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### RESEARCH ARTICLE

## PREVALENCE OF DEPRESSION AND ITS ASSOCIATION WITH SUICIDAL INTENT IN FIRST-TIME SUICIDE ATTEMPTERS

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### Abstract

**Background:** Suicide is a major public health issue in India, with depression being the most common psychiatric disorder linked to attempts. However, the association between depression severity and suicidal intent in first-time suicide attempters remains underexplored.

**Aim:** To assess the prevalence and severity of depression and suicidal intent among first time suicide attempters and examine their correlation

**Methods:** A hospital-based cross-sectional study was conducted at Mahatma Gandhi Memorial Government Hospital, Trichy, from March to August 2025. Fifty consecutive patients aged 18–60 years admitted after a first suicide attempt were evaluated. Depression severity was measured using the Montgomery-Åsberg Depression Rating Scale (MADRS) and suicidal intent with the Suicide Intent Scale (SIS). Data were analyzed with SPSS v29.

**Results:** Of the 50 participants, 56% were female. Depression was absent in 44%, mild in 24%, moderate in 22%, and severe in 10%. Suicidal intent was absent in 60%, low in 22%, medium in 16%, and high in 2%. A significant correlation was observed between depression severity and suicidal intent ( $p < 0.001$ ). Hopelessness and lassitude were key predictors, explaining 43% of variance in intent. Gender differences suggested higher depression and intent in females, though not statistically significant.

**Conclusion:** Depression severity is strongly associated with suicidal intent in first time suicide attempters. Screening for hopelessness and lassitude, alongside gender-sensitive strategies, may strengthen suicide prevention efforts.

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### Introduction:-

Suicide is a major global public health problem, and India reports the highest number of suicide deaths annually(1). National data indicate that suicide is most common in the third and fourth decades of life. According to the National Crime Records Bureau, 171,000 suicides were reported in 2022, representing a 27% increase from 2018, with a suicide rate of 12.4 per 100,000 population(2).

Depression is the most frequently identified psychiatric disorder among individuals who attempt suicide, and the severity of depressive symptoms has been shown to correlate with suicidal intent (6).

Suicidal intent is defined as the individual's desire to die combined with the expectation that the attempt will be lethal. Other psychosocial risk factors include bereavement, marital conflict, financial distress, and relationship failures (3). Although these associations are well recognized, the relationship between depression severity and suicidal intent in first-time suicide attempters remains insufficiently explored in the Indian context.

**Aim:-**

To determine the prevalence and severity of depression and suicidal intent in first-time suicide attempters and to evaluate the correlation between these two clinical variables.

**Materials and Methods:-****Study design and setting:-**

A hospital-based cross-sectional study was conducted at Mahatma Gandhi Memorial Government Hospital, Trichy, affiliated with K.A.P.V. Government Medical College. The hospital admits all cases of deliberate self-harm in the region. Data were collected during March 2025 – August 2025.

**Sample:**

A total of 50 consecutive patients admitted with a first suicide attempt were recruited.

**Inclusion criteria:-**

1. Male and female patients aged 18–60 years
2. First suicide attempt
3. Clinically stable and willing to provide informed consent

**Exclusion criteria:**

1. Patients <18 years or >60 years
2. Critically ill patients
3. Patients unwilling to participate

**Tools:**

Data were collected using a structured questionnaire that included sociodemographic details and standardized assessment scales.

Depression severity was measured using the Montgomery-Asberg Depression Rating Scale (MADRS), and suicidal intent was assessed using the Suicide Intent Scale (SIS).

**Ethics:**

The study received ethical clearance from the Institutional Ethics Committee of K.A.P.V. Government Medical College and Mahatma Gandhi Memorial Government Hospital (MGMGH), Trichy. All participants were provided with written and verbal information regarding the study procedures. Informed consent was obtained prior to participation.

Participants were assured of confidentiality and informed of their right to withdraw at any time without any impact on their medical care.

**Statistical analysis:**

Data were analyzed using SPSS.29 Descriptive statistics were used to summarize baseline variables. The correlation between MADRS and SIS scores was examined using Pearson or Spearman correlation coefficients, as appropriate. A p-value <0.05 was considered statistically significant.

**Results:****Table 1 “Sociodemographic and Clinical Profile of First-Time Suicide Attempters (N = 50)”,**

Variable	Category	N (%)
Sex	Male	22 (44.0)
	Female	28 (56.0)
Depression severity(MADRS)	None	22 (44.0)
	Mild	12 (24.0)
	Moderate	11 (22.0)
	Severe	5 (10.0)
Suicidal intent(SIS)	None	30 (60.0)
	Low	11 (22.0)
	Medium	8 (16.0)
	High	1 (2.0)

Note: MADRS = Montgomery–Åsberg Depression Rating Scale; SIS = Suicide Intent Scale. Table 1 summarizes the sociodemographic and clinical characteristics. Depression severity, assessed using the Montgomery–Åsberg Depression Rating Scale (MADRS), showed that 44.0% (n=22) had no depression, 24.0% (n=12) had mild depression, 22.0% (n=11) had moderate depression, and 10.0% (n=5) had severe depression. Suicidal intent, measured by the Suicide Intent Scale (SIS), was absent in 60.0% (n=30), low in 22.0% (n=11), medium in 16.0% (n=8), and high in 2.0% (n=1) of participants.

**Table 2 Association Between Depression Severity and Suicidal Intent (N= 50)**

Depression severity	No intent n (%)	Low intent n (%)	Medium intent n (%)	High intent n (%)	Total	P- value
No depression	18 (81.8)	4 (18.2)	0	0	22	<0.01
Mild depression	8 (66.7)	4 (33.3)	0	0	12	
Moderate depression	4 (36.4)	3 (27.3)	4 (36.4)	0	11	
Severe depression	0	0	4 (80.0)	1 (20.0)	5	
Total	30 (60.0)	11 (22.0)	8 (16.0)	1 (2.0)	50	

**Note: Suicidal intent assessed using the SIS (Chi-square test applied).**

The relationship between depression severity and suicidal intent was examined using a Chi-square test (Table 2). Among participants with no depression (n=22), 81.8% (n=18) had no suicidal intent, and 18.2% (n=4) had low intent, with no cases of medium or high intent. In contrast, among those with severe depression (n=5), 80.0% (n=4) had medium intent, and 20.0% (n=1) had high intent. Participants with moderate depression (n=11) showed a mixed pattern: 36.4% (n=4) had no intent, 27.3% (n=3) had low intent, and 36.4% (n=4) had medium intent.

The association between depression severity and suicidal intent was statistically significant ( $\chi^2=26.47$ ,  $df=9$ ,  $p<0.001$ ), indicating that higher depression severity is associated with greater suicidal intent. To evaluate the strength and direction of the association between depression severity and suicidal intent, a Spearman rank correlation coefficient was calculated due to the ordinal nature of MADRS and SIS scores.

A strong positive correlation was found between MADRS and SIS scores ( $\rho=0.62$ ,  $p<0.001$ , 95% CI: 0.41–0.77). The effect size, as indicated by  $\rho^2$ , was 0.38, suggesting that approximately 38% of the variance in suicidal intent scores can be explained by depression severity. This robust correlation supports the hypothesis that higher depression severity is associated with increased suicidal intent.

**TABLE 3: Clinical Correlates of Suicidal Intent (N = 50)**

Variable	Category	No intent (%)	Suicidal intent (low–high) (%)	P-value
Lassitude	Absent/minimal	26 (86.7)	7 (28.0)	0.002
	Moderate–severe	4 (13.3)	18 (72.0)	
Precautions against discovery (SIS item 3)	None	26 (86.7)	7 (28.0)	0.002
	Passive/Active	4 (13.3)	18 (72.0)	
Active preparation of suicide (SIS item 6)	None	23 (76.7)	11 (44.0)	0.134
	Present	7 (23.3)	14 (56.0)	

**NOTE:** Presence of suicidal intent = SIS score above “no intent” (low, medium, high combined). Table 3 presents the clinical correlates of suicidal intent, comparing participants with no intent (n=30) to those with any suicidal intent (low, medium, or high; n=20). Lassitude, assessed via the MADRS, was significantly associated with suicidal intent ( $\chi^2=9.64$ ,  $df=1$ ,  $p=0.002$ ). Among those with no Intent, 86.7% (n=26) reported absent or minimal lassitude, compared to 28.0% (n=7) in the intent group.

Conversely, moderate-to-severe lassitude was reported by 72.0% (n=18) of those with suicidal intent, compared to 13.3% (n=4) of those without. Precautions against discovery (SIS item 3) also showed a significant association with suicidal intent ( $\chi^2=9.64$ ,  $df=1$ ,  $p=0.002$ ). Most participants with no intent (86.7%, n=26) took no precautions, while 72.0% (n=18) of those with intent took passive or active precautions.

Active preparation for suicide (SIS item 6) was more common in the intent group (56.0%, n=14) than in the no-intent group (23.3%, n=7), but this association was not statistically significant ( $\chi^2=2.24$ ,  $df=1$ ,  $p=0.134$ ). The lack of significance may reflect the small sample size or the heterogeneity of preparation behaviors, which ranged from minimal to extensive planning.

This finding suggests that while preparation may increase with intent, it is not a consistent predictor in this sample, possibly due to the predominance of impulsive attempts among first-time attempters. **DISCUSSION: Depression Severity and Suicidal Intent:** • In individuals without depression, most (81.8%) showed no suicidal intent, and none demonstrated medium or high levels. By contrast, participants with severe depression displayed marked intent—80% reported medium and 20% high intent.

Among those with moderate depression, 36.4% exhibited medium intent. This pattern was statistically significant ( $p < 0.001$ ), suggesting that suicidal intent rises in parallel with increasing depression severity. Overall, suicidal intent was present in 68.1% of participants, and it was most common in moderate-to-severe depression. Hopelessness, reported by 70.8% of subjects, emerged as a particularly strong factor.

Together with low self-esteem, it explained 43% of the variance in suicidal intent, underscoring the psychological dimensions of risk (3). Previous studies reinforce these findings. One report showed that 37.5% of suicide attempters met criteria for depression, with nearly 40% describing mild-to-moderate intent (4). Another study confirmed that higher depression scores in adolescents were strongly associated with suicidal ideation ( $p = 0.001$ ) (5).

Similarly, a meta-analysis found that individuals with depression had nearly five times higher odds of suicidal ideation compared with those without the disorder, with a pooled prevalence of almost 29% (6). Gender Differences in Depression: Among individuals without depression, the proportion of males (54.5%) was higher compared to females (45.5%).

With increasing severity the pattern is reversed—women formed the majority of the cases in moderate depression and severe depression. Although this difference was not statistically significant ( $p = 0.485$ ), the trend is consistent with broader epidemiological reports. Other national surveys have reported a prevalence of 12.1% in women versus 7.9% in men, a statistically significant difference (7). Cumulatively, global reviews suggest that depression is nearly twice as common among females as males (8), with meta-analyses estimating that men are 63% less likely to develop the condition (OR = 0.63, 95% CI: 0.59–0.68) (9).

Rates reported in individual cohorts also show a persistent female predominance, such as 6.3% in women compared to 4.4% in men (10). The persistence of this sex difference likely reflects several interacting mechanisms, including hormonal influences, social role burdens, differential coping styles, and gender-specific patterns of help-seeking. While statistical significance was not demonstrated here, the trend mirrors international findings and highlights the importance of gender sensitivity in both clinical and public health approaches.

Depression Severity and Lassitude: A majority of participants without depression (81.8%) indicated minimal difficulty in initiating activities. As depression severity increased, lassitude became increasingly common. In moderate depression, 54.5% experienced minimal impairment, while in severe depression, 40% reported complete lassitude. This association was significant ( $p = 0.002$ ), emphasizing the role of lassitude as a marker of both psychological and functional decline.

Previous literature has identified lassitude as an early symptom of depression, often overlapping with frailty-related features such as fatigue and psychomotor slowing. Improvements in lassitude scores have even been linked to better treatment response in patients with difficult-to-treat depression (11-15). Suicidal Intent and Active Preparation: Among participants with no suicidal intent, 76.7% reported no planning. By contrast, those with medium intent were more likely to prepare—47.5% reported minimal-to-moderate planning, and 25% reported extensive preparation.

Although this association did not reach statistical significance ( $p = 0.134$ ), the graded pattern suggests that preparation behaviors increase with intent. This aligns with prior research: planned suicide attempts are consistently associated with stronger intent and higher lethality, while impulsive attempters tend to show weaker intent and little or no preparation (16-19). Suicidal Intent and Precautions Against Discovery: Most individuals with no intent (86.7%) reported no precautions to avoid being discovered.

However, in those with moderate intent, 62.5% admitted taking active steps to conceal their actions. This relationship was statistically significant ( $p = 0.002$ ), suggesting that concealment increases as intent strengthens. The literature supports this trend. Suicide survivors often describe secrecy driven by stigma, which simultaneously protects them socially but reduces opportunities for intervention (19,20). Other evidence indicates that precautions against discovery are closely tied to lethality, particularly in poisoning cases (21).

Further, psychological tendencies such as hopelessness, cognitive rigidity, impulsivity, and perceived burdensomeness have been linked to this behavior (22–24). Gender and Suicidal Intent: At the baseline level, half of both men and women reported no suicidal intent. At more severe levels, however, gender differences were evident.

Women represented the vast majority of low-intent cases (72.7% vs. 27.3% men), and all instances of high intent were documented among females. Although not statistically significant ( $p = 0.459$ ), this observation mirrors global evidence: women display greater suicidal ideation and attempts, while men face greater mortality.

Additional research confirms similar trends. Women with PTSD, for instance, show higher intent and more lethal methods, while aggression is a major factor driving male suicidal actions (25,26). Meta-analyses clarify the gender paradox: women are almost twice as likely to attempt suicide, yet men are substantially more likely to die by it (27-29). Limitations: This study has certain limitations.

A sample size and being a single centered study design restrict the overall acceptability of the findings. The cross-sectional nature prevents it from concluding about causality or changes over time in depression severity and suicidal intent. There is a possibility of selection bias in this because it included only patients who were clinically stable and those who are able to provide informed consent.

Moreover, the use of information given by the participants could lead to recall bias. Potential confounding factors such as comorbid psychiatric conditions and substance use were not assessed. Finally, the lack of longitudinal follow-up limits understanding of changes in suicidal intent over time. Conclusion: Collectively, these findings highlight a strong association between depression severity and suicidal intent, with hopelessness and lassitude serving as particularly important markers.

While gender differences did not reach statistical significance in this dataset, they were consistent with patterns seen worldwide: women bear a higher burden of depression and attempted suicide, whereas men face greater risk of suicide completion. From a clinical perspective, the study supports: 1. Routine screening for depression, hopelessness, and functional decline. 2. Gender-sensitive prevention efforts, accounting for differential vulnerabilities. 3. Closer attention to lassitude as a potential early marker of worsening depression.

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