Suicidal Behaviours in First Episode Psychoses

Shruti R. Agrawal [a*φ] and Pradeep S. Patil [a#]

a Department of Psychiatry, Jawaharlal Nehru Medical College, Datta Meghe Institute of Medical Sciences, Wardha, India.

Authors' contributions

This work was carried out in collaboration between both authors. Both authors read and approved the final manuscript.

Study Protocol

ABSTRACT

Background: Psychotic disorders severely affect the quality of life of many patients. Mortality is very high in such patients. Suicide risk is 12 times more in patients with psychoses than in the general population. First episode psychosis has no agreed-upon definition, but the initial years are crucial for a better prognosis of the illness. Early intervention and timely management prove beneficial in improving quality of life and reducing mortality, mainly due to suicide. Suicide risk is about 1.5 times higher in the first year of treatment.
Aims and Objectives: We aim to find out the presence of suicidal ideas and attempts in FEP and find out risk factors for suicidal ideas and attempts in FEP. The study also assesses the nature of clinical manifestations, depression, and insight with suicidal ideas, suicidal attempts, and non-suicidal self-harm in FEP.
Methods: It is a cross-sectional observational study. Seventy-five indoor or outdoor patients aged 18 to 50yrs will be assessed. Tools used are sociodemographic proforma, PANSS, Addington Depression scale, Suicidality Module of MINI, and Birchwood Insight Scale.
Results and Discussion: This study's result will help ascertain suicidal behaviors in first-episode psychosis. The study will also help identify risk factors and their role in suicide in these patients.

Keywords: First episode psychosis; suicide; risk factors; insight; depression.

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φResident;
#Professor and Head;
*Corresponding author: E-mail: shruti7agrawal@gmail.com;

1. INTRODUCTION

Psychotic disorders are shown characteristic changes in multiple domains, and symptoms can be favorable negative associated with behavior changes and cognitive impairment. Disorders like schizophrenia, delusional disorder, schizoaffective disorder, bipolar affective disorders with psychotic symptoms come under psychoses. These disorders severely affect the quality of life of patients and their caregivers and are concurrent with extremely high levels of morbidity and mortality. These disorders show frequent symptom exacerbations and many psychiatric and medical comorbidities. This has significantly reduced the life expectancy of these patients by as much as a quarter of a century. Mortality is high due to the 12 fold increased risk of suicide in these patients compared to the general population. The Global Burden of Disease study assigned Schizophrenia the highest disability weight amongst the entire range of injuries and illnesses considered in the study [1-4].

Interest has piqued for the understanding of the beginning and progression of psychoses. Research for reducing morbidity and mortality, primarily through early intervention, is ongoing during the initial few years of disease onset. Catching the disease early and understanding its progression is the key to improving overall patient well-being. This will drastically bring down the disability weight of psychoses.

There is no agreed-upon definition for first-episode psychosis. The definition varies considerably across various clinical practices and research protocols. The diagnostic systems of DSM V and ICD 10 also do not define first episode psychosis satisfactorily. This lack of uniformity creates a barrier in deriving meaningful conclusions and hinders the generalisability of the results [5-7].

First episode psychosis (FEP) poses a significant health risk globally. First presentation of patients with FEP is usually in adolescence. They may present with positive symptoms of psychosis, e.g., delusions or hallucinations, negative symptoms like apathy, blunting of effect, etc., and cognitive deficits, including impairment in higher functions and personality deterioration. This adversely affects individual's dual's daily life wherein the patient cannot maintain a routine and lead a fulfilling life. Family members may experience caregiver burden as these patients often get aggressive and may risk themselves and society. They, therefore, need constant supervision and care, which can be exhausting for the caregiver as such constant care is physically, emotionally, and economically draining for the family. This causes significant stress to the family as a whole. Early treatment and intervention is hindered due to social stigma and a general lack of awareness regarding psychiatric disorders. This is a challenge for mental health workers as patients present with exacerbated, symptoms and questionable compliance to treatment. Superstitious and religious beliefs also delay initiation of treatment as many patients consult quacks and take treatment from unauthorized, self proclaimed healers. This delay in treatment may further deteriorate the patient's condition. Health care access in rural India is still inadequate, and many patients do not get specialized care. Barriers like poor economic conditions, lack awareness, superstitious beliefs, and inability of family members to recognize red flag signs of disease lead to further delay in treatment initiation. The unavailability of properly trained personnel to diagnose the disease is also a significant problem. Continuation of treatment is very poor as there is attrition of patients in follow-ups due to the distance and economic constraints [8-13].

Over 8 million people end their lives every year worldwide making suicide a cause for international concern. Suicide ranks tenth in causes of death globally. Overall, about 1.5 percent of all deaths are due to suicide. Suicide is defined as "self-inflicted death, with explicit or implicit evidence that the person intended to die, while suicide attempts usually involve self-injurious behavior with the intent to die." Suicidality is a complex behavior ranging from preliminary death wishes, suicidal thoughts, and ideas to risky lifestyles, suicide plans, suicide attempts, and completed suicide [14-17].

The First-year of treatment has about 1.5 times higher risk of the patient attempting suicide than the risk in the following years. Therefore, it is imperative to study suicidal behaviors and identify risk and predictive factors for suicide, especially in first-episode psychosis. Prospective studies will help in understanding these factors. Suicidal attempts are difficult to monitor as there are no surveillance systems to monitor them. Their prevalence is more than that of completed suicide, but factual data is not available. Suicidal behaviors differ across countries and different backgrounds therefore, it is essential that the

healthcare system customize its services as per the need of the population and comparable studies will help in developing such services [18-21].

Major depression, alcohol use disorder, and psychotic disorders are most associated with suicide. A literature search in a standard medical database like Pubmed shows no Indian study on suicidal behaviors in First Episode Psychosis (FEP). This is the first study to fill up the gap.

2. AIMS AND OBJECTIVES

2.1 Aim

1. To find out the presence of suicidal ideas and attempts in FEP
2. To find out risk factors for suicidal ideas and attempts in FEP

2.2 Objectives

1. To assess the suicidal ideas and suicide attempts in FEP
2. To assess the relationship of clinical manifestations, depression, and insight with suicidal ideas, suicidal behavior and non-suicidal self-harm FEP

3. MATERIALS AND METHODS

3.1 Type of Study

Cross-sectional observational study.

3.2 Population for Study

Patients diagnosed with FEP visiting the OPD or admitted in AVBR Hospital, Sawangi (M), Wardha-442001.

3.3 Study Setting

Sample collection to be done from 1st October of 2019 to 31st October of 2022, on the patient's first visit.

3.4 Sample Size: 75.

The sample size was calculated with the help of a sample size calculator with the parameters input as a confidence level of 90%, the margin of error 10%, population proportion 34%, and population size 12,00,000.

The patients will then be administered the following questionnaires:

1. Sociodemographic Characteristics
2. PANTS
3. Addington Depression scale
4. Suicidality Module of MINI
5. Birchwood Insight Scale

3.5 Criteria for Inclusion

1. Age group of 18 to 50 years
2. First inpatient admission in a mental healthcare setting, first consultation on outpatient or inpatient basis with psychiatric units with positive symptoms, initiation of antipsychotic therapy, or first emergence of positive symptoms confirmed by an informant of less than one year before being enrolled in the study;
3. Informed and signed consent

3.6 Criteria for Exclusion

1. Another DSM-5 diagnosis, except for nicotine-related disorders
2. Intellectual disability plus impaired global functioning before disorder onset;
3. Generalised development disorder

3.7 Tools to be used

3.7.1 Socio-demographic data and clinical data

Patients' age, gender, religion, residence etc. will be enquired about. Relevant clinical data like age of onset of illness, total duration of the episode, past history of suicide in patient or family members, history of mental illness in family etc will be collected with the help of a semi structured proforma.

3.7.2 Positive and negative syndrome scale (PANSS) [22]

This scale contains a total of thirty items, with a likert rating scale of 7 points. It is a clinical interview consisting of a formal semi structured format which was constructed in a format to carefully evaluate after clearly defining positive, negative and other symptom dimensions. In the scale, seven items are clubbed together into a positive scale assessing features that are in addition to a normal mental status, next seven items are clubbed together into negative scale assessing features that are missing from a normal mental status, 16 items that remain out of the thirty item scale comprises general psychopathology scale that assessed the overall

intensity of schizophrenic disorder by addition of 16 items. It has internal reliability ranging from 0.73 to 0.83 [22].

3.7.3 Suicidality Module of MINI (Sheehan et al 2016)

Sheehan et al in 1998, developed a scale for the assessment of seventeen most common psychiatric disorders. Agreement of 85% was present between the diagnoses arrived at by M.I.N.I. when compared with the diagnoses arrived at by general practitioners and specialists psychiatrist. Highest agreement was seen for the commonest disorders i.e. Depression (0.68), Generalized Anxiety Disorder (0.62) and social phobia (0.66) The latest version updated for DSM 5 , i.e. M International Neuropsychiatric Interview version 7.02 (2016) will be used for the study [23].

3.7.4 Calgery Depression Scale for Schizophrenia (Addington)

The CDSS is specially used for the evaluation of the severity of depression in schizophrenia. It has been extensively used to assess depression levels in both relapsed and remitted patients and is sensitive to any alterations. It has nine items to be rated from 0-3. There is a significant reduction in overlap between the symptoms in the positive and negative symptom group when compared with the Hamilton Depression Scale. Time of remission and relapse both show this relapse. Addition of all the items gives the CDSS depression score. Major depressive disorder can be predicted by score 6 and up with an 82% specificity and 85% sensitivity. Every items is rated as per the operational criteria from 0-3.

Comparison with different rating scales for depression and the prediction of a major depressive episode was used to confirm construct validity. These scale shows good internal reliability and inter-rater reliability [24].

3.7.5 Birchwood Insight scale [25]

Insight dimensions namely ability of the patient to re-label symptoms, being aware of mental illness and recognising that the patient requires treatment are the 3 dimensions assessed by the Birchwood Insight Scale (BIS; Birchwood et al., 1994). The BIS, because of its many advantages like it is a brief scale that is quick to administer and also that it is easy to administer makes it the scale of choice for research in patients with schizophrenia and other psychotic disorders [25].

3.8 Statistical Methods

The Statistical Package for Social Science, version 21.0 (SPSS Inc., Chicago, IL, USA),will be used for statistical analyses. Two-tailed tests were used and 5% significance level was used. First, bivariate analyses (chi-square, t test) were used to detect differences between those with/without suicide ideas, attempts, or non-suicidal deliberate self-harm in sociodemographic and clinical variables like severity of positive, negative and general psychopathology, depression and insight.

Social, demographic and other such continuous or categorical variables were analysed using descriptive analysis.

4. EXPECTED OUTCOME AND RESULT

The result of this study will help in ascertaining the prevalence of suicide behaviours in first episode psychosis. The study will also help in identifying risk factors and their role in suicide in these patients.

5. DISCUSSION

Chesney E, 2014. Nordentoft 2011; Tiihonen . 2009; in their study assessed patients with schizophrenia spectrum disorders have a much higher risk of dying young via suicide or physical illness; their life expectancy is estimated to be reduced by 10-20 years. Because the problems affect 2% to 3% of the population and peak in early adulthood, they have a significant influence on public health.

Even after accounting for established suicidality indicators, Melle (2006) found that the rate of serious suicidality (plans or attempts) was considerably greater in subjects from communities without an early detection programme compared to those from early detection areas. Early detection programmes that bring patients into therapy when their symptoms are at a lower level may lessen the likelihood of suicidality at the time of initial contact.

In the years following a first episode of psychosis, depressive symptoms and suicidal conduct are common. During the first 10 years of treatment, he discovered a significant mortality rate, with the risk of suicide being particularly high during the first two years [26].

Fedyszyn et al. looked at suicidal conduct in 699 FEP patients. They discovered that 12% of these patients showed signs of suicidal behaviour during therapy (up to 3 years); highest suicide risk was at the beginning of therapy; and 64% of suicide attempts were due to overdoses, generally on antipsychotics. The majority of attempts were impulsive, seen after psychosocial stressors, and were serious in nature; 20% of suicide attempts involving hanging or strangulation occurred under care of psychiatric facilities. The strongest predictors were proximal non-suicidal self-injurious behaviour and proximal unfavourable life experiences [27].

Zhang XY, a study of 357 inpatients and 380 healthy controls who met the DSMIV criteria for schizophrenia, found a suicide attempt rate for first-episode schizophrenia inpatients at 12.0% [28].

In FEP patients, a lack of understanding leads to negative attitudes and possible stigmatisation of the illness. In terms of the link between insight and suicidal behaviours, it was discovered that 47 percent of patients with a first episode of psychosis had suicidal ideation, and amongst these who attempted suicide (9 percent) had higher insight into having a mental illness than those who did not. Demoralization syndrome in patients with schizophrenia when they become aware of their condition and its implications, has been claimed to increase suicide risk (i.e. higher insight, greater risk of suicide).

Ayesa-Arriola looked at the link between insight and suicidal conduct in patients who had a three-year follow-up FEP. There were no links observed amongst baseline insight level and the time it took to commit suicide. Poor insight at the evaluation closest to the suicide attempt, on the other hand, was linked to a higher chance of suicide. Suicide behaviour was not affected by the stability of insight, but changes in either direction were associated with an increased likelihood of suicidal behaviour, particularly poorer insight. Insight is a dynamic concept in psychosis, and we showed that the association between insight and suicide risk is also dynamic [29]. Few of the related studies on suicides and psychoses in this region were reviewed [30-34].

6. CONCLUSION

The present study will help in recognising risk factors for suicide in first episode psychosis and in establishing relationship of clinical manifestations, depression and insight with suicidal ideas, suicidal attempts and non-suicidal self harm in FEP.

7. LIMITATION

1. Cross sectional design of the study.
2. As the study is done only in one hospital with a small sample size it cannot be generalised all over the country.

CONSENT AND ETHICAL APPROVAL

Ethics committee approval and method: Approval from the ethics committee will be obtained. Informed consent of the patients/caregivers will be taken. Demographic and social data of the patients will be assimilated.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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