Original Research Article

Suicide Rate Among Patients Admitted to a Forensic Psychiatry Unit at Mental Health Hospital, Taif, Saudi Arabia

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ABSTRACT

Background: Suicide is the act of injuring oneself with the intent to end one's life. The act of attempting suicide involves harming oneself with the intention of ending one's life without actually dying. The term suicide ideation (SI) refers to a variety of contemplations, wishes, and preoccupations with death and suicide. There is still a high suicide rate among late adolescents. It not only leads to the direct loss of many young lives, but also disrupts the psychosocial and socioeconomic environment. The objective of this study is to evaluate the socio-demographic profile, the frequency and intention of suicide, and the suicide rate among people with mental disorders.
Methodology: This was an observational study performed in the forensic psychiatric department at the Mental Health Hospital, Taif, Saudi Arabia. During a one-year period, 654 patients of both genders visited the outpatient department (OPD). Suicidal patients admitted to the inpatient (IPD) ward (n = 16) between June 2020 and July 2021 were included in the study. A descriptive statistical analysis was conducted and presented as frequency and percentage categorical variables. We also evaluate suicide rates in psychiatric disorders.
Results: The study has 625 males and 29 females from a total of 654 OPD patients. Among 16 suicidal admitted IPD patients, 13 were male (81.25%) and 3 were female (18.75%). The majority of patients (81.25%) were in the age group of 31 to 40 years. The maximum number of suicidal attempts was 68.75%, while suicidal ideation was 31.25%. 50% of patients were diagnosed with substance abuse with personality disorders, 31.25% were schizophrenic, and 18.75% suffered from depression. In our study, 11 patients attempted suicide (68.75%), and 5 patients had suicidal ideation (31.25%).
Conclusions: Suicidal tendencies and thoughts are low among females and young adults between 21-30 years of age. Male gender, unmarried patients, and adolescents in the 31–40 age range were among the risk factors. These factors focus on improving treatment and support for these people, which may reduce their risk of repeating such behaviors.
Keywords: Suicide attempt, suicidal ideation, psychosis.

(Paper received – 11th March 2023, Peer review completed – 15th May 2023, Accepted – 25th May 2023)

INTRODUCTION

Suicide is a major public health issue and accounts for approximately 1.5% of deaths per year worldwide. Suicide is the second-leading cause of death, and it rarely occurs under the age of 15 years, although the prevalence is likely to be underestimated [1]. The phenomenon of suicide is multifactorial and complex, involving many factors that contribute to and facilitate it. A variety of factors can influence it, such as neurobiology, family history, stressful experiences, and sociocultural background [2]. In India, farmers and agricultural workers die every day due to economic distress [3]. Psychiatric disorders are associated with high mortality risks compared to the general population because of unhealthy lifestyles. There is also an increased mortality risk among those who have a criminal history and have been incarcerated [4].

Suicidal ideation can be transient or chronic; some individuals experience passive suicidal ideation for years without attempting suicide. An individual with suicidal ideation has thoughts about taking their own life. A number of suicidal patients are seen in emergency psychiatric settings and are referred for immediate assessment and treatment [5]. Defining deliberate self-harm as an intentional act of physically injuring oneself without intending to die may be more accurate than the terms "attempted suicide" or "parasuicide." Deliberate self-harm typically involves cutting with a knife or razor, scratching or hitting oneself, and intentional drug overdoses. Additionally, they may restrict food intake and engage in other "risk-taking" behaviours, such as driving at high speeds and having unsafe sexual relationships [6-7]. Studies have found that it is positively correlated with female gender, mood disorders, adjustment disorders, and heavy alcohol consumption [8]. Prior to self-harm, patients report feeling tense, anxious, angry, or fearful, and the act is positively reinforced by feelings of relief, satisfaction, and decreased tension. A teenager may also intentionally harm himself or herself. In the literature, acute suicide prevention interventions are described. The aim of pharmacotherapy is to modify biological functions to reduce negative or increase positive mood states. Suicidal ideation can be treated with antidepressants, second-generation antipsychotics, anticonvulsants, and illness-specific medications for bipolar disorders and psychotic disorders [9-11]. Patients at high risk of suicide are observed without interaction, either continuously or intermittently. It is intended to discourage suicide attempts as well as facilitate a quick response if a patient attempts to commit suicide [12]. When a person contracts for safety, they make a verbal or written statement vowing not to kill themselves [13]. A Crisis Response Plan (CRP) was developed during the development of the no-suicide contract. A CRP consists of written instructions for a person to use in a crisis. This includes identifying warning signs, coping strategies, seeking professional assistance, and seeking social support [14-15]. As with CRP, safety planning involves lethal means counselling to reduce the person's suicide options by making their environment safer [16]. The Care Collaborate Connect program is not only for those at risk of suicide, but for anyone who is distressed. Supporting help-seeking is a healthy coping strategy, and it is rewarded. Care, Collaborate, and Connect focuses on what you can do to cope with distress rather than how to avoid or stay safe from suicide [17].

METHODOLOGY

Participants: The study included male inpatient departments (IPD) from the forensic psychiatry wards at the Mental Health Hospital in Taif, Saudi Arabia. A total of 16 participants (n = 16) were admitted for suicide attempts and suicidal ideas over the course of one year between June 2020 and July 2021.

Parameters: In this study, we evaluated the socio-demographic profile and the frequency and intent of types of suicide, including suicide attempts and suicidal ideas, as well as the suicidal rate in psychiatric disorders such as substance abuse with personality disorders, schizophrenia, and depressive disorders. We also collected data on the age of patients at risk of suicide and the impact of marital status on suicidal behaviour.

Inclusion criteria

- Forensic patients with a history of attempted crime and suicide
- Patients who have participated in the study are admitted as indoor (IPD) patients.
- Participants diagnosed with psychiatric disorders during the previous year were included in the study.

Exclusive criteria

- Geriatric age group patients
- The age range of participants is below 20 years.
- Divorced patients

Sampling Technique

Researchers used a purposeful sampling strategy to select participants from the mental health hospital in Taif, Saudi Arabia. The sample size was N = 16, which included male and female participants. The following three groups were studied separately:

- Suicide attempt patients.
- Suicidal ideation patients
- Those without suicidal risk

Research Instrument

The aim of this study was to determine the socio-demographic profile, the frequency and intent of suicide attempts, Suicidal Ides, and the rate of suicidal behaviour in patients with psychiatric disorders like substance abuse with personality disorders, schizophrenia, and depressive disorders.

Ethical Issues in Research

The research work started after it was approved by the Ethical Committee of the Research and Studies Department, Directorate of Health Affairs, Taif, Saudi Arabia.

Data analysis

Categorical variables were described using frequencies and proportions. Continuous variables were described using descriptive statistics. After obtaining written informed consent, all patients aged 21 to 40 who were admitted due to suicidal risk were interviewed. Consent was obtained in Arabic, which the patient understood, and they were free to accept or reject the study. In the study, 11 patients attempted suicide, and 5 had suicidal ideas.

RESULTS

Table 1: Patients who visited the outpatient department (OPD) in one year

Gender	Frequency	Percentage
Male	625	95.57%
Female	029	04.43%
Total	654	100.00%

Table 2: Socio-demographic variables (n=16)

Age distribution		
Age in Years	**Frequency**	**Percentage**
21-30	03	18.75%
31-40	13	81.25%
Total n=16	16	100%
Gender		
Male	13	81.25%
Female	03	18.75%
Total n=16	16	100%
Marital Status		
Married	06	37.5%
Unmarried	10	62.5%
Divorced	00	00%
Total n=16	16	100%

Table 3: Suicidal risk rate in psychiatric disorders

Diagnosis	Frequency	Percentage
Substance abuse with personality disorder	08	50.00%
Schizophrenia	05	31.25%
Depressive disorder	03	18.75%
Total n=16	16	100.00%

This study was conducted on the indoor unit (IPD) in the forensic psychiatric department. The total number of suicidal risk patients monitored was 16, of which 11 patients had attempted suicide (68.75 percent) and 5 patients had suicidal ideas. In our study population, 18.75% were between the ages of 21-30 years, followed by 81.25% between 31-40 years, as represented in Table 1. Additionally, in Table 2, there are a maximum of 13 suicidal male patients (81.25%), while there are three suicidal female patients (18.75%). Table 2 also shows the maximum number of unmarried suicidal patients in our study was 10 (62.6%), followed by 6 (37.5%) married patients, and divorced patients did not take part in our study. As for psychiatric disorders, the majority of 8 suicidal patients were diagnosed with substance abuse with personality disorder with 50%. This was followed by 5 schizophrenia patients with 31.25 percent and 3 depressive disorder patients with 18.75 percent, as shown in table 3. The suicide rate among 654 inpatients at the outpatient forensic department in 2020–2021, which was 1.76% attempted suicides and 0.76% suicidal ideation. 97.55% of the patients were not at risk of suicide.

DISCUSSION

The risk of suicide is higher in general psychiatric patients with substance abuse with antisocial personality disorders [18-19]. Our study found that substance abusers with personality disorders were more often at risk of suicide. This makes it a valid factor to consider when assessing suicide risk in psychiatric patients. Schizophrenia and depression were also significant factors after substance abuse with a personality disorder. Our study sample included patients who had been stabilized in the forensic unit. It is possible that they may have been dishonest due to the structure of their personalities or their fear of being moved to a more restrictive setting. Suicide is the second leading cause of death among young adolescent people, after self-inflicted injuries. In our study, the age group 32- 40 years had the highest risk factors for suicide with 81.25%, followed by 21–30 years with 18.75%. Suicide rates vary by gender. Statistically, men tend to attempt suicide using more lethal methods than women, and because of this, suicide attempts by men are considered "serious" more often than those made by women. Studies have shown that males commit suicide at a higher rate than females. There is a ratio of about 3.6:1 between males and females who commit suicide around the world [20-21]. Among our study participants, the suicide risk was higher for males at 81.25 than for females at 18.75. We found some non-Saudi and non-Muslim patients among the 16 cases in our study. It represents the population fractionation of Saudi patients, and religion has no influence on suicidal risk. People at risk of repeating such behaviours may be helped by interventions that focus on enhancing their treatment and support. A primary care physician plays a crucial role in educating family members about suicide risk and modelling a compassionate approach to treatment. A psychiatric hospitalization referral is indicated if a patient is at high risk of suicide or if they have made a recent attempt. In the case of severe psychiatric conditions, such as psychosis, and if they have a high frequency, intensity, or lethality of suicide attempts, a referral is also indicated. It may be helpful to refer an adolescent patient to formal psychotherapy to address underlying psychological issues and develop more effective coping skills. Screening for suicide risk can still be valuable because it allows for intervention if suicidal thoughts are present, which most likely indicate significant emotional distress. In order to prevent suicide and create a healthy and strong community, family, and individual, everyone has a role to play. There is no substitute for a comprehensive public health approach to suicide prevention.

Patients with a family history of suicide are more likely to commit suicide. The risk of suicide is six times higher if you have a first-degree relative who committed suicide. A twin study suggests that both environmental and genetic factors contribute to this increased risk [22]. It has been shown that suicide risk increases with physical illness such as chronic pain, recent surgery, and certain chronic or terminal diseases such as human immunodeficiency virus infection (HIV), asthma, diabetes mellitus, and obesity [23]. There is a significant correlation between marital status and suicide risk, with the highest risk among the never married, followed in descending order by the widowed, separated, or divorced; married without children; and married with children [24]. In our study, suicide was more common among unmarried participants (62.5%) than among married participants (30.5%). The risk of suicide in adults appears to be increased by childhood abuse and other adverse childhood experiences. A history of suicide attempts is more likely to lead to completed suicide in schizophrenia patients or those suffering from unipolar or bipolar disorders [25].

In our study completed suicide is not included because it is a one-year study. However, our suicidal attempt patients appear to be at a high risk of completing suicide, so proper precautions should be taken for different types of suicide. There are several behavioural and observable warning signs that point to suicide, such as isolation, drastic changes in mood, hopelessness, anger, and excessive use of alcohol or drugs. Suicide risk is lower when social support and family connections are strong, and higher when family discord is present [26].

Limitations of the study

- Data were collected from convenience samples in the inpatient department (IPD) of a hospital.
- This study was an observational study, and no longitudinal outcome data were collected.
- The dose of medications was not mentioned in this study.
- The study of facility-based issues is sensitive in nature.

CONCLUSION

Patients who have a suicidal risk are prone to further attempts, and success rates are higher among those who re-attempt. Therefore, socio-demographic data and the suicide risk of all patients should be taken into consideration to minimize further attempts. Our results are analogous to previous research, which showed a higher risk of suicide in substance abusers with personality disorders than in general psychiatric patients. If the suicide risk of patients can be accurately assessed, it can help provide improved care, treatment, and rehabilitation for these patients.

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Acknowledgements – Nil.
Conflict of Interest – Nil
Funding – Nil