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Original Research Article

Socio-Demographic Profile and Suicidal Tendencies Among Patients Attending the Psychiatric Outpatient Department of a Tertiary Care Hospital in Ongole, Andhra Pradesh.

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Abstract

Background: Suicide is a significant public health issue and a leading cause of death globally. In India, socio-demographic and psychological factors play a critical role in suicidal behavior. Understanding these factors is essential for designing targeted preventive strategies.

Objectives: To assess the socio-demographic characteristics, psychological distress, and methods associated with suicide attempts among patients attending the Psychiatric Outpatient Department of a tertiary care hospital in Ongole, Andhra Pradesh.

Methods: This hospital-based cross-sectional study included 150 patients with a history of suicide attempts. Participants were selected using systematic random sampling. Data were collected through a semi-structured proforma assessing socio-demographic variables, reasons for attempts, and methods used. Descriptive statistics and chi-square tests were employed for analysis.

Results: The results of the study revealed that females (53%) and individuals under 30 years of age (49.3%) were the predominant groups among suicide attempters. Additionally, urban residents (51.3%), individuals from nuclear families (60.6%), and those belonging to lower socioeconomic strata (54%) were identified as being more vulnerable. Psychological distress was the leading cause of suicide attempts, accounting for 40% of cases, followed by financial stress, which contributed to 32.6% of attempts. Organophosphate poisoning emerged as the most common method of suicide attempt (30%), with notable gender differences observed (p=0.04). Furthermore, the majority of attempts occurred during the daytime (62.6%) and took place in the home (60.6%).

Conclusion: Younger individuals, females, and those facing psychological or socio-economic challenges are at higher risk of suicide attempts. The findings emphasize the need for targeted interventions, including mental health services, socio-economic support, and restricting access to lethal means.

Keywords: Suicide attempts, socio-demographic factors, psychological distress, mental health, Andhra Pradesh, India..

Introduction

Suicide is a critical public health issue that impacts millions globally, with approximately 700,000 individuals dying by suicide each year, making it one of the leading causes of death worldwide. In 2019, the global suicide rate was 10.5 per 100,000 population, with notable geographic and demographic disparities [1]. In India, suicide is among the top ten causes of death, disproportionately affecting young adults aged 15–29 years [2]. Southern Indian states such as Andhra Pradesh exhibit higher rates of suicide compared to northern states due to cultural, socio-economic, and environmental factors.

Suicide affects not only the individuals but also families, communities, and healthcare systems. For every death by suicide, there are an estimated 20–30 attempts, emphasizing the need for early intervention and prevention strategies [3]. Beyond the human toll, suicide incurs significant economic costs through healthcare expenditures and productivity losses. Identifying the socio-demographic and psychological factors associated with suicidal behavior is essential for designing targeted prevention programs.

Suicide risk is strongly associated with several socio-demographic factors, including age, gender, marital status, education, and socioeconomic status.

Younger individuals, particularly those under 30 years of age, exhibit higher rates of suicide attempts, often due to psychosocial stressors, relationship conflicts, and financial instability [4]. Gender differences are well-documented, with males being more likely to die by suicide and females more likely to attempt it. These differences may stem from the lethality of methods chosen and underlying socio-cultural norms [5].

Unemployment, low income, and lower educational attainment further exacerbate suicide risk. Socioeconomic deprivation often correlates with chronic stress, limited access to mental health services, and increased exposure to harmful behaviors, such as substance abuse [6].

Mental health disorders remain one of the most significant predictors of suicidal behavior. Studies estimate that over 90% of individuals who die by suicide have a diagnosable psychiatric condition, including depression, bipolar disorder, or substance use disorders[1]. Psychiatric disorders amplify suicide risk when compounded by external factors such as social isolation and acute life crises.

Cultural norms and environmental circumstances uniquely influence suicidal behavior in low- and middle-income countries (LMICs) like India. Easy access to pesticides and other means of self-harm contributes to the high prevalence of suicide in rural areas [6]. Religious beliefs, marital practices, and societal expectations also play a role in shaping individual vulnerabilities to suicide [7].

This study focused on the socio-demographic and psychological correlates of suicidal behavior in a tertiary care hospital in Ongole, Andhra Pradesh. Given the alarming rates of suicide in India, understanding localized factors is critical for devising context-specific interventions. The findings aim to inform mental health policies and improve outcomes for at-risk populations in similar socio-cultural settings.

Methodology

This hospital-based cross-sectional study was conducted to assess the socio-demographic characteristics and suicidal tendencies among patients attending the Psychiatric Outpatient Department of the Government Medical College and Government General Hospital, Ongole, Andhra Pradesh. Data collection was carried out over six months, from January to June 2021. The study population included patients with a history of psychiatric disorders who were receiving treatment at the outpatient services of the hospital. Information regarding the patients was corroborated with family members to ensure reliability and completeness of the data. Participants were selected using systematic random sampling, and the sample size was calculated based on prior studies indicating that approximately 53% of suicide attempters have psychiatric problems. Using a confidence interval of 95%, an allowable error of 10%, and accounting for a non-response rate and design effect, the final sample size was determined to be 150 participants. The inclusion criteria required participants to be permanent residents of Ongole (urban and rural areas), receiving treatment at the outpatient department, and willing to provide informed consent. Patients with severe psychiatric illnesses that impaired their ability to participate or those unwilling to give informed consent were excluded from the study. Data were collected using a semi-structured proforma designed to gather comprehensive information, including socio-demographic details, psychological history, and characteristics of suicidal attempts, such as methods used, timing, and underlying reasons. Descriptive statistics were employed for analyzing the data, and chi-square tests were used to identify significant associations between socio-demographic factors and suicidal behaviors. Results were presented as frequencies and percentages.

Results

The study evaluated 150 participants, with a slight predominance of females over males. The majority of suicide attempters were young adults below 30 years, with fewer cases observed in older age groups. Unmarried individuals constituted a significant proportion of the study population, while married individuals were less represented. Educational attainment showed that individuals with secondary education were more likely to attempt suicide compared to those who were illiterate or had higher education levels.

Regarding occupational status, unemployment was a notable risk factor, with the majority of participants reporting no employment. Urban residents showed a slightly higher prevalence of suicidal attempts compared to those from rural areas. Nuclear family settings were also more frequently associated with suicide attempts than joint families. Socioeconomic analysis revealed a higher incidence among individuals from lower income groups.

Most suicide attempts occurred during the daytime and within the home environment. Among the reasons for suicide attempts, psychological distress emerged as the most common factor, followed by financial problems and significant life events. Organophosphate poisoning was the leading method of attempt, particularly among males, while tablet poisoning was more common among females.

The statistical analysis revealed that differences in some factors, such as the method of suicide, were significant, indicating potential gender-related variations. However, other variables, including age

and marital status, did not show significant statistical associations.

Overall, the findings highlight the vulnerability of younger individuals, females, and those with psychological challenges or socio-economic disadvantages to suicidal behavior. These insights underscore the need for targeted interventions to address these risk factors effectively.

Table 1: Socio=Demographic Distribution of Suicidal Attempters

Variable	Male (%)	Female (%)	Total (%)
Gender	70 (47)	80 (53)	150 (100)
Age			
< 30 years	33 (47)	41 (51)	74 (49.3)
– 60 years	31 (44)	28 (35)	59 (39.3)
>61 years	9 (9)	13 (14)	19 (11.4)
Marital status			
Unmarried	42 (60)_	36 (42)	78 (52)
Married	28 (40)	44 (55)	72 (48)
Education			
Illiterate	7 (10)	10 (12.5)	17 (11.3)
Primary	18 (26)	24 (30)	42 (28)
Secondary	22 (31)	28 (35)	50 (33)
Higher secondary	23 (32)	18 (22.5)	41 (27.3)

Table 2: Place & Time of Suicide Attempts

Variable	Male (%)	Female (%)	Total (%)
Time of attempt			
Day time	40 ()	54 ()	94 ()
Night time	30 ()	26 ()	56 ()
Place of attempt			
Home	38 ()	53 ()	91 ()
Other pkace	32 ()	27 ()	59 ()

Table 3: Reasons and Methods for Suicide Attempts

Variable	Male (%)	Female (%)	Total (%)
Reasons			
Psychological	29 (41)	31 (39)	60 (40)
Life events / Financial problems	23 (33)	26 (32)	49 (32.6)
Other reasons	18 (26)	23 (29)	41 (27.4)
Methods			
Organophosphorous poisoning	25 (36)	20 (25)	45 (30)**
Tablets poisioning	12 (17)	28 (35)	40 (40)
Other methods	33 (47)	32 (40)	65 (43.3)

P < 0.05

Discussion

The findings of this study provide critical insights into the socio-demographic factors and methods associated with suicidal behavior among patients attending the psychiatric outpatient department of a tertiary care hospital in Ongole, Andhra Pradesh. These findings align with existing literature, which underscores the multifactorial etiology of suicide and its significant association with socio-economic, demographic, and psychological determinants.

The predominance of younger individuals (<30 years) among suicide attempters in this study aligns with national and global trends. Youth often face heightened psychological stressors, including academic pressures, unemployment, and relationship issues, which increase their vulnerability to suicidal behavior [8]. A similar pattern was noted in a psychological autopsy study from northern India, where the majority of suicide cases were individuals aged 20–29 years [9].

Females constituted a slightly higher proportion of attempters in this study, which aligns with findings from eastern India and other parts of the country[10]. This gender discrepancy may be attributed to socio-cultural factors, such as domestic violence, marital discord, and gender-based discrimination, which disproportionately affect

women in India [11]. However, men often exhibit higher rates of completed suicides, likely due to the use of more lethal methods [8].

Marital status also emerged as a significant correlate, with unmarried individuals exhibiting higher rates of suicidal behavior. This finding resonates with studies highlighting the protective effects of marital stability against suicide [12]. Marriage often serves as a buffer against social isolation, though marital discord can also act as a precipitant of suicidal behavior, particularly among women[11].

Educational attainment revealed that individuals with secondary education were more likely to attempt suicide. Limited education often correlates with low-income opportunities and diminished coping mechanisms, factors that are well-established contributors to suicidal ideation [13].

The study found that organophosphate poisoning was the most common method of suicide, consistent with trends in rural India, where easy availability of pesticides contributes to their use in impulsive acts of self-harm[14]. Tablet poisoning was also prominent, particularly among women, which may reflect gendered differences in method accessibility and intent[15]. The predominance of impulsive methods underscores the need for restrictions on access to lethal means, as has been suggested in prior research [11].

Psychological distress emerged as the leading reason for suicide attempts, highlighting the role of mental health issues. Prior studies have similarly identified depression, adjustment disorders, and substance use disorders as common underlying conditions among suicide attempters[16]. However, only a fraction of individuals with psychiatric disorders seek treatment, emphasizing the need for enhanced mental health services and community outreach[15].

Daytime and home-based suicide attempts dominated in this study. These findings may reflect the impulsive nature of many attempts and the role of family dynamics in triggering such behaviors [11].

Conclusion

This study highlights the complex interplay of socio-demographic factors, psychological distress, and methods associated with suicidal behavior among patients attending a psychiatric outpatient department in a tertiary care hospital in Ongole, Andhra Pradesh. The findings reveal that younger individuals, females, and those from socio-economically disadvantaged backgrounds are particularly vulnerable. Organophosphate poisoning emerged as the most common method, reflecting regional availability and impulsivity in suicidal acts. The predominance of psychological reasons underscores the urgent need for accessible mental health services. These results emphasize the necessity of targeted, culturally sensitive suicide prevention strategies that address both individual and systemic risk factors.

Limitations

This study, while offering valuable insights into the socio-demographic and psychological factors associated with suicidal behavior, has certain limitations. First, its cross-sectional design prevents the establishment of causal relationships between the observed factors and suicidal behavior. This restricts the ability to determine whether socio-demographic characteristics, such as marital status or education, directly influence suicidal tendencies or are coincidental associations. Second, being a single-center study conducted in a tertiary care hospital in Ongole, Andhra Pradesh, the findings may lack generalizability to other regions with different socio-cultural, economic, and healthcare contexts. The diversity within India, both geographically and culturally, necessitates caution when extrapolating these results to other populations. Third, the reliance on self-reported data from patients and their families introduces the possibility of recall bias or underreporting due to stigma associated with mental health and suicide. Fourth, the exclusion of individuals with severe psychiatric conditions or those unwilling to consent could have led to the omission of high-risk groups, thereby limiting the comprehensiveness of the findings. Additionally, the study did not extensively explore contextual and environmental factors, such as familial dynamics, community support systems, or access to mental health care, which are critical in understanding suicidal behavior in depth.

Future Perspectives

Future research should focus on longitudinal designs to explore the trajectory of suicidal ideation and behavior over time, enabling a better understanding of causality and risk factors. Expanding the geographic scope to include multi-center studies across diverse regions of India would enhance the generalizability of findings and provide insights into regional and cultural variations. Efforts should also aim to include marginalized or underserved populations, such as individuals with severe psychiatric disorders or those living in rural areas, to offer a more inclusive understanding of suicide risks.

In addition, future studies should evaluate the effectiveness of community-based interventions, such as mental health awareness programs, socio-economic support initiatives, and restrictions on access to lethal means. The integration of technology, such as mobile applications or telemedicine, could also play a crucial role in identifying at-risk individuals and delivering timely

interventions. Holistic approaches that consider the role of familial relationships, social networks, and systemic inequities are critical to designing effective preventive strategies. Such efforts would not only improve understanding but also contribute significantly to reducing the societal burden of suicide.

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