment, have been found to be associated with suicide. A prospective cohort study, found that anhedonia, anxiety symptoms,

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difficulty in concentration and alcohol abuse were short term predictors of suicide, while hopelessness mood cycling and history of suicidal behaviour were long term predictors (Fawcett,1990). At 5-year follow up of the National Institute of Medical Health (NIMH) collaborative study, the only two clinical features that strongly differentiated the suicides from other depressed patients were hopelessness and anhedonia. Despite the apparent link between hopelessness and suicidal behaviour in these patients the nature of this link remains unclear (Rifai et al.,1994).

In the past three decades the construct of hopelessness has been used to refer to complex affective, motivational and cognitive tendencies resulting in a negative assessment in the future on the part of the patient (Beck, 1963). Thus far, however, most published studies of hopelessness have focused on its relation to acute episode of DSM-III or DSM-III-R axis I symptoms of major depression including suicidal ideation and to the prediction of future suicide potential (Fawcett et al., 1987; Beck et al., 1990; Minkoff et al.,1973;Kovacs et al.,1974) found hopelessness to be significantly better indicator of both the intensity of current suicidal ideation and the extent of a patient's aversion to life than was depression. The analyses also suggested a specific behavioural sequence hopelessness leads to attenuated desire to live which leads to increased current suicidal ideation. Suicidal ideas can serve as a danger signal or a way of communication to alert the therapist to gear up the resources to help the needy. Recognizing that vast majority of the people who indulge in suicidal behaviour do not in fact wish to kill themselves, some investigators have emphasized upon analyzing the degree of intent associated with suicidal behaviour. ("Suicidal Intent" - the intensity of the wish to die at the time of act), Beck et al. (1975) commented that the degree of intent does appear predictive of the lethality of method used. Thus a patient who gave unmistakable evidence of a determination to end his life but who suffered a little physical

damage as a result of his suicidal attempt would be rated high on intent scale but low on medical lethality dimension.

MATERIAL AND METHOD

The study was carried out at Gandhi Memorial & Associated Hospitals & K.G's Medical College, Lucknow. All the subjects admitted to the hospital during study period with suicide attempt were screened. Suicide attempt in the present study refers to "A non fatal act whether physical injury, drug overdose or poisoning, carried out in the knowledge that it was potentially harmful". Uncooperative patients & those below 15 years of age were excluded from the study.

Informed consent was obtained from patients/guardians for participation in the study. Subjects were interviewed in respective surgical and medical wards as soon as their physical condition permitted after recovering from the adverse effects of their self poisoning or self injury. In each case close family member were interviewed before hand in different session. All the interviews were carried out in confidential set up. Whether with patient or the family members. Patients interview was completed in single session with administration of the measuring instrument.

Following instruments were administered in each patient :

- (i) Case sheet Proforma- included identification and social demographic data, detailed history of present illness, past history, family, premorbid personality and a detailed history of suicide attempt, complete physical and mental status examination.
- (ii) The I.C.D.-10 criteria for psychiatric classification.
- (iii) The Hamilton Rating Scale for Depression (HRSD)- Since depression preceding the attempt if any could be measured with the help of detailed history of present illness from both the patient and a reliable informant among the family members. HRSD was used to asses depression at the time of interview. For the patient a minimum score of 17 points was selected. By using HRSD any room

for bias in the subjects presentation in his or her self-report was virtually eliminated.

(iv) Suicidal Intent Questionnaire - SIQ was used to measure suicidal intent of the subject present at the time of interview. This is a self-report questionnaire developed and validated in the Deptt. of psychiatry, King George's Medical College, Lucknow by Gupta et al.(1983) has been widely used in a number of studies. It consists of 10 statements in simple Hindi and responses are obtained and recorded as "often" "sometimes" and "never" and scored as 2, 1 and 0 respectively. Data analysis reveals that patients presenting with suicide preoccupation invariably, obtain a score of 5 or more, although the maximum score is 20. It was therefore decided to keep a cut-off score of 5 to identify a "Definite Communications" (Suicidal preoccupation fairly present). "Partial communicators" has been operationally defined as obtaining a score between 2 and 4, as suicidal ideation is likely to be present only partially in these subjects, while higher scores show more intense suicidal preoccupation.

(v) Hopelessness scale devised by Beck et al., (1974) was used to measure hopelessness. It is a self rating scale containing of 20 statements of thoughts or feeling about the future which the subjects rates 'True' or 'False' half the items are keyed true & half false with a total score of 20 for maximum hopelessness. A cut off score of 9 or more was taken as reliable criteria to distinguish high-risk suicidal patients.

RESULTS

During the period of study, 79 subjects fulfilled the selection criteria- subsequently 23 were lost: 8 left against medical advice prematurely, 7 absconded from the hospital before they could be interviewed and 8 were non-co-operative (were not ready to participate in the study as they did not want to disclose their inner family dynamics to anyone). The sample as a whole was represented by more males, the male-female patient ratio being 1.5:1. The majority of subjects fall below 30 years of age (82.14%, $p < 0.001$) & comprised almost

1/3 of the sample (32.14%, $p < 0.001$).

Method used : Non violent methods were used by 75% of the subjects (42 of 56) 17.8% used drug overdose while 57.2% took organophosphorus compounds (insecticides & pesticides used in equal number of cases.)

TABLE 1
METHOD USED FOR ATTEMPT

| | n | % |
|----------------------------|----|-------|
| Drug overdose | 10 | 17.86 |
| Organophosphorus compounds | | |
| - Insecticide | 16 | 28.57 |
| - Pesticide | 16 | 28.57 |
| - Burn | 4 | 7.14 |
| - Corrosive | 5 | 8.93 |
| - Wrist Slashing | 3 | 5.37 |
| - Hanging | 1 | 1.78 |
| - Multiple | 1 | 1.78 |

Family History of psychiatric illness (10.7%), suicide attempts in past (9%) & psychoactive substance abuse/dependence (5.4%) did not contribute significantly to the sample.

TABLE - 2
PRECIPITATING FACTOR

| | n | % |
|--------------------|----|-------|
| Examinations | 9 | 16.07 |
| Financial Problems | 11 | 19.65 |
| Job Problems | 6 | 10.71 |
| Family Quarrels | 24 | 42.86 |
| Unemployment | 6 | 10.71 |

Assessment of precipitating factors immediately preceding the suicide attempt showed over representation of family quarrels 42.86% (19 Male & 5 Female) others being financial loss, failure in examination, loss of job and confrontations at place of job.

TABLE - 3
DIAGNOSIS (BASED ON ICD-10)

| | n | % |
|-------------------------------|----|-------|
| Depressive Episode | 21 | 37.50 |
| Adjustment Disorder | 3 | 5.36 |
| Schizophrenia | 3 | 5.36 |
| Obsessive Compulsive Disorder | 2 | 3.57 |
| Drug Dependence | 3 | 5.30 |
| No Psychiatric Diagnosis | 24 | 42.85 |

Diagnosis : - Diagnostic assessment based on ICD-10 criteria revealed that 57.5% of

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the studied sample had psychiatric illness and depression consisted the largest group (21 of 56 i.e. 37.5% of the sample $p < 0.001$ M : F = 9:12 (Females in depressive gp.) A severe depressive episode was present in 15 patients while other (6) had moderate depression at the time of suicide attempt. Cases of schizophrenia (5.36%), obsessive-compulsive disorder (3.57%), drug dependence (5.36%), adjustment disorders (5.36%) were few. 24 cases could not be ascribed any psychiatric diagnosis. All 3 cases of drug dependence (all alcohol) had consumed alcohol along with organophosphorous to kill themselves.

DISCUSSION

There were 105 subjects who were admitted to Gandhi Memorial & Associated Hospitals K.G.'s Medical College, Lucknow, with attempted suicide for the management. However, only 56 could be included in the study, thus almost half of the sample ($n=49$) could not be taken up. The chief reasons were-death ($n=26$) absconds ($n=7$) and those who left hospital against medical advice ($n=8$) and few were not willing to participate in the study ($n=8$).

Most of the Indian studies (Sathyavati & Murthy, 1961; Venkoba Rao & Chinnian, 1972; Singh, 1977) on suicide have been proved out to be quite informative. These studies showed that the age group most vulnerable to this kind of self-destructive behaviour is between 16 to 30 years. There appears a general trend that age 15-30 years are the peak rise years. Epidemiological studies point out that throughout the world, variable percentage are of the persons attempting suicide under the age of 30 years, ranges from 30% to 70% (Weissman, 1974). Venkoba Rao (1965) and Sethi et al. (1978) also replicated the similar findings in their studies.

In our study males constituted 58.93% of the sample, while females represented 41.07% which is in conformity to other Indian studies. We also found that most (82.14%) of the subjects were between 15-30 years of age, adolescents being 37.50% and large portion of them were

students (32.14%). Australia has an adolescent suicide rate of 16.4 per 100,000 population (UNICEF, 1993) and ranks at the top in the same perspective. All over the world different studies have shown a consistent rise of suicidal risk and attempt in adolescent/high school students (Garrison, 1989; Meehan et al., 1992; Martin et al., 1993; Pearce and Martin, 1993 & 1994). In a large W.H.O. multicentre study on incidences of attempted suicide and its association with demographic risk factors in 15 cities from all regions of Europe (Platt et al., 1992). Highest frequencies were among young adults between 25-34 years.

Our study showed that 32.14% were students followed by housewives-17.85%. Other studies conducted in this country have also shown almost the similar percentage of break up, occupation wise notably, Ponnudurai et al. (1986) Gupta & Singh (1987); Benerjee et al. (1990). Hawton & Fagg (1992) in an Oxford study noted that out of 9605 subjects about 1/3 had a history of previous suicide attempt also. In a study by same worker regarding trends in attempted suicide over a period of 15 years 24% of the sample had engaged in suicidal behaviour previously also. In our study about 9% subjects had shown suicidal behaviour in the past also. This is also in conformity with the study of Venkoba Rao et al. on 100 burn cases out of which 8 persons presented with past history of suicide attempt, while Ponnudurai et al. (1986) observed that about one fourth of 86 suicide attempters had contemplated on this act even earlier also. In our study, family members of about 11% of the subjects were suffering with one or other-psychiatric illness, most prevalent being bipolar affective disorder (5.36%). 5.35% of the persons were abusing psychoactive substance, having equal inclination towards alcohol and cannabis. Studies world over have shown an increased risk for suicide attempt among those who are separated, divorced or widowed (Sethi et al., 1978). Gupta & Singh, 1981 found 62% of their samples as single out of 100 attempters in the same setup at Lucknow, which further replicated the findings of Venkoba Rao (1971). Ponnudurai et al.

(1986) and Gupta et al.(1991) also found the almost same break up of the sample. In our study 60.72% of persons were single making a large group and 71.43% of them were from urban areas.

In our study, family quarrels was the major precipitating event in 42.9%. Which was in the form of confrontation with siblings or with one of the parents. Other main crucial precipitating factors were financial problems (19.7%), examinations (16%), unemployment (10.7%) and problems at the place of job (10.7%). While most of the studies gave domestic problems as the cause (Ponnudurai & Jayakar, 1980; Hegde, 1980; Benerjee et al., 1990; Shukla et al., 1990). In Singh (1977) disharmony with relatives other than spouse was also a factor in 31.4% of suicide attempters. In 27.1% cases the main factor appeared to be disharmony with spouse.

Singh (1977) in a study of 70 patients of attempted suicide in Lucknow showed that 44.2% involved in some form of drug overdose and barbiturates and hypnotics constituted the common type of drug responsible. Our findings show that 17.8% of patients used drug overdose, whereas 57.2% subjects took organophosphorous compounds. About one fourth of the sample used violent methods for attempts i.e. wrist slashing, hangings, burn, drowning and corrosives. There is also a substantial number of subjects in the present study, which used insecticides & pesticides for the attempt and this might be attributed to their easy availability. Venkoba Rao (1971) reported in a study where 68% of all suicides were by agricultural chemicals and that the persons involved were all quite young, 88% being 30 years old or younger. Berger (1988) reported that in Sri Lanka a country with one of the world's highest rates for suicide (29 per 1000,000 in 1980) poisoning by agricultural chemicals was the method most often used. Ponnudurai et al. (1986) in a study of 86 suicide attempters, found that organophosphorus compounds had been commonly chosen (38.4%). In a study by Hawton & Fagg, 1992, 13340 referrals for attempted suicide over a period of 15 years (1976

- 1990) were evaluated. They reported that self-poisoning was involved in 87.3% of the episodes and self-injury in 9.9% cases, while in our study it was 75% and 25% respectively.

In our study the diagnosis of depression was made in 37.5% of the patients majority of the patients fulfilled the criteria for severe depression while 28.57% showed features of moderate depression with or without psychotic symptoms. Various lines of investigation have emphasized the presence of an intimate relationship between depression and suicidal behaviour. Barraclough et al. (1974) Robins (1986) analysed several hundred cases of suicide and concluded that more than 90% of them had been suffering from psychiatric illness at the time they killed themselves. Morgan et al.(1975) reported neurotic depression in 52%, personality disorders in 29%, functional psychosis in 12% and alcohol addiction in 10%.

The great majority of suicides among psychiatric patients are preventable. Psychiatric patient's risk of suicide is 3 to 12 times greater than that of non-patients. The degree of risk varies according to age, sex and diagnosis. The psychiatric diagnosis that carries the greatest risk of suicide in both sexes is mood disorder. More depressive disorder patients commit suicide early in the course of illness, more males than females and the chance of depressed person killing themselves is increased by their being single, separated, divorced or recently bereaved. On the basis of long term psychotherapy of 50 depressed suicidal patients. Beck(1963) noted that the suicidal preoccupation seemed related to the patient's conceptualization of his situation as untenable or hopeless. Patient believes that he can not tolerate a continuation of his sufferings and could see no solution to his tormenting problems.

In a 10-year prospective follow up study of 165 patients hospitalized with suicidal ideation. Beck et al. (1985) reported that hopelessness was predictor of actual suicide. Of the 11 patients who eventually committed suicide, 10(90.9%) had Beck's Hopelessness Scale scores of 9 or above.

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The findings of the present study are fairly in concordance with their previous study showing similar predictive value of hopelessness scores in the subjects.

Hopelessness is an important clue that should alert clinicians to the possibility of suicidal risk in these patients. It should be emphasized, however, that a comprehensive assessment of suicide risk should include, in addition to Beck Hopelessness Scale, such clinical predictors of suicide as the presence of affective disorder, a high level of suicidal ideation, a history of suicide attempts, family history of suicide, history of alcohol and drug abuse and relevant demographic factors such as age, sex and race.

According to Beck et al (1990) Hopelessness, as it occurs in depressed patients may be viewed as closely associated with severity of depression. However, some individuals seem to be chronically hopeless, regardless of their being depressed or not. These are the individuals who are more susceptible to suicidal behaviour. The view of the term 'depressed' here connotes to those who fulfill ICD-10 criteria, because a person having a constant feeling of hopelessness is quite akin to a case of 'masked depression' the observation, that some people might think of killing themselves because they have no hope that things would ever improve, is strikingly pragmatic, hopelessness should therefore be taken as important 'target symptoms' in the treatment of suicidal attempts.

With regard to a tangible relationship between suicidal intent, hopelessness and depression. Observations of the study are in conformity with the previous studies (Minkoffe et al., 1973; Beck et al. 1975; Pokorny et al. 1975; Wetzel, 1976; Wetzel et al., 1980; Goldney, 1978; Gupta et al., 1991).

The present study shows highly significant correlation between suicidal intent and hopelessness ($p < 0.001$), hopelessness and depression ($p < 0.001$), depression and suicidal intent ($p < 0.001$), it is also evident that depressed patients have significantly higher scores on

Suicidal intent Questionnaire as well as Beck's Hopelessness Scale.

The implications of these findings for therapy of suicidal individuals are important. The cognitive and attitudinal phenomena of hopelessness are important target symptoms in treating suicidal individuals. The clinician is more likely to "Get a hold" of the situation by targeting in on the patient's helplessness rather than by dealing with his over self-destructive acts. By focussing on reduction of a patient's hopelessness the professionals may also be able to alleviate suicidal crisis more effectively.

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