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**Research Article**

**SUICIDAL IDEATION AMONG MEDICAL STUDENTS**

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**Abstract:**

**Objective:** To study the prevalence of suicidal ideation among medical students.

**Methodology:** This multi-center, cross-sectional analysis was conducted upon a sample of 300 medical students (chosen via no-probability, consecutive sampling) from 3 different medical teaching institutes. No gender or age-related bias was observed, and data was collected using an anonymous, pre-structured, self-administered questionnaire comprising of enquiries about basic biodata and sociodemographic details. Hamilton depression rating scale was used to screen for depression and data pertaining to suicidal ideation was recorded using the Suicidal Ideation Attributes Scale (SIDAS). The data obtained was recorded onto a structured questionnaire and analyzed using SPSS v.21 & Microsoft Excel 2016.

**Results:** Among, the 300-patient enrolled into the study, 29% were males while the remaining 71% were females. The mean age of the sample stood at 20 ( $SD \pm 2$ ). The prevalence of depression was comparable for males (29.89%) and females (28.17%). Suicidal thoughts were encountered more often by males (21.84%) than females (17.84%). The mean SIDAS score for the entire sample stood at 6.9.

**Conclusion:** After careful consideration, it can be concluded that the suicidal ideation is very much a reality among medical students. Although much research has been carried out to identify the causes behind the prevalent psychological distress in this community and its consequences, little is done to address the matter. Identification of such marked levels of suicidal ideation should serve as an eye opener for all.

**Key Words:** Psychological Distress, Depression, Medical Students, Suicide and Suicidal Ideation.

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**INTRODUCTION:**

It has been hypothesized since long that that psychological distress shall be among the leading causes morbidity and mortality in the future, however if one ponders over the rampant depression, anxiety and stress faced by the society today, that future does not seem to distant. <sup>[1]</sup>

Psychological distress is known to be faced more often by individuals that are employed in testing work environments and healthcare profession today, is among the most difficult professions and thus healthcare professionals are more prone to psychological distress and the incumbent suffering. With much suffering also comes the risk of suicide. <sup>[2]</sup>

Death by suicide is a major occupational hazard for healthcare professionals. <sup>[3]</sup> The suicide rate among male physicians is more than 40% higher than among men in the general population, whereas that of female physicians is a staggering 130% higher than among women in the general population. <sup>[4]</sup>

The increased risk for suicide among physicians may begin during medical school. <sup>[5]</sup> Available studies suggest that the suicide rate among medical students is higher than in the age-matched population. <sup>[6]</sup> Other small, single-institution studies <sup>[7-10]</sup> have reported that 3% to 15% of medical students have suicidal ideation during medical school training.

Suicidal ideation is a well-established predictor of suicidal planning and attempts. The National

Comorbidity Survey found that 34% of individuals in the general population with suicidal ideation develop a suicide plan and, of those who plan, more than 70% will attempt suicide. <sup>[11]</sup> Notably, 26% of individuals with suicidal ideation progressed directly to an unplanned suicide attempt. <sup>[12]</sup>

Suicide is at the extreme end of the personal distress continuum, and it is critical for medical schools to identify students at greatest risk for suicide in the hope of intervening before a tragic outcome. Several multi-institutional studies <sup>[13,14]</sup> reveal that medical students have a substantially lower mental quality of life than similarly aged individuals in the general population and more worryingly, medical students are less likely than the general population to receive appropriate treatment despite seemingly better access to care. <sup>[15]</sup>

**METHODOLOGY:**

This multi-center, cross-sectional analysis was conducted upon a sample of 300 medical students (chosen via no-probability, consecutive sampling) from 3 different medical teaching institutes. No gender or age-related bias was observed, and data was collected using an anonymous, pre-structured, self-administered questionnaire comprising of enquiries about basic biodata and sociodemographic details. Hamilton depression rating scale was used to screen for depression and data pertaining to suicidal ideation was recorded using the Suicidal Ideation Attributes Scale (SIDAS). The data obtained was recorded onto a structured questionnaire and analyzed using SPSS v.21 & Microsoft Excel 2016.

**Suicidal ideation attributes scale**

In the past month, how often have you had thoughts about suicide? (0 = Never, 10 = Always)

0	1	2	3	4	5	6	7	8	9	10
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In the past month, how much control have you had over these thoughts? (0 = No control, 10 = Full control)

0	1	2	3	4	5	6	7	8	9	10
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In the past month, how close have you come to making a suicide attempt? (0 = Not close at all, 10 = Made an attempt)

0	1	2	3	4	5	6	7	8	9	10
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In the past month, to what extent have you felt tormented by thoughts about suicide? (0 = Not at all, 10 = Extremely)

0	1	2	3	4	5	6	7	8	9	10
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In the past month, how much have thoughts about suicide interfered with your ability to carry out daily activities, such as work, household tasks or social activities? (0 = Not at all, 10 = Extremely)

0	1	2	3	4	5	6	7	8	9	10
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## RESULTS

Among, the 300 patient enrolled into the study, 29% were males while the remaining 71% were females. The mean age of the sample stood at 20 (SD  $\pm$  2).

Age Group	Males	Females
Up to 18 years	23	39
19 years	17	32
20 years	31	62
21 years	07	44
22 years or more	09	36

The prevalence of depression was comparable for males (29.89%) and females (28.17%). Suicidal thoughts were encountered more often by males (21.84%) than females (17.84%).

Time	Depression (Frequency)		Suicidal Ideation (Frequency)	
	Male	Female	Male	Female
Up to 18 years	05	09	01	03
19 years	05	13	05	02
20 years	03	11	03	11
21 years	06	10	07	07
22 years or more	07	17	04	15

The mean SIDAS score for the entire sample stood at 6.9.

## DISCUSSION:

Our large, multi-center study showcased a high prevalence of suicidal ideation among medical students, with approximately 1 of 5 students experiencing thoughts of suicide in the past 1 month. The cumulative rate of rate of suicidal ideation among medical students in our study (19%) is higher than for medical students from developed countries such as the United States (11.2%).<sup>[16]</sup>

In our study, a frequent co-occurrence of suicidal ideation was seen with depression. Although, the cross-sectional nature of our research does not allow us to comment on an association between the two, the relationship between depression and suicidal ideation is well recognized.<sup>[17]</sup> Identifying risk factors for suicidal ideation provides the opportunity for interventions to prevent an adverse outcome. Few of the probable such factors were highlighted in this study including depression and male gender. The factors and experiences that help students recover from suicidal ideation however are unknown, and merit further study. Such information could make the services provided by the student wellness programs more valuable.<sup>[19]</sup>

Suicidal ideation interfered with the daily activities of the medical students, and reduced their ability to feel joy, enjoy pleasant moments and decreased their ability to focus on their education and training. This

finding is synonymous with other research that reports anhedonia to set in among most of the individuals experiencing suicidal ideation.<sup>[20]</sup>

## CONCLUSION:

After careful consideration, it can be concluded that the suicidal ideation is very much a reality among medical students. Although much research has been carried out to identify the causes behind the prevalent psychological distress in this community and its consequences, little is done to address the matter. Identification of such marked levels of suicidal ideation should serve as an eye opener for all.

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