



STUDY OF SUICIDE ATTEMPTS CASES IN SCHIZOPHRENIA

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Conflicts of Interest: Nil

ABSTRACT:

Disease characterized by remissions and exacerbations is known as Schizophrenia which reduces the life expectancy of those afflicted by approximately 10 years. Suicide is known as cause of premature death among patients suffering with schizophrenia. About 10% has been estimated of completed suicide lifetime prevalence in patient. Risk factors for attempting suicide among patients with schizophrenia are as male gender, marital status, age under 30 years, history of substance abuse, history of depression, previous suicide attempts and recent discharge from the hospital as well as experiencing hopelessness and fear of disintegration are also at high risk for suicide. In India due to suicide More than one lakh lives are lost every year. In few years past (from 1975 to 2005), about 43% suicide rate was increased. However the ratio between male-female has been stable at around 1.4 to 1. wide variation in suicide rates was found in India; especially southern states of Kerala, Andhra Pradesh, Karnataka and Tamil Nadu have a suicide rate of >15 while in the Northern States of Punjab, Bihar, Uttar Pradesh and Jammu and Kashmir, the suicide rate is <3.

Aim: The main aim of this study is to find suicide attempters in schizophrenia with possible recognition of risk factors.

Material and method: This study was carried out in KM medical college and hospital in the department of psychiatric department. This study was carried on with the period of 1 year with 100 patients suffering from schizophrenia for diagnostic criteria attending the outpatient department for treatment.

Result: In the study population 32 % had attempted suicide while 68 % did not have a history of suicide attempt. Out of the study group who attempted suicide, 9.4% were below 21 years, 37.5 % were between 21 and 30 years, 31.3 % were between 31 and 40 years, 15.6 % were between 41 and 50 years, and 6.3% between 51 and 60 years. In the group which attempted suicide, 34.4% were married, 43.8% were unmarried, 6.3% were separated, and 15.6% were divorced. In SE Status which attempted suicide, 62.5% were from lower socio-economic group, 28.1% were from middle socio-economic group, and 9.4% belonged to higher socio-economic group. Whereas in occupation attempted suicide, 18.8% were housewives, 12.5% were in skilled jobs, 46.9 % were in unskilled jobs, and 21.9% were unemployed. According to family history who attempted suicide, 21.9% had no family history of mental illness or suicide, 34.4% had family history of mental illness, 28.1% had family history of suicide, and 15.6% had family history of both mental illness and suicide.

Conclusion: Especially when the illness is acute and severe, in early stages, sufferings from schizophrenia are at a high risk for suicidal attempts. More attention for the higher risk group includes those with a family history of suicide and people' communicating their intention. Hence effective

medical and social risk factors and effective monitoring of treatment is important which keep a step towards meeting one of the greatest unmet challenges in psychiatry “Suicide in Schizophrenia.”

Key words: schizophrenia, Suicide, Risk factors and psychiatry

Introduction

Disease characterized by remissions and exacerbations is known as Schizophrenia which reduces the life expectancy of those afflicted by approximately 10 years. Suicide is known as cause of premature death among patients suffering with schizophreniaⁱ. About 10% has been estimated of completed suicide lifetime prevalence in patientⁱⁱ. Risk factors for attempting suicide among patients with schizophrenia are as male gender, marital status, age under 30 years, history of substance abuse, history of depression, previous suicide attempts and recent discharge from the hospital as well as experiencing hopelessness and fear of disintegration are also at high risk for suicideⁱⁱⁱ.

Most devastating possible outcome of a schizophrenic illness is Suicide. It is also decisiveness for suicide that has intense and long-lasting impact on families, other patients, and professional staff^{iv,v}. All psychiatric disorders other than major depression is the major risk of suicide in schizophrenia^{vi}. According to the studied about rate of suicide in schizophrenia is 20-50 times greater than suicide rate in general population^{vii}. About 20% to 40% suffering from schizophrenia make suicide attempts. in schizophrenia about 9% to 12.9% rate completed suicide^{viii}. People suffering from schizophrenia who attempt suicide are Approximately 1% to 2 % who attempt suicide are reported to complete suicide within a year after their initial attempt, and thereafter with an additional 1% doing so each year^{ix}.

In India due to suicide More than one lakh lives are lost every year. In few years past (from 1975 to 2005), about 43% suicide rate was increased. However the ratio between male-female has been stable at around 1.4 to 1. wide variation in suicide rates was found in India; especially southern states of Kerala, Andhra Pradesh, Karnataka and Tamil Nadu have a suicide rate of >15 while in the Northern States of Punjab, Bihar, Uttar Pradesh and Jammu and Kashmir, the suicide rate is <3^x.

For 64% accounted attempted suicides with schizophrenia.

According Gupta, et al studied in two-year follow-up patients attempted suicide with schizophrenia and depression reported that 51.8% of the suicide attempters had a personality disorder, 23.5% had a history of drug dependence and 42% had neurotic symptoms during childhood. 17.1% of the schizophrenia patients had attempted suicide during the follow-up period again with one completing suicide, compared to 19% of the depressed patients^{xi}. The main aim of this study is to find suicide attempters in schizophrenia with possible recognition of risk factors.

MATERIAL AND METHODS:

This study was carried out at KM Medical College and Hospital Mathura in the department of psychiatric department. This study was carried on with the period of 1 year with 100 patients suffering from schizophrenia for diagnostic criteria attending the outpatient department for treatment. Patients with suffering and medication from schizophrenia were included in this study whereas Patients with Substance use disorder and could not be evaluated by meaningful conversation due to severe psychotic excitement were excluded in this study. Patients with detailed history was recorded with the history of past suicide attempt. Scale for the Assessment of Positive Symptoms (SAPS), Scale for the Assessment of Negative Symptoms (SANS), The Calgary Depression rating Scale for Schizophrenia (CDSS) and Suicide intent scale for patients with a history of suicide attempt was also recorded as data.

OBSERVATION AND RESULTS:

Table 1: Frequency of suicide attempt in individual

Suicide Attempt	Frequency	Percent
Yes	32	32
No	68	68
Total	100	100

In the study population 32 % had attempted suicide while 68 % did not have a history of suicide attempt.

Table 2: Age wise comparison of suicide attempters

Age in years	Suicide attempt	percentage
< 21	3	9.4
21-30	12	37.5
31-40	10	31.3
41-50	5	15.6
51-60	2	6.3
Total	32	100

Out of the study group who attempted suicide, 9.4% were below 21 years, 37.5 % were between 21 and 30 years, 31.3 % were between 31 and 40 years, 15.6 % were between 41 and 50 years, and 6.3% between 51 and 60 years.

Table 3: Gender wise comparison of suicide attempters

Gender	Suicide attempt	percentage
Male	22	68.8
Female	10	31.3
Total	32	100.0

Among the group of suicide attempters, 68.8 % were males and 31.3 % were females.

Table 4: Comparison of suicide attempters by various factors

Marital Status	Suicide attempt	percentage
Married	11	34.4
Unmarried	14	43.8
Separated	2	6.3
Divorced	5	15.6
SE Status		
Low	20	62.5
Middle	9	28.1
High	3	9.4
Occupation		
Housewife	6	18.8
Skilled	4	12.5
Unskilled	15	46.9
Unemployed	7	21.9
Family History		

None	7	21.9
Mental illness	11	34.4
Suicide	9	28.1
Both	5	15.6

In the group which attempted suicide, 34.4% were married, 43.8% were unmarried, 6.3% were separated, and 15.6% were divorced. In **SE Status** which attempted suicide, 62.5% were from lower socio-economic group, 28.1% were from middle socio-economic group, and 9.4% belonged to higher socio-economic group. Whereas in occupation attempted suicide, 18.8% were housewives, 12.5% were in skilled jobs, 46.9 % were in unskilled jobs, and 21.9% were unemployed. According to family history who attempted suicide, 21.9% had no family history of mental illness or suicide, 34.4% had family history of mental illness, 28.1% had family history of suicide, and 15.6% had family history of both mental illness and suicide.

Table 5: Comparison of suicide attempters and non attempters by various scale scores.

SCALE	Suicide Attempts		P value
	Mean	S.D.	
SANS SCORE	15.5	6.7	0.86
CDSS SCORE	4.7	2.6	0.01
SAPS SCORE	21.9	9.2	0.01

The mean SANS (negative symptoms scale) score was 15.52 (SD - 6.77) with attempt suicide. This was not statistically significant ($p = 0.86$) in t test. Whereas for mean score on CDSS (Depression scale) was 4.667 (SD - 2.602) which was statistically significant ($p = 0.01$) in t test. And mean score on SAPS (positive symptoms scale) was 21.93 (SD - 9.20) which was statistically significant ($p = 0.01$) in t test.

DISCUSSION:

Throughout the life-span of individuals suffering from schizophrenia the risk for suicidal behavior is high. Suicidal behavior has given differing strikingly in role of demographic variables. Patients suffering with schizophrenia are at a higher risk in Young males with comparison to female. As the studied done by Tsuang et al⁸ in

females suffering from schizophrenia less risk for suicide while in study of Ting-Pong Ho et al^{xii} and Vanessa Raymont et al⁹ there is higher risk for young adults which is similar to our study.

According to studied of Kaplan et al^{xiii} risk factor for suicide is higher socio-economic status. In this higher status due to illness is said to contribute towards suicide attempts which was opposite to this study. Lower socio-economic class also said to be more prevalent for Suicide similar to this study.

According to the study by Radomsky et al^{xiv} single, separated or divorced did not confer higher risk for suicide attempts in psychosis. That majority of the schizophrenic suicides are committed by unmarried as a result that is similar to this study. In the demographic variables between individuals who exhibited suicidal behavior find any significant difference was found in the study of Harkavy et al. According to Roy and Segal et al^{xv} consistent with adoption studies reporting genetic and familial factors contributing to suicide risk.

From many studies majority of the people who attempted suicide did so during early periods of their illness. Knights et al^{xvi} studied during acute phase of illness, the symptom severity, and depressive symptoms are more risk factor for Suicide. Brier et al^{xvii} studied shows majority of them attempt in their early stages of illness Suicide rates remain elevated throughout the lifetime of individuals suffering from schizophrenia.

CONCLUSION:

Especially when the illness is acute and severe, in early stages, sufferings from schizophrenia are at a high risk for suicidal attempts. More attention for the higher risk group includes those with a family history of suicide and persons communicating their intention. Therefore Careers and professionals are often with feelings of profound ineffectualness and guilt in the face of suicide. Hence effective medical and social risk factors and effective monitoring of treatment is important which keep a step towards meeting one of the greatest unmet challenges in psychiatry "Suicide in Schizophrenia".

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