



PSYCHIATRIC COMORBIDITY AND SUICIDAL INTENT IN PATIENTS OF ATTEMPTED SUICIDE IN TERTIARY CARE HOSPITAL: A CROSS SECTIONAL, OBSERVATIONAL STUDY

Psychiatry

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ABSTRACT

Background- The suicide rate in India is 10.3 per lakh population. In the last three decades, the suicide rate has increased by 43%. Majority (71%) of suicide in India are by persons below the age of 44 years which imposes a huge social, emotional and economic burden on society. Physical and mental illness, disturbed interpersonal relationships and economic difficulties were the major reasons for suicide. Therefore, the study of psychiatric comorbidity and intent of suicide helps prevent further suicide attempts. **Aims and Objectives-** To study psychiatric comorbidity & intent of suicide in patients attempting suicide. **Settings and Design-** A cross-sectional, observational study is done in tertiary care centre in semi urban area. **Materials and Methods-** A total of 40 patients of attempted suicide referred to psychiatry department were assessed using Beck's suicide intent scale and psychiatric Comorbidity was assessed by using the DSM 5 (Diagnostic and statistical manual of mental disorder, fifth edition). **Result-** Most common psychiatry comorbidity in suicide attempt patients was substance dependence (25%), depressive disorder (12.5%), personality disorder (7.5%), alcohol related disorders (5%), anxiety disorder (5%), schizophrenia (2.5%) and bipolar affective mood disorder (2.5%). In this study 30% patients were with low intent, 20% were with high intent of suicide and patient with medium suicide intent were 50%.

KEYWORDS

Suicide, Psychiatric comorbidity, Suicide intent

INTRODUCTION

Suicide is a major global health problem. Worldwide, around 800,000 suicide deaths occur every year, and Asians accounts for up to 60.0% of suicide deaths¹. Suicide rates in India are highest in the world with an estimated suicide death rate of 21 per 100,000 (cf. global suicide rate 11.4/100,000), equating to over 250,000 suicide deaths annually with social, emotional and economic consequences and burden².

The World Health Organization defines Suicide act as "the injury with varying degrees of lethal intent and that suicide may be defined as a suicidal act with fatal outcome."³. Attempted suicide can be defined as a non-fatal self-directed potentially injurious behaviour with intent to die⁴. Patient with suicide intent most of the time presents with altered behaviour in form of expressing his/her intent by expressing to family/friends by saying they often send out signals and make statements about "wanting to die" or "feeling useless". These signals must not be ignored.

Most suicides are related to psychiatric disease, with depression, substance use disorders and psychosis being the most relevant risk factors⁵. However, anxiety, personality, eating, and trauma-related disorders and organic mental disorders, also contribute. As per the psychological autopsies in last centuries, most people who have died by suicide have suffered from mental disorder. A recent figure suggests this number could be at least 90%^{7,8}. The risk of suicide has been estimated to be 5–8% for several mental disorders, such as depression, alcoholism and schizophrenia^{9,10}. Comorbid disorders are associated with a high suicide risk^{11,12}.

The present special issue on 'suicide risk and mental disorders' reflects several aspects of prediction, including ethnicity/immigrant status, adverse childhood experiences, severity of depression and Comorbidity of mental disorders. Other papers deal with internet addiction¹³. Depression is a common thread throughout the articles, also known to be the most common disorder among people who die by suicide¹⁴. According to the WHO, in last few decades there is a 60% surge in both male & female suicide rates worldwide, rising the concern^{15,16}.

India is the youngest country in the world, with a median age of 29 years. Unfortunately, India has the highest suicide rate in the world¹. Considering adult as productive population & future of a country, suicide being preventable to some extent this makes it necessary & urgent to ensure an environment, which promotes positive well-being of people. Even though extensive research works have been done in suicide, there is a paucity of studies focusing the mentally ill attempters, especially with reference to intent. Hence, this study is planned to study the psychiatric comorbidity of people who have

attempted suicide in a tertiary care centre.

AIMS AND OBJECTIVE

1. To study psychiatric comorbidity in patients attempted suicide.
2. To study the intent of suicide.

Inclusion Criteria

- 1) Patients of attempted suicide in the age group of 15- 65 years referred for psychiatric evaluation.
- 2) Medically stable and communicating patient.
- 3) Patients who are willing to give consent for study.

Exclusion Criteria

- 1) Patients who are not accompanied with reliable informant.
- 2) Patients who are intellectually disabled.

Method

The study was conducted on patients referred to psychiatry department for attempting suicide. They were given information about the purpose and nature of the study and the written informed consent of the patient were taken and for below 18-year patients consent was taken from their legal guardian. Using semi structured Performa patient's detailed history was taken. The diagnostic categorization of the patients was done according to DSM-5¹⁷ research criteria. Patient's suicide intention was assessed by using Beck's Suicidal Intent Scale¹⁸. Total 40 patients were included in this cross-sectional study. The data obtained was tabulated

Tools

1. Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR)¹⁷ The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, Text Revision (DSM-5-TR)
2. BECK'S SUICIDAL INTENT SCALE¹⁸ - Assess its seriousness and analyse subsequent suicidal risk. This is an interviewer administered measure of seriousness of the intent to commit suicide among suicide attempters. The scale consists of 20 items to be scored on a 3-point Linkert scale. The 15-item survey is divided into two parts: Items 1 to 8 cover objective circumstances of the attempt (e.g., isolation, precautions against discovery, suicide note); Items 9 to 15 report 5"s intentions and expectations regarding the attempt. Remaining five items are not to be included in scoring. The score is calculated from first 15 items, ranging from 15 to 45 (15-19: Low intent, 20-28: Medium intent, and 29 or more: High intent).

RESULT AND DISCUSSION

• Socio-demographic Data-Age, Sex Marital Status

In this study out of 40 registered patients 23 were female with mean age 32 and 17 were males with mean age 26. Mean age of participants was

30.57. Majority of patient belonged to age group of 15-29 years (n=19, 47%). Out of 40 patients 14 were married, 21 were unmarried, and 3 were separated.

• Past History Of Suicide Attempts

In this study out of 40 patients with attempted suicide 4 had past history of suicide attempts for which 1 had taken help of medical professional.

• Family History

In 40 patients with attempted suicide 3 had family history for suicide and was taken medical help for the same.

• Association Of Age And Intent Of Suicide. (Table No 1)

The youngest patient was of 15-year-old and oldest patient was 60-year-old. Majority of patient belonged to age group of 15-29 years (n=19, 47%). The particular vulnerability in young patients may be due to emotional disturbances, increase in alcohol and substance abuse, peer pressure, job difficulties and academic setbacks. Thus, as large number of this high-risk group enters the phase of life associated with greatest risk¹⁹.

• Association Of Gender With Suicide Intent. (Table No- 2)

In 40 patients 17 were males and 23 were females in this study we find more attempts in females as in other studies males have more suicide attempts²⁰. In this study females population is observed in more number might be due to study conducted in tertiary care hospital which is surrounded by rural population with poor economic conditions, region is affected by natural calamities like floods which disturbs life.

• Marital Status In Patient With Attempted Suicide. (Figure.1)

Among the patients 52.5% (n=21) were unmarried, 35% (n=14) married and 7.5 % (n=3) were separated. Reason for more number in unmarried might be due lack of job opportunities in pandemic of covid 19, employment is disturbed, dependency of younger generation is increased, lack of social support, companionship in unmarried and separated people. In married sense of responsibility toward family and emotional warmth form family might be reason for lower rates.

• Attempting Suicide Under Alcohol Influence. (Fig. 2)

20% patients were with history of attempting suicide under alcohol influence due to unable to differentiate between the poison and alcohol, in rural background availability of country liquor is easy, alcohol dependence is more. These attempts can be prevented by treating patients for de-addiction, alcohol support groups, and family support.

• Method Of Attempting Suicide

Out 40 patients attempting suicide 3 have tried by hanging, 2 tried to cut the wrist and 8 had tablet overdose and 27 patients by consuming poison. (Table no 5) More number with poison consumption might be due to availability of insecticide and herbicide for farm work as maximum population works in farm.

• Association Of Psychiatric Illness In Patients Attempting Suicide (Table No. 6).

In this study the patients with pre-existing psychiatric illness attempting suicide is being emphasised. Among patient highest suicide attempts is seen in patients with substance dependence (25%), impulsive act (22.5%), accidental consumption (17.5%), depression (12.5%), personality disorder (7.5%), alcohol related disorder (5%). In some studies²¹ it was seen that in depression patients' intent of suicide is high and high suicide attempts among depression but lower among schizophrenia and bipolar mood affective disorder. In this study 30% patients were with low intent, 20% were with high intent of suicide and patient with medium suicide intent is maximum 50%. In this study high suicide intent was seen in depression. 65% patients were not given DSM 5 diagnosis of psychiatric illness as some of the attempts are following interpersonal conflicts, manipulation to fulfil the demand.

Participants in this study were mostly from rural background with poor economic status which acting as a contributory factor for higher rates of suicide also this geographical area frequently suffers floods in rainy season as well, and during covid 19 pandemic the livelihood of people has been disturbed. There is need for the awareness among the government and non-government organisation for social interventions to prevent the suicide attempts. Active participation in de-addiction for alcohol related disorder can prevent suicide attempts among these patients.

Family support, counselling and medical help can improve the

depression and affective disorder. The role of health care worker as well as family, friends support is very important in preventing this untoward event of suicide. Easy availability of helpline, referral services and legal assistance are needed to solve the growing issue.

Table No-1- Association Of Age And Intent Of Suicide.

Age	Low intent	Medium intent	High intent	Total
15-29	7	10	2	19
30-44	4	9	2	15
45-60	1	1	4	6

Table No- 2 – Association Of Gender With Suicide Intent

Gender	Low intent	Medium intent	High intent	Total
Male	5	9	3	17
Female	7	11	5	23

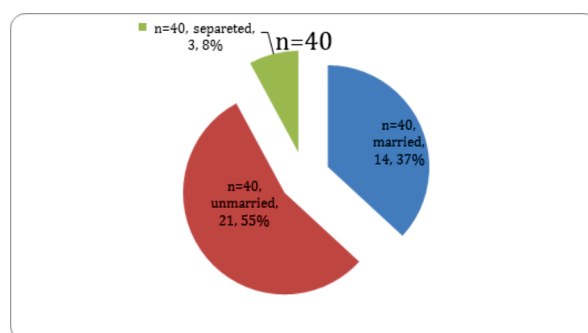


Fig. 1- Pie-chart Showing Marital Status In Patient With Attempted Suicide.

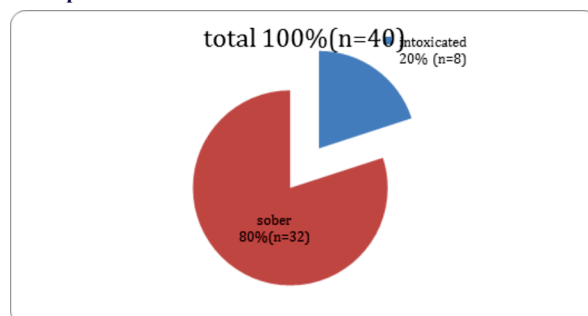


Fig. 2- Attempting Suicide Under Alcohol Influence.

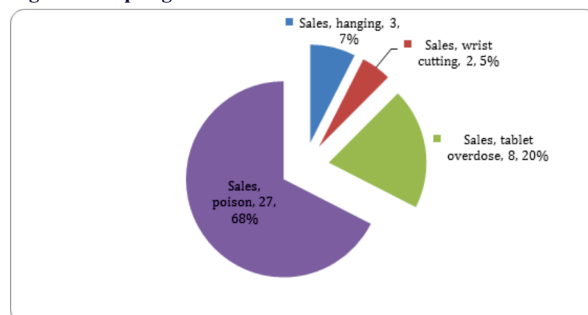


Fig 3- Method Of Attempting Suicide

Table No 3. – Association Of Psychiatric Illness In Patients Attempting Suicide

Psychiatric diagnosis	Low intent	Medium intent	High intent	Number of patients	% percentage
Alcohol related disorder	1	0	1	2	5%
Schizophrenia	1	0	0	1	2.5%
Bipolar mood affective disorder	0	1	0	1	2.5%
Depressive disorder	0	1	4	5	12.5%
Anxiety disorder	0	2	0	2	5%
Personality disorder	0	2	1	3	7.5%
Accidental consumption	5	2	0	7	17.5%

Impulsivity	4	5	0	9	22.5%
Substance dependence	1	7	2	10	25%
Total	12	20	8	40	100%

Limitations Of Study

This study was conducted on a small sample size of people coming to a tertiary care hospital. A study with a larger sample size would make for more robust data. As this is a hospital-based study, the finding could not be generalized to the community population.

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