

AN EXPLORATORY STUDY OF THE MOTIVATION IN SUICIDE ATTEMPTERS

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The motivation of one hundred cases of suicide attempters was assessed clinically depending purely on their subjective reports. They were grouped into two, viz., those who primarily wished for a change (hereinafter called WC) and those who unambiguously wished to die (hereinafter called WD). They were compared with regard to the details of the attempt, methods of attempt, psychiatric and sociodemographic profile. The WC group was observed to have taken less precaution against discovery of their attempt, had low lethality with regard to the method used and had more adjustment problems than psychiatric diseases. They clearly belonged to the low risk group. The WD group had all these findings in the contrary, which put them in the high risk category. This simple way of assessing suicide risk may be having a face validity in the sociocultural context of the present study.

Key words: motivation, wish to die, wish for change, lethality, suicide risk.

INTRODUCTION

Suicide attempts persists as a major public health problem (McClure, 1984; Weissman, 1974). Planning of management has definite social implications. It is on the increase in some countries (World Health Organization Chronicle, 1975) and in some states of India. The Union Territory of Pondicherry where this study has been conducted is classified as a high prevalence area. Pondicherry (geographical area 26435.31 hectares) is a place of rapid industrialization. The population was 1,85,295 in 1971, five lakhs in 1991 and during the time of the present study and one year follow up was around six lakhs (Bureau of Economics and Statistics, Government of Pondicherry, 1971 & 1991 and personal communication with Directorate of Census Operations, Ministry of Home Affairs, Government of India, Pondicherry).

The Jawaharlal Institute for Postgraduate Medical Education and Research (JIPMER) hospital caters for Pondicherry and neighboring Villupuram and South Arcot Districts of Tamil Nadu mainly, though stretches of North Arcot, Trichy and Dharmapuri districts also utilize the medical facilities of this hospital. Average monthly out-patient attendance of new cases from Pondicherry is around 4,000 and Villupuram and South Arcot together is around 14,000; the in-patient service utilization for new cases is around 600 and 1,600 for Pondicherry and Villupuram/South Arcot together respectively. From other districts of Tamil Nadu, the monthly outpatient attendance is between 170 and 500 on an average and inpatient service utilization is between 20 and 200 on an average. Daily average outpatient attendance of old and new cases is 560 for medicine,

260 for casualty and 104 for psychiatry services. On a weekly average, outpatient attendance for once weekly follow up clinics of psychiatry is 88, 35 and 102 for Affective Disorder, Substance Abuse Disorders clinic and Schizophrenia respectively.

Four qualified psychiatrists in JIPMER Hospital (situated five kilometers away from the heart of the town) and two qualified psychiatrists in General Hospital (situated in the town) cater for the mental health needs of the population mentioned above. There is no clear cut catchment area demarcated between the General Hospital and JIPMER Hospital. In JIPMER, 98% of suicide attempters are registered through the Casualty services and are resuscitated in the Medicine Intensive Care Unit and subsequently kept under observation in medical wards and then referred to psychiatry for mental health evaluation and management. As there are a small number of psychiatrists in other hospitals in Pondicherry, non-psychiatrists are also evaluating and managing suicide attempters in the general hospital or primary health center set up and the method of risk assessment adopted by the doctors of all these hospitals is by directly probing the patients (Personal communication with the doctors of Pondicherry).

Suicide attempt is a medical emergency. It invokes prompt medical and psychiatric care. The family members rally around the patient and waste no time in seeking medical help. Various authors have undertaken studies to define prevalence (Weissman, 1974), high incidence of psychiatric morbidity (Nandi et al, 1978; Gupta & Singh, 1981; Venkoba Rao, 1971), methods (Venkoba Rao, 1971; Sato et al, 1993), and sociodemographic profile of suicide attempters (Sato et al, 1993). Venkoba Rao

(1992) has pointed out diagnosis of borderline personality disorder in repeated suicide attempters. Adam (1985) recommends direct probing of suicidal ideation in depressive patients. In the clinical experience of the authors a significant percentage of the suicide attempters have used the act as a distress call without an actual wish to die. To assess the significance of this clinical impression, an exploration into the motivation of suicide attempters was done.

AIMS

To compare the various characteristics of suicide attempters who primarily wished for change with those who unambiguously wished to die.

MATERIAL AND METHODS

Sample

One hundred consecutive cases of attempted suicide registered between December 1992 and December 1993 in the casualty services of JIPMER Hospital were recruited for the study and followed up for a period of one year. The geographical distribution of these patients was as follows: Pondicherry 47; Villupuram and South Arcot Districts 42; North Arcot District 9; Trichy 1; Dharmapuri 1.

Method

An informed consent to participate in the study was taken from each one of the patients. Strict confidentiality was assured to the patients and their families regarding their identity and details collected during the interview. They were interviewed once they gained physical stability after resuscitation, recovery and a short period of observation in the medical intensive care unit. Detailed serial mental status examination after history taking was done with a view to making a diagnosis by consensus method (K.E.S. & R.C.). The psychiatrist filled up a separately designed and pretested proforma for each patient. This proforma included sociodemographic details, details of the attempt and psychiatric profile of the patients. The patients were examined when they had reached a conscious state with physical and mental stability.

Thirty six out of the forty eight interns posted in medicine in batches of eight (two per unit x 4 units) during the period of study, volunteered to take part in a lecture demonstration. The sessions were conducted separately for each batch in the beginning of their two month posting in medicine units. They were taught to establish rapport and to elicit the content

of thought during a conversation with a given patient for the purpose of the present study. These interns who were blind to the case history, diagnosis and management of the patients in the sample saw each of them to record their answer to the following question, after establishing a good rapport with them: "Did you or do you actually and unambiguously wish to die or did you or do you primarily wish for a change or relief from your psychological distress or strenuous circumstances?". The answer to the above question often required indirect probing and more than one session in situations where establishment of rapport was not easy.

These interns were trained to approach the patient in an informal, impartial and friendly manner. They were advised not to use any authoritative language or show any authoritative behavior in front of the patients. They were also instructed not to reprimand or criticize the patient for his suicidal act and to reassure the patient with regard to confidentiality for the answer given by them.

Depending upon the answer to the above question the sample was allocated to the WD and WC group, by designating them as B and A group respectively; thus the consensus psychiatrists were blind to the information collected by the interns and the group to which the patient belonged. The interns did not take part in any further aspects of the study. Every patient spent a further seven to fifteen days in the hospital during which significant family members or peer were interviewed to corroborate the study details. Lethality of the suicide attempt was assessed depending on the physical condition of the patient and the method used. The physical changes recorded were: degree of consciousness, pulse, blood pressure, electrocardiographic changes, respiratory distress and the amount and type of drug/chemical ingested. In case of hanging, a ligature mark on the neck was considered lethal. In cases of burns, more than 30% was considered lethal.

Statistical method

This included comparison of frequencies (Chi square test): WC and WD groups were compared with regard to the details of the attempt, psychiatric morbidity and methods of attempt. For comparison of some of the aspects of sociodemographic profile Z test (standard error between two proportions) or Critical Ratio was also utilized apart from Chi square test. The null hypothesis was that the WC and WD groups did not differ in their characteristics.

In the present study the following terms are understood in the manner mentioned below:

1. **Wish for change** is the patient's subjective report that she primarily wanted help for getting rid of her psychological distress or environmental problems and wished for a change towards a better and healthier future.

2. **Wish to die** is the patient's subjective report of her feeling that death is the only way of escape from her present distressful psychological or environmental condition. She may or may not be planning for further attempt.

3. **Lethality**: The possibility or degree to which any biological change that could have endangered the life of the patient if not rescued, brought to hospital and resuscitated. The biological change refers to ECG changes, change in the consciousness, respirator distress etc. due to the physical or chemical methods utilized.

4. **Psychiatric disease**: Any psychiatric diagnosis except adjustment problems and transient situational disturbances, which are mostly short lasting and need only supportive psychotherapy.

5. **Suicide risk**: Risk for repeating the attempt.

RESULTS

Table 1 shows that there is a significantly high representation of patients with low lethality, lack of planning for the attempts, more likelihood of rescue, history of communication of personal distress to others and lack of precaution taken against discovery in the Wish for Change (WC) group. Multiple attempters and those who got intoxicated before attempting were poorly represented in this group. Presence or absence of self blame, anger or frustration before the suicidal act did not have much significance in differentiating WC from the Wish to Die (WD) group.

Patients with definite psychiatric disease, especially depression and alcoholism with comorbidity, were more represented in the wish to die group (WD) (Table 2). WC group had more of adjustment problems than psychiatric disease. These findings were statistically significant.

Drastic and instantaneous physical methods like jumping, burning and hanging were utilized by the WD group. WC group utilized more of the chemical methods (Table 3).

Table 1
DETAILS OF THE ATTEMPT

Details of attempt		WC n = 60		WD n = 40		X ²	p
		No.	%	No.	%		
Lethality	High	17	28.0	31	77.5	21.31	<0.001
	Low	43	71.7	9	22.5		
Planning	Yes	11	18.3	32	18.0	34.76	<0.001
	No	49	81.7	8	20.0		
Rescue	Likely	53	88.3	9	22.5	41.30	<0.001
	Unlikely	7	11.7	31	77.5		
Distress communication	Yes	38	63.8	5	12.5	23.27	<0.001
	No	22	36.2	35	87.5		
Precaution	Yes	12	20.0	31	77.5	30.02	<0.001
	No	48	80.0	9	22.5		
Intoxication	Yes	4	6.7	10	25.0	5.26	<0.05
	No	56	93.7	30	75.0		
Number of attempts	Single	56	93.7	30	75.0	5.26	<0.05
	Multiple	4	6.6	10	25.0		
	Self blame	8	13.3	11	27.5	2.28	NS
	Anger mixed with frustration	52	86.7	29	72.5		

Table 2
Psychiatric morbidity pattern

Diagnosis	Wished for a change (WC) (n = 60)		Wished to die (WD) (n = 40)		Total
	No.	%	No.	%	
Definite psychiatric disease	17	28.3	30	75.0	47
a) Depression (296, DSM III-R)	13	21.7	20	50.0	
b) Schizophrenia (295, DSM III-R)	3	5.0	3	7.5	
c) Alcoholism with comorbidity (303 with 301, DSM III-R)	1	1.7	7	17.5	
No definite psychiatric disease	43	71.7	10	25.0	53
a) Adjustment disorder (309.00 or 309.28, DSM III-R)	28	46.7	8	20.0	
b) No psychiatric diagnosis	15	25.0	2	5.0	

X^2 of total of patients with definite psychiatric disease and those without definite psychiatric disease: 19.5; $p < 0.001$.

Table 3
Methods of suicidal attempt

	WC n = 60		WD n = 40		Total
	No.	%	No.	%	
Chemical	55	91.7	21	52.5	76
Insecticide	23	38.3	12	30.0	35
Plant products	20	33.3	5	12.5	25
Tablets	10	16.7	3	7.5	13
Unknown poison	2	3.3	1	2.5	3
Physical	5	8.3	19	47.5	24
Hanging	2	3.3	12	30.0	14
Burning	3	5.0	3	7.5	6
Jumping	0	0.0	4	10.0	4

X^2 of total of chemical and physical methods: 16.39; $p < 0.001$.

Table 4
Sociodemographic profile

	WC n = 60		WD n = 40		Total	X^2
	No.	%	No.	%		
Habitat						
Rural	21	35	14	35	35	NS
Urban	39	65	26	65	65	
Marital status						
Married	29	48.3	20	50	49	NS
Single	31	51.7	20	50	51	
Education						
below SSLC	43	71.7	21	52.5	64	NS
above SSLC	17	28.3	19	47.5	36	
Age group						
10 to 24	40	66.7	19	47.5	59	NS
25 and above	20	33.3	21	52.5	41	

The sociodemographic profiles of the two groups were also analyzed (Table 4). Rural and urban representation was almost equal in the WC and WD groups. The same was the case with the civic status, married and single. People below SSLC were more represented in both the groups. There was slight over representation of patients below 24 years in the WC group, but none of these were of any statistical significance, even after applying Z test, apart from Chi square analysis, in the case of educational status and age group.

DISCUSSION

Assessment of risk after a suicide attempt is a difficult process. It is also the most urgent task for immediate management (Adam, 1985). The psychiatrist is expected to differentiate the high risk groups and admit and aggressively treat them. The low risk groups can be followed up through the outpatient services especially in a busy general hospital set up. The patient's subjective impression regarding his act is commonly believed to be less reliable (Bancroft et al, 1979). Bancroft and coworkers reported that only 29% of the representative sample of self poisoners were judged by the psychiatrists to be seriously suicidal even though 56% of them stated that they wished to die (Bancroft et al, 1979; Adam et al, 1980). Patient's subjective motivation has been included in Adam's risk evaluation scale with the remark that patients often tend to exaggerate their intention to die and tend to minimize the manipulative and punitive aspects of their actions (Adam, 1985).

MOTIVATION IN SUICIDE ATTEMPTERS

The results of the present study show that the WC group had low lethality, lack of planning for their attempts, more likelihood of rescue, positive history of clear communication of distress to significant family or peer, no precaution taken against discovery and they were not intoxicated during the attempt. Psychiatric morbidity (DSM III-R; American Psychiatric Association, 1987) was more in the WD group than the WC group. The WD group utilized more drastic physical methods like hanging while the WC group utilized chemical methods. Based on the motivation, the two groups differed significantly, and so the null hypothesis was disproved. These findings suggest that patient's subjective reports regarding motivation has importance in suicide risk evaluation.

The initial and follow up interviews with the patients of the WD group showed that they were more decisive and impulsive in utilizing drastic physical methods for the suicidal act, but the authors feel that potential lethality cannot be judged solely on the basis of choice of physical or chemical methods.

Multiple attempts were made by ten patients (25%) of the WD group and four patients (6.6%) of the WC group. Eight of the ten patients of the WD group had history of previous attempt prior to the intake for the present study; two of the WD group had two attempts prior to and two after the intake for the present study. Four patients of the WC group had one previous attempt prior to the intake and none of these patients had further attempts after the intake. None from the WC and WD groups died during the one year follow up between December 1993 and December 1994. Repeaters were resuscitated in the same way as mentioned before and were provided with more frequent and regular follow up and family therapy sessions and adjuvant medication whenever needed.

The differences between attempted suicides with no strong motivation for death and completed suicides were noted first by Erwin Stengel. They were described as different but overlapping population with different epidemiological, sociodemographic and clinical characteristics and outcome (Stengel, 1964). The WC and WD groups did not differ significantly on the basis of sociodemographic profile. In the risk evaluation scale by Adam (1985), married people are noted to be at a low risk, unlike the findings of the present study.

A departure from the classificatory approach to suicide by Emile Durkheim is noticed in the classificatory approaches of attempted suicides by subsequent authors. Subsequent authors have emphasized the risk for repetition of the act and have classified suicide attempters into three (Hankoff, 1982): (i) impulsive suicide attempters who are angry and whose attempt is a response to limited stress, (ii) those who have inability to cope with a transient life crisis and seek suicide as a solution; and (iii) those who attempt suicide on the background of a serious psychopathological condition or mental disorder (Hankoff & Einsidler, 1979).

Kreitman (1977) coined the term 'parasuicider'. Patients of the WC group of the present sample can be conceptually considered as 'parasuiciders'. In the present sample of attempters, WD group contained more impulsive patients and patients with mental disorder. The second group of Hankoff (1982) can be equated with the WC group of the present study. According to Hankoff (1982), insanity or serious psychopathology probably accounts for a very small proportion of the attempted suicides. Only 28.3% of the WC group had a definite psychiatric diagnosis. With regard to the WC group alone the authors agree with the views of Hankoff (1982). On the contrary, the WD group had more patients (75%) with definite psychiatric diagnosis.

Direct probing of the motivation was not disturbing to the patients. The interns who probed this aspect reported that the patients felt more reassured than upset, while questioned regarding their wish. This goes at par with Adam's findings (1985). During the course of the study several advantages in determining the motivation of the patients were noted:

- (a) with adequate sensitivity and empathy the question regarding WC and WD could be asked in a simple way;
- (b) the same was done by less qualified people (interns);
- (c) most often it took less time to probe and get these details;
- (d) it is the only subjective report of the patient which has a bearing on the future action of the patient and on his recent, and (if a repeater), past suicide activity.

All other aspects given in Adam's (1985) risk evaluation scale were objective facts. Unlike the psychiatrist the patient does not have a bias regarding the risk group to which he belongs.

The present sample of the study got divided into two groups purely on the basis of patient's subjective reports.

One of the factors which could have influenced the patient's answer regarding his motivation to attempt suicide may be his educational status and awareness of legal penalties and fear thereof. During the recent follow up, when probed regarding their awareness of legal aspects of suicide, the authors could demonstrate that none of the patients were aware that, in India, suicide was formerly a punishable legal offence. Majority of the patients were below SSLC or just had SSLC standard. This might have contributed to their lack of awareness on legal implications.

The rapport between the patient and the doctor could also influence the patient's answer to a pointed question probing the real motivation. The authors have tried to reduce this influence by training the interns on establishment of rapport with the patients. Another factor which could have influenced the patient's answer may be fear of social stigma. The authors have tried to reduce this influence by reassuring confidentiality to the details given by the patients. The interns were also instructed to reassure confidentiality to the patients.

Extrapolating the results of the present study and recommending the same approach for suicide risk assessment to other sociocultural situations may be out of place. The validity of the subjective reports of the patient on his motives in the suicide risk assessment is to be tested clinically and in the community by further research in larger samples and different sociocultural milieu. A medical college hospital is not the only place to which suicide attempters are brought for treatment. Private hospitals and clinics, government district hospitals and primary health centers are often involved in treatment of suicide attempters without the facility of psychiatric reference and services. In such centers, simple probing into the motivation of attempters can be done by any doctor.

CONCLUSION

1. Assessment of the suicide attempter's thinking and feeling in retrospect, regarding wish to die or primary wish for change, is important in their management.

2. In the present clinical sample, the wish for change and wish to die group significantly differed with regard to some of the risk factors.

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