

Study Protocol

Suicidal Behaviours In First Episode Psychoses

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 the general population. First episode psychosis has no agreed upon definition but the initial years are crucial for better prognosis of the illness. Early intervention and timely management prove beneficial in improving quality of life and reducing mortality especially 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 presence of suicidal ideas and attempts in FEP and to find out risk factors for suicidal ideas and attempts in FEP. The study also assess 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. 75 indoor or outdoor patients of ages between 18 to 50yrs will be assessed. Tools used are sociodemographic proforma, PANSS, Addington Depression scale, Suicidality Module of MINI and Birchwood Insight Scale.

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

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

Introduction:

Psychotic disorders are show characteristic changes in multiple domains and symptoms can be positive, negative associated with behaviour changes and cognitive impairment. Disorders like schizophrenia, delusional disorder, schizoaffective disorder, bipolar affective disorders with psychotic symptoms all come under psychoses. These disorders severely affect the quality of life of patients as well as their caregivers and are concurrent with extremely high levels of morbidity as well as 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 increase risk of suicide in these patients in comparison with 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 understanding the beginning and progression of psychoses. Research for reducing morbidity and mortality especially through early intervention during the initial few years of disease onset is ongoing. Catching the disease early and understanding its progression is the key in 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 major health risk globally. First presentation of patients with FEP is usually in adolescence. They may present with positive symptoms of psychosis eg. delusions or hallucinations, negative symptoms like apathy, blunting of affect etc and cognitive deficits including impairment in higher functions and personality deterioration. This adversely affects the individuals daily life wherein the patient is unable to maintain a routine and lead a fulfilling life. Family members may experience caregiver burden as these patients often get aggressive and may pose a risk to themselves and the 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 general lack of awareness regarding psychiatric disorders. This is a challenge for mental health workers as patients present with exacerbated symptoms and compliance to treatment is also questionable. Superstitious and religious beliefs also delay initiation of treatment as many patients consult quacks and take treatment from unauthorised, 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 specialised care. Barriers like poor economic conditions, lack of awareness, superstitious beliefs and inability of family members to recognise red flag signs of disease lead to further delay in treatment initiation. Unavailability of properly trained personnel to diagnose the disease is also a major 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 cluster of behaviour ranging from preliminary death wishes, suicidal thoughts and ideas to risky lifestyles, suicide plans, suicide attempts and completed suicide. (14 -17)

First year of treatment has about 1.5 times higher risk of the patient attempting suicide than the risk in the following years. It is therefore imperative to study the suicidal behaviours 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 in place for monitoring them. Their prevalence is more than that of completed suicide but concrete data is not available. Suicidal behaviours differ across countries and different backgrounds, therefore it is important that the healthcare system customise their 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 the psychiatric disorders most associated with suicide. Literature search in standard medical database like Pubmed shows that there is virtually no Indian study on suicidal behaviours in First Episode Psychosis(FEP). This is first study to fill up the gap.

AIMS AND OBJECTIVES

Aim:

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

Objectives:

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

MATERIAL AND METHODS

Type of Study: Cross sectional observational study

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

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

Sample Size: 75

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

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 . The patients will then be administered to the following questionnaires:

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

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 1 year prior to being enrolled in the study;
3. Informed and signed consent

Criteria for exclusion

1. Other DSM-5 diagnosis, except for nicotine-related disorders
2. Intellectual disability plus impaired global functioning prior to disorder onset;

3. Generalised development disorder

TOOLS TO BE USED:

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.

2. Positive and negative syndrome scale (PANSS)(Kay , Opler, Fiszbain 1987)

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. 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)

4. Calgary 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)

5. Birchwood Insight Scale (Birchwood et al., 1994)

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)

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.

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.

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. (2014) 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 (2018), 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 (2018) 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).

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.

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

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