DEVELOPMENT OF A SUICIDAL INTENT QUESTIONNAIRE

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Inspite of the fact that the study of suicidal behaviour has been the subject of an ever increasing body of literature, research in the field of communication of suicidal intent has somehow not received due attention. Quite often patient's suicidal ideas may remain unnoticed during clinical interview in an overcrowded psychiatric outpatient and at times this inadvertent neglect might result in loss of a precious life. Perhaps the problem could be effectively handled if we had some reliable technique to detect the potentially suicidal individual. Besides, there are different types of suicidal behaviour involving varying degrees of risk; for instance, in a case of hysteric the gravity of risk may be much less as compared to a truly depressed. According to Stengel (1964), talking about suicide intent serves as a warning to other people and as such irrespective of the level of conscious awareness every suicidal attempt has a powerful "appeal for help". Similarly, Farberow and Schneidman (1963) and Schneidman (1967) regarded both verbal and nonverbal expression of suicidal ideas as a call for help.

Although several attempts have been made to investigate suicidal intent through projective tests especially Rorschach Inkblot Test (Appelbaum and Colson, 1968; Appelbaum and Holzman, 1962; Daston & Sakheim, 1969; Martin, 1951; Piotrowski, 1968; Stipolsky, 1963; Weiner, 1961), considerable amount of disagreement still exists with regard to their applicability in a clinical setting. Administration as well as interpretation of these psychological tests not only require extensive experience but are also considerably time consuming. Hence, development of a questionnaire to elicit suicidal behaviour has been a long felt need. It is hoped that a tool which may discriminate suicidal and non-suicidal patients and easy to administer should go a long way in providing effective psychiatric treatment and to some extent, lessening the incidence of suicidal morbidity.

CONSTRUCTION OF THE QUESTIONNAIRE

First of all, a large number of statements indicating suicidal ideas were collected from the clinical records of 108 suicide attempters reported earlier (Sethi & Gupta, 1977, Sethi et al., 1978). Each statement was subsequently screened by the co-authors (S. G. G. and J. K. T.) to judge its face validity. Items found to be non specific, less comprehensible or pseudophilosophical were excluded after a through discussion with other staff members of the department. The questionnaire thus comprised of the following 10

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items as given below (English Translation):—

1. I do not want to show my face to family members any longer.

2. It would have been better if I was not alive.

3. I would have ended my life had there been no liabilities of children or other dependents.

4. I keep on thinking about the type of problems likely to occur in the family if I commit suicide.

5. If I fail in solving my problems I would commit suicide.

6. My mind gets preoccupied with the possible methods of ending life i.e. jumping, burning, hanging, taking sleeping pills or any other poison.

7. It would be good for everybody in the family if I was dead.

8. The only way out for me is to die.

9. People shall regret how they have treated me after I finish my life.

10. I am fed up and would kill myself.

To ascertain the clinical validity of the designed questionnaire it was proposed to administer the questionnaire upon normals as well as those psychiatric patients who have reported suicidal preoccupation or have recently attempted suicide. This was primarily done to observe the efficacy of various test items in delineating the two distinct groups. For this purpose 40 normal individuals (relatives of psychiatric patients having no history of psychiatric illness) and 40 indoor depressed patients presenting with suicidal thoughts were individually administered this questionnaire. Responses were recorded as ‘often’, ‘sometimes’ and ‘never’ and were scored as 2, 1, and 0, respectively.

| S1Q Scores | Normals (N=40) | Patients with suicidal preoccupation (N=40) |
|------------|----------------|------------------------------------------|
| 0–1        | 40             | 0                                        |
| 2–4        | 0              | 0                                        |
| 5–7        | 0              | 9                                        |
| 8–10       | 0              | 17                                       |
| 11–15      | 0              | 8                                        |
| 14–16      | 0              | 4                                        |
| 17 & above | 0              | 2                                        |

It is quite evident from the above table that normal subjects rarely give a positive answer upon any of the items and their mean score was 0.5. This implies that persons obtaining a score of zero or one should be regarded as non-communicational (Suicidal ideations absent). The depressed group on the other hand had a mean score of 9.9 (range 5-17). Data analysis further revealed that the patients presenting with suicidal preoccupation invariably obtained a score of 5 or more, although some tend to score as much as 17. It was therefore decided to keep 5 as cut-off point to identify definite communicators (Suicidal preoccupation fairly present). Partial communicators has been operationally defined as those obtaining a score between 2 to 4 as suicidal ideation is likely to be only partially present in these subjects.

After having prepared the scoring pattern and the criteria of identifying suicidal subjects, the questionnaire was administered upon a larger number of psychiatric patients of various diagnostic groups. The sample (N=278) was drawn from the indoor section of the department of Psychiatry, G. M. & Associated Hospitals, Lucknow, during a period of eight months. The experimental design
included availability of an informant who could provide a reliable clinical history, patient being cooperative as well as verbally communicative at the time of enquiry, should have hospitalization of at least two weeks and there should not be any suspicion of organic brain disease, or subnormality. The diagnostic breakup of the studied sample shows that 172 were schizophrenics, 62 were MDP and 44 neurotics.

Patients were administered the questionnaire by one of the co-authors and it was usually during the first week of the hospitalization, that is, as soon as some rapport could be established and the patient had recovered from the acute phase of illness. The interviewer made no attempt to elicit H/o suicidal behaviour and mainly confined himself to the administration of the tool.

In addition to the above, the consultants incharge of the patients were requested to provide the following information on a structured proforma after having done a thorough clinical evaluation of their respective subjects:
1. H/o suicidal attempt as obtained from the patient or informant.
2. Any substantial evidence of suicidal threatening and/or suicidal ideation observed during mental status examination.

On the basis of above information provided by the consultant attempt was made to find out the validity of the questionnaire by comparing the SIQ scores of definite communicators and non-communicators.

OBSERVATIONS

Diagnostic distribution of the sample:

Schizophrenia accounted for nearly two-third (172 out of 278), MDP and neuroses constituted 22.3% and 15.8% respectively. Among schizophrenics vast majority of cases were labelled as undifferentiated. MDP, depressed and cases of neurotic depression formed the second major group 47 and 13 respectively.

On the basis of SIQ scores the studied sample had the following distribution:

| Def. communicator (5 and above) | 99 |
| Partial communicator (2 to 4)   | 91 |
| Non-communicator (0 or 1)       | 88 |
| Total                           | 278 |

Definite communicators constituted more than 1/3rd of the studied sample and distribution of their scores is as given in Table-1.

| Scores | N  | %  |
|--------|----|----|
| 4 or less | 0  | 0.0 |
| 5      | 32 | 32.3|
| 6      | 28 | 28.3|
| 7      | 10 | 10.1|
| 8      | 10 | 10.1|
| 9      | 10 | 10.1|
| 10     | 1  | 1.0 |
| 11     | 0  | 0   |
| 12     | 1  | 1.0 |
| 13     | 4  | 4.1 |
| 14     | 1  | 1.0 |
| 15     | 1  | 1.0 |
| 16     | 1  | 1.0 |

Mean = 6.8
s.d. = 2.78

Above table shows that 60.6% of the definite communicators had a score of 5 or 6. About one third obtained it in the range of 7 to 9 and the remaining (9.1%) scored between 10 and 16. Further, attempt was made to analyse response pattern (frequency of suicidal ideas) of definite communicators on
various items of the questionnaire (Table-2).

**Table 2. Response pattern of definite communicators (N=99) on the Questionnaire**

| Items | "Sometime" | "Often" |
|-------|------------|---------|
| 1. I do not want to show my face to family members any longer. | 33.23 | 12.1 |
| 2. It would have been better if I was not alive. | 55.6 | 23.2 |
| 3. I would have ended my life had there been no liabilities of children or other dependents. | 41.4 | 9.1 |
| 4. I keep on thinking about the type of problems likely to occur in the family if I commit suicide | 24.2 | 2.0 |
| 5. If I fail in solving my problems I would commit suicide. | 22.12 | 10.1 |
| 6. My mind gets preoccupied with the possible methods of ending life i.e. jumping, burning, hanging, taking sleeping pills or any other poison. | 49.15 | 12.1 |
| 7. It would be good for everyone in the family if I was dead. | 50.5 | 15.2 |
| 8. The only way out for me is to die. | 52.5 | 13.1 |
| 9. People shall regret how they have treated me after I finish my life. | 39.4 | 7.1 |
| 10. I am fed-up and would kill myself. | 53.5 | 10.1 |

(Figures in percentages)

It is quite obvious from the above table that most of the test items had a response of "sometimes" and comparatively a much smaller number of subjects experienced these suicidal thoughts frequently. The fact that their mean score is less than 7 on this questionnaire also substantially confirms the impression that the intensity of these morbid thoughts is not of a severe nature. As such it would be desirable to corroborate their clinical findings recorded in the case sheet or elicited during mental status examination by a trained psychiatrist independently (Table-3).

**Table 3. Pattern of suicidal behaviour elicited during clinical interview in non-communicators and definite communicators**

| Evidence of suicidal behaviour in the clinical records | Non-communicators* (N=88) | Def. Communicators* (N=99) |
|-------------------------------------------------------|---------------------------|---------------------------|
| Suicidal attempt + threat + ideas.                    |                           |                           |
| Suicidal attempt + threat.                            |                           |                           |
| Suicidal threat + ideas.                              |                           |                           |
| Only suicidal attempt.                                |                           |                           |
| Only suicidal threat.                                 |                           |                           |
| Only suicidal ideas.                                  |                           |                           |

*SIQ Scores 0 or 1

Table 3 shows that there were 6 (6.8%) cases in the group of non-communicator (SIQ Score 0 or 1) who were reported to have suicidal threat or ideation. Somehow they could not be detected through the questionnaire. Regarding definite communicators, H/o suicidal attempt was recorded in nearly half of them and the remaining presented...
with suicidal threat and/or ideation. The fact that there was only one false positive (98 out of 99 confirmed from the case history and clinical interview) implies a high degree of association between the SIQ scores and clinical evidence of suicidal behaviour.

**DISCUSSION**

In view of very few studies relating to the assessment of suicidal communication in psychiatric patients development of a reliable questionnaire is likely to be immensely helpful in detecting suicide prone individuals as well as their therapeutic management. Although there are several studies in the literature pertaining to the communication of suicidal intent in the subjects who had either attempted or committed suicide (Tuckmau and Lauel, 1958; Robins & Murthy, 1968; Dorpat and Ripley, 1960; Yessler et al., 1961; Delong and Robins, 1961; Seager and Flood, 1965; Rudestam, 1971; Ovenstone, 1973; Kovacs et al., 1976), the nature and extent of suicidal communication in a psychiatric population has been reported by only a few investigators (Delong and Robins, 1961; Rudestam, 1971).

The basic purpose of the present enquiry was to construct a clinically reliable tool to elicit suicidal indication. Ten statements of the suicidal intent questionnaire were selected after a thorough scrutiny and data analysis suggests the effectiveness of the devised tool in discriminating suicidal and non-suicidal psychiatric patients. The observation that the questionnaire picked up only one false positive out of 99 subjects labelled as suicidal communicators provided a high predictive validity of the questionnaire.

In another similar study, Delong and Robins (1961) had assessed suicidal communication on a 16-item-questionnaire but the present questionnaire substantially differs from it. While their enquiry incorporated suicidal thoughts or impulses observed any time in the past, the present tool restricts to suicidal communication of the last 3 months only. Thus questionnaire utilized in the present study mainly relates to suicidal communication of the recent past or currently existing.

The most striking finding emerging from this study is that about one third (35.6) subjects were found to be definite communicators. On the other hand, Delong & Robins (1961) reported 68% hospitalized psychiatric patients having suicidal intent, and Bagadia et al. (1979) had found nearly half of the hospitalized patients presenting with such thoughts. Somewhat similar to the present report, Chandrasekhar et al. (1979) had observed suicidal ideation in 25.3% psychiatric out-patients. A low occurrence of these thoughts in the studied sample as compared to Delong and Robins (1961) seems to be largely on account of differences in the nature of two questionnaires and categorization of suicidal individuals as definite and partial communicators. If partial communicators (SIQ score between 2 and 4) are included there seems to be no substantial difference in the two studies.

In the present enquiry psychiatric patients were also independently evaluated for suicidal behaviour and the findings of SIQ significantly correlate to the clinical data in this respect. As such the devised questionnaire seems to be fairly valid although further work on this tool is mandatory to establish its statistical reliability and validity.

**REFERENCES**

Appelbaum, S. A. and Halzman, P. S. (1962). The Colour-Shading responses and suicide. J. Project. Techn., 16, 155.
Appelbaum, S. A. and Golson, D. B. A. (1968). Reexamination of the Color-shading Rorschach Test: Test responses and suicidal attempts. Journal of Projective Techniques and Personality Assessment, 32, 160.

Bagadia, V. N., Ahiyankar, R. R., Shirreff, Pravin, Mehta, Panna, Doshi, J. Yoti, Chawala, R., Joshi, S. V., Sahr, L. P., & Saraf, R. R. (1979). Suicidal behaviour: A clinical study. Ind. J. Psychiat., 21, 370.

BROADIA, V. N., AHUVANKAR, R. R., SHROFF, PRAVIN, MEHTA, PANNA, DODHI, JYOTI, CHAWALA, R., JOSHI, S. V., SHAH, L. P., & SARAF, R. R. (1979). Suicidal behaviour: A clinical study. Ind. J. Psychiat., 21, 370.

DASTON, P. G. AND SAKIIEIM, G. A. (1960). Prediction of successful suicide from the Rorschach test using a sign approach. J. Project Technique, 4, 355.

DELANG, W. B. AND ROBINS, E. (1961). Communication of suicidal intent prior to psychiatric hospitalization: A study of 87 patients. Am. J. Psychiat., 117, 697.

DORFART, T. L. AND RIPLEY, H. S. (1960). A study of suicide in the Seattle area. Comprehensive Psychiatry, 1, 349.

FARBEROW, N. L. AND SEINLEMA, E. S. (eds.) (1965). The cry for help. New York, McGraw Hill Book Co. Inc.

KOVACS, M., BECK, A. T. AND WISEMAN, A. (1976). The communication of suicidal intent. Arch. Gen. Psychiat., 33, 2, 198.

MARTIN, H. A. (1951). A Rorschach study of suicide. Unpublished doctoral dissertation, University of Kentucky, quoted from Matt. J. Sidney & Rutker, A. Barry. (1974). Suicide and the representation of transparency and cross sections of the Rorschach. J. Consult. Clin. Psychology, 42, 2, 290.

O'NESTON, I. M. K. (1973). Spectrum of suicidal behavior in Edinburgh. Brit. J. Prev. Soc. Med., 27, 27.

Protowski, Z. A. (1968). Psychological prediction of suicide. In: HLP Rashik (Ed.) Suicidal behaviour—Diagnosis and management, Boston: Little Brown.

ROBINS, E. AND MURPHY. (1968). The communication of suicidal ideas. In: Rashik H.L.P. (Ed.) Suicidal behaviour, J. & A. Churchill Ltd London, p. 163.

RUDERSTAM, E. K. (1971). Stockholm and Los Angeles—A cross-cultural study of the communication of suicidal intent. J. of Consult and Clinical Psych., 36, 1, 82.

SAPALAKY, A. (1963). An indicator of suicidal ideation on the Rorschach test. Journal of Projective Technique and Personality Assessment. 27, 332.

SCHNEIDMAN, E. S. (eds.) (1967). Essays in Self destruction. New York, Science House Inc.

SEAGER, C. P. AND FLOOD, R. A. (1965). Suicide in Bristol. Brit. J. Psychiat., 91, 191.

SEETHI, B. B. AND GUPTA, S. C. (1977). Psychosocial factors and personality characteristics in cases of attempted suicide. Paper presented at the 29th Annual Conference of Indian Psychiatric Society in Calcutta.

SEETHI, B. B., GUPTA, S. C. AND SINGH, HARIJIT. (1978). Psychosocial factors and personality characteristics in cases of attempted suicide. Indian J. Psychiat., 20, 25.

STENGEL, E. (1964). Suicide and attempted suicide. Baltimore, Penguin Books Inc.

TOUCMAN, J. AND LAUREL, N. (1958). A study of suicide Philadelphia. Public Health Reports, 73, 547.

WEBER, I. B. (1961). Cross validation of Rorschach Checklist associated with suicidal tendencies. J. Consult. Psychol., 25, 312.

YESSLER, P. G., GUBE, J. J. AND BECKER, H. A. (1964). On communication of suicidal ideas:—II, some Medical consideration. Arch. Gen. Psychiat., 5, 12.