

PSYCHOSOCIAL FACTORS RELATED TO ATTEMPTED SUICIDE IN SCHIZOPHRENIC PATIENTS

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Abstract

Introduction: Schizophrenia is a major psychotic disorder in the field of psychiatry. One of the important sequelae of chronic schizophrenia is attempted suicide or suicide. The leading cause of death among schizophrenic patients is completed suicide.

Place of study: This study was conducted in the outpatient and inpatient of the departments of Bangabandhu Sheikh Mujib Medical University (BSMMU), Dhaka, National Institute of Mental Health (NIMH), Sher-E-Bangla Nagar, Dhaka, and Mental Hospital, Pabna from 30th September 2007 to 29th February 2008.

Objective: The present study was designed to determine the reasons for suicidal attempt, socio-demographic features and the methods of attempted suicide among the schizophrenic patients with history of suicidal attempt.

Method: This is a cross sectional study on one hundred and two schizophrenic patients who had the history of suicidal attempt.

Results: All patients were interviewed by using the semi-structured questionnaire which was developed according to study requirement. It contains socio-demographic and other relevant information. Among 102 cases of schizophrenic patients with suicidal attempt, 72.5% were young; mean age was 31.28 years (SD±8.53) and majority were of male gender (75.5%). Most of them were unemployed (36.3%) and unmarried (49.0%). Forty-five patients (44.1%) had positive family history of psychiatric illness.

Mean duration of suffering from schizophrenia was 8.24 years (SD±5.81). Most of the patients (41.2%) attempted suicide in their earlier course of illness (within 5 years). 64.7% patients attempted multiple times. Most frequent reason for the suicidal attempts was depression (82.4%); 79.4% attempted in recovery phase. The methods mostly applied were ingestion of poison/corrosive (28.4%) and hanging (25.5%).

Conclusion: This study tried to find out the possible reasons and sociodemographic correlates of attempted suicide in schizophrenic patients. A study in the community level can pin point the causes of suicidal attempts. However this study is an eye opening in this field. It should be remembered that the rate of completed suicide is more in those patients who had attempted suicide earlier. Awareness in the community, caregivers, and health professionals is very important to save the lives of those schizophrenic patients with suicidal attempts/intent.

Key-words: Schizophrenia, attempted suicide, sociodemographic features.

Introduction

Schizophrenia is a major psychotic disorder in the field of psychiatry. Schizophrenia, which affects approximately one percent of the population, usually begins before the age of twenty five, persists throughout life, and affects persons of all classes. Although schizophrenia is discussed as if it is a single disease; it probably comprises as a group of

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disorders with heterogeneous etiologies. The diagnosis of schizophrenia is based entirely on the psychiatric history and mental status examination¹. One of the important sequelae of chronic schizophrenia is attempted suicide or suicide. Attempted suicide is now recognized as a major health problem to be addressed scientifically like any other medical conditions^{2,3}.

People who have intentionally harmed themselves have a much increased risk of later suicide. The systemic review concluded that among these people; between 1 in 200 and 1 in 40 commit suicide within one year and about 1 in 15 commits suicide within 9 years or more⁴. It is often difficult to clinically assess suicide risk in individual patients with schizophrenia⁵.

Indeed, the clinical assessment of suicidality in patients with schizophrenia is often more intricate than in other patient groups because of the complexity and range of symptoms presented by patients with schizophrenia^{6,7}. In assessing suicide in schizophrenia the clinician should be cautious about suicidal thoughts in schizophrenic patients because 10% of schizophrenic patients die by suicide, 30-55% make suicide attempts, 60-80% have suicidal ideas. Schizophrenics often do not give clues that arouse clinical intuition^{8,9}.

The aim of this study is to find out the risk factors, socio-demographic features and relevant information of the schizophrenic patients with history of attempted suicide. There is hardly any study in Bangladesh regarding suicide attempt among the patients suffering from schizophrenia. This study will help in early identification of suicide attempts and also in finding out the possible preventable factors that can prevent suicide in schizophrenia by increasing awareness in the patients and caregivers.

Materials and Methods

This is a cross sectional descriptive study conducted at outpatient and inpatient departments of Bangabandhu Sheikh Mujib Medical University, Dhaka National Institute of Mental Health, Sher-E-Bangla Nagar, Dhaka and Mental Hospital, Pabna from 30 September 2007 to 29 February

2008. One hundred and two schizophrenic patients with the history of attempted suicide were included in consecutive method attending the above mentioned study places during the study period. A semi-structured questionnaire was designed to collect socio- demographic features and relevant information about schizophrenia and attempted suicide. Study population was included in this study irrespective of their sex. Age of the study population was ≥ 18 years. Patients who were mute, stuporous, non-cooperative, non-communicable and also accidental poisoning cases were excluded from this study. Patient who fulfilled the diagnostic criteria of DSM-IV (Diagnostic and Statistical Manual of Mental Disorders-IV) for schizophrenia and confirmed by consultant psychiatrist, were included in this study. Data were analyzed by computer with the help of SPSS (Statistical Package for Social Sciences) win-12 software package. Statistical significance is set at 0.05 level and confidence interval at 95% level. Result is presented in table. Confidentiality of the patients (subjects) about personal information was strictly maintained. The study did not create any environmental hazard.

Results and Observations

Total one hundred and two patients suffering from schizophrenia with the history of attempted suicide, attending the above mentioned study places during the study period were selected for this study.

Table-I: shows that out of 102 cases of schizophrenia who had suicidal attempts, 44 (43.1%) were within the age group of 26-35 years, 30 (29.4%) were within the age group of 18-25 years and rest (27.4%) of the patients were within 36-55 years age-group. Among the patients 77 (75.5%) were male and 25 (24.5%) were female. 37 (36.3%) of cases were unemployed, 14 (13.7%) were businessmen, 12 (11.8%) were students, 9 (8.8%) were housewives, 7 (6.9%) were service holders, 12(11.8%) were farmers and 11 (10.8%) were day labourers. Among the patients 83 (81.4%) were Muslim and 19 (18.6%) were Hindu. Fifty (49.0%) patients were unmarried, 44 (43.1%) married, 3 (2.9%) separated, 3 (2.9%) divorced & 2 (2%) widowed.

Table-I: Distribution of age, sex, occupational, religion and marital status of the schizophrenic patients who attempted suicide (n=102).

Parameters	No of patients	Percent
Age (year)		
18-25	30	29.4
26-35	44	43.1
36-45	20	19.6
46-55	8	7.8
Total	102	100.0
Mean \pm SD (range)	31.28 \pm 8.53 (18-55)	
Sex		
Male	77	75.5
Female	25	24.5
Total	102	100.0
Occupational status		
Unemployed	37	36.3
Student	14	13.7
Housewife	12	11.8
Farmer	9	8.8
Day labour	7	6.9
Businessman	12	11.8
Service holder	11	10.8
Total	102	100.0
Religion		
Muslim	83	81.4
Hindu	19	18.6
Total	102	100.0
Marital status		
Unmarried	50	49.0
Married	44	43.1
Separated	3	2.9
Divorced	3	2.9
Widowed	2	2.0
Total	102	100.0

Table-II shows among 102 cases, 45 (44.1%) patients had positive family history of psychiatric illness. and 19 (18.6%) patients were habituated to take psychoactive substances.

Table-II: Distribution of the patients who had family history of psychiatric illness and substance abuse (n=102).

	Number of patients	Percentage
Family history of psychiatric illness	45	44.1
No family history of psychiatric illness	57	55.9
Total	102	100
Habit of taking psychoactive substance	19	18.6
• Ganja	11	10.8
• Multiple substance	6	5.9
• Wine	2	2.0
No habit of taking psychoactive substance	83	81.4
Total	102	100

Table-III shows that 42 (41.2%) patients attempted suicide within 1-5 years of suffering from schizophrenia, 33 (32.4%) within 6-10 years and rest 27 (26.5%) within 11 years and onwards.

Table-III: Distribution of the patients who attempted suicide by duration of illness (n=102).

Duration of suffering from Schizophrenia (years)	No of patients	Percent
• 1-5	42	41.2
• 6-10	33	32.4
• 11-15	16	15.7
• 16-20	9	8.8
• 21 and above	2	2.0
	Mean \pm SD (range)	
Duration of suffering from schizophrenia	8.24 \pm 5.81 (1-32)	

Among 102 cases of schizophrenia with attempted suicide, 36 (35.3%) cases attempted single time, 47(46.0%) cases 2-5 times and 19 (18.7%) 6 imes or more (Table-IV).

Table-IV: Distribution of the patients with no of attempted suicide (n=102).

No of attempt	No of patients	Percent
• 1(single)	36	35.3
• 2-5	47	46.0
• 6-	19	18.7

Among 102 suicide attempters, 84 (82.4%) attempted due to depression, 7 (6.9%) due to non-adherence to drugs, 5 (4.9%) due to past and recent suicidal ideation, 2 (2.0%) due to repeated hospital admission, 2 (2.0%) due to delusional content, 2 (2.0%) due to history of stress (Table-V).

Table-V: Distribution of different reasons of attempted suicide (n=102).

Possible reasons of attempted suicide	No of patients	Percentage
Suffering from depression	84	82.4
Non adherence to drug	7	6.9
Past and recent suicidal ideation	5	4.9
Frequent admission to hospital	2	2.0
Delusional thought content	2	2.0
History of stress	2	2.0
Auditory hallucination	0	0.0

Table-VI shows that most of the patients 81 (79.4%) attempted suicide in recovery phase of suffering from schizophrenia, followed by 8 (7.8%) in active phase and 13 (12.8%) in initial phase.

Table-VI: Distribution of suicidal attempts according to the course of illness (n=102).

Suicidal attempts in different phases of schizophrenia	No of patients	Percentage
Initial phase	13	12.7
Active phase	8	7.8
Recovery phase	81	79.4

Table-VII regarding methods of suicide, 29 (28.4%) were attempted by ingesting poison or corrosive, 26 (25.5%) by hanging, 25 (24.5%) by self-inflicted injury, 19 (18.6%) by taking excessive medication and 3 (2.9%) by taking excessive psychoactive substances.

Table-VII: Distribution of methods of attempted suicide (n=102).

Methods of attempted suicide	No of patients	Percentage
Ingestion of poison/corrosive	29	28.4
Try to hang	26	25.5
Self-inflicted injury	25	24.5
Taking excessive medication	19	18.6
Taking excessive psychoactive substance	3	2.9

Discussion

This study on schizophrenic patients who had history of attempted suicide was done to obtain sufficiently reliable and valid data to provide credible picture on attempted suicide in schizophrenia. The mean age of the patients in this study was 31.28 years (SD \pm 8.53). Most (72.5%) of the patients were within 35 years of age (Table-I). That means, most of the patients were young and within their productive age of life. This study correlates with other studies showing that suicide rate is increased among young men^{1,4,8}. Two other western studies showed that the mean age of the schizophrenic patients attempted suicide were 37.17 years (SD \pm 10.41) and 37.2 years (SD \pm 10.2) respectively^{10,11}. Another study on suicidal behaviour in schizophrenic patients who made a recent suicide attempt showed that the patients were younger (mean 29.96 years SD \pm 8.07) and prevalence rate of suicide attempts was highest within the 20-29 years age group¹². Among people admitted to hospital with schizophrenia the excess risk was largest in the young age groups and the risk decreased per year for every additional year of age^{13,14}.

In this study, most patients 77 (75.5%) were male. Risk of suicide is high in male gender^{4,8}. A study showed that among schizophrenic patients who had attempted suicide, 62% were men and 38% were women¹⁰. Out of 102 patients, 37 (36.3%) were unemployed which commensurates with the finding that unemployment increases the risk of suicide in schizophrenic patients^{1,4,11}. Rest of the patients were students (13.7%), businessmen (11.8%), service holders (10.8%), housewives (11.8%), day labours (6.9%) and farmers (8.8%). In religious aspect, 83 (81.4%) were Muslim and rest were Hindu.

There was no association between religion and suicide/attempted suicide in schizophrenic patients¹⁵. But few patients reported an incentive role of religion, not only due to negatively connoted issues but also to the hope for something better after death¹⁶. Moreover suicide rate is traditionally low in Islamic countries¹⁷. This study revealed that attempted suicide rate in schizophrenic patients was highest in unmarried patients (49.0%) than other groups. Usually those who were married or cohabiting were at somewhat lower risk. Unmarried, living alone, socially isolated or not living with their families were at greater risk of suicide^{1,4,9,15,17}.

Among the patients, 45 (44.1%) had positive family history of psychiatric illness. This finding is highly consistent with the study that showed the family history of psychiatric illness significantly increased suicidal risk^{8,17}. Suicide risk was considerably high in the presence of drug misuse or dependence in schizophrenic patients¹⁵. Nineteen (18.6%) patients had history of taking psychoactive substance especially ganja. Forty two (41.2%) suicide attempters attempted suicide within 5 years of suffering from schizophrenia and mean duration was 8.24 years (SD±5.81). It revealed that most patients attempted in their early course of disease. Suicide rate is high early in the course of illness^{1,4,8}. Mean duration of suffering from schizophrenia was 8.24 years (SD±8.07)¹¹. More than 80% of first suicide attempts occurred after the onset of psychosis and within first five years of illness¹⁰. Most of the patients, 66 (64.7%) attempted twice or more.

It is consistent with the study that 60% of schizophrenic patients who had attempted suicide were reported making multiple attempts of suicide^{8,10}. This study found that suffering from depression was the most common 84 (82.4%) factor or possible reason for attempted suicide in schizophrenic patients. The most frequent documented reason for having made a suicide attempt by individuals with schizophrenia was that the person was depressed^{8,10}. Various studies showed that the reasons for the suicide attempts in schizophrenic patients included depression, loss of significant relatives (i.e. spouse, friends), being bothered by psychotic symptoms, response to stressful life events, response to command of auditory hallucination, previous suicide attempts, physical abuse, substance abuse, poor adherence to treatment, for attention and for unknown reasons^{1,10,11,12,15}.

The rate of suicidal attempts was highest 81 (79.4%) in recovery phase. Suicide risk was particularly high after discharge from hospital^{1,4,7,18}. It is due to regaining of insight after recovery from the illness, knowing the consequence of treatment and outcome of disease. This causes frustration and hopelessness in the patients, leading to suicide or suicidal attempts^{1,4,8,9}. The methods applied for attempting suicide were ingestion of poison / corrosives (28.4%), hanging (25.5%), self-inflicted injury (24.5%), taking excessive medication (18.6%) and taking excessive psychoactive substances (2.9%). Self-poisoning with a variety of substances ranging from pesticides to commonly available household products is the commonest method ranging from 70% in Sri Lanka to 23% in Thailand. Study in Indonesia (47%) and India (37%) also shows incidence of self-poisoning. Hanging is the frequently adopted method for attempting suicide with incidence rate of 26% in India, 59% in Thailand, and 46% in Indonesia³.

Conclusion

Suicide is unfortunately one of the leading causes of death for people with schizophrenia, but it is highly preventable. This study tried to find out the possible reasons and sociodemographic features of attempted suicide in schizophrenic patients.

Those patients with the best prognosis can paradoxically be at high risk for suicide. The profile of the patient at greatest risk is a young man who once had high expectation and then declined from higher level of functioning and realizes that his dreams are not likely to come true and has lost faith or has ignorance about the effectiveness of treatment. Before completion of suicide, most of the patients attempt several times. So attempted suicide is the most significant factor of this worst outcome. For the management of suicidality in schizophrenic patients, health service system should be improved at all levels in the country. Proper medication, psychological and social support may prevent the premature termination of schizophrenic patient's life.

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