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Depression and Suicidal Ideation Among Medical Students; A Cross-Sectional Study

Sanaila Gull Sana

Assistant Professor, Department of Forensic Medicine, Federal Medical College, Islamabad

ABSTRACT

Objective: To assess the prevalence of depression and suicidal ideation among medical students.

Methodology: A cross-sectional study was conducted at Federal Medical College Islamabad from January to June 2024. A well-define, self-explanatory questionnaire which also included Public Health Questionnaire (PHQ-9) for the identification of depression with Suicide Behaviors Questionnaire Revised (SBQ-R) for identification of suicidal ideation among medical students. Study variables were gender, year of study, ethnicity, marital status, life style, any psychological traumas, degree of depression, suicidal ideation and coping mechanisms. Data was collected from the medical students of all five years of medical college and analyzed using SPSS 27.

Results: A total of 300 cases were included in this study, with predominance of female medical students, almost 61%. About 66% were living in hostels with not so good living conditions, poor sleep patterns and lifestyles. One of the main reasons of having depression is the failure to meet expectations in studies, almost 36.6%. Majority of students were facing mild depression, 34% and almost 29.34% were suffering from moderate depression, (M=75, SD=30.31) which leads to almost 40.67% students to have suicidal ideation sometimes during their academic tenure. (M=75, SD=68.95) Maximum number of students don't opt for any positive coping method but just to ignore their current mental condition, almost 31.67%. (M=60, SD=29.28)

Conclusion: The prevalence of depression and suicidal ideation is rising day by day among medical students. A lot of factors, like social pressures, poor lifestyles, disturbed sleep, financial issues, family problems, academic stresses and many more, contribute to soaring cases of depression, which in turn leads to suicidal ideation among students.

Key Words: Depression, Suicidal ideation, Mental Health, Medical Students, Forensic Psychiatry.

Authors' Contribution:
[1]Conception; Conception of the work idea, data collection, analysis and interpretation, drafting the manuscript, [3]reviewing and final approval.

Correspondence:
Dr. Sanaila Gull Sana
Assistant Professor, Department of Forensic Medicine, Federal Medical College, Islamabad
Email: Sanaila.gul.sana@gmail.com

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Introduction

The Silent killer of youth, DEPRESSION is taking over our future generation like a termite, hollowing out the very roots of our existence in living realm, typically asphyxiating the medical students who form the cream of nation and on whom our future of medical truly relies on. Medical students, fighting against depression during their academic years are also on the verge of suicidal ideation. According to Forensic Psychiatry, Suicidal Ideation refers to thoughts about self-harm with deliberate consideration or planning of possible techniques of causing one's own death. The medical profession imposes greater degree of depression upon medical students, as it demands rigorous academic schedules, intense clinical training and a full commitment to the well being of others. Which in turn, has overlooked mental health of medical students by a considerable amount.

The prevalence of depression and suicidal ideation among medical students is a pressing issue, which is needed to be critically taken into account. The soaring number of such cases necessitate attention for understanding causes and factors leading to depression and suicidal ideation among medical students, so that well-being of our students could be revitalized.

Globally, mental health disorders are very common among medical students as compared to non-medical students.[1] Many factors contribute to such dilemma in our medical field, such as; psychological, social, financial, owing to peer pressure, professional competitiveness and unrealistic academic expectations among medical students. [2] This creates an emotional turmoil that unable to meet all expectations and also maintain one's mental health intact.[3] Among these factors, social stigma surrounding mental health within medical community also contribute greatly to the already heightened levels of depression, which deters students from seeking help and it only exacerbates the main problem, leading to suicidal ideation as the only way out. [4] All these reasons, when compared to other non-medical students, revealed that they have deteriorating effects more on medical students.[5]

The consequences of unspoked and untreated depression among medical students are deeply concerning as they can lead to decreased academic performances, burnouts and even suicidal ideations.[6] It has come to attention that there is a strong female predominance in this aspect, which leads to vicious circle of generational trauma that ultimately affects the bases of family systems.[7] Furthermore, the emotional well-being of medical students directly impacts their future ability to provide compassionate high-quality care to not only patients but also their own family members.[8] The rising predicament of such cases among medical students has negative effects not only on individual basis but also affecting country's health care system as a whole.[9] It is thus imperative to assess prevalence of depression and suicidal ideation among medical students, in accordance with all the contributing factors, so that positive approach could be adopted to minimalize harmful causes that lead to deterioration of their mental well-being.[10]

So, the need of the hour is to create a supportive and understanding environment that promotes mental health awareness, encourages help seeking behavior, and providing adequate resources for those who are struggling with depression.[11] There is a dire need to modulate prevention strategies including coping techniques and counselling sessions to handle depression and impacting positively so that it won't lead to suicidal ideation.[12]

This study will help in assessing the root factors contributing to the aching phenomenon of depression among medical students and also to rule out main causes which pave the way for depression to become suicidal ideation.

Methodology

This is a cross-sectional study which was conducted in 6 months, i.e., January to June 2024, using a well-define, self-explanatory questionnaire which also included Public Health Questionnaire (PHQ-9) for the identification of depression with Suicide Behaviors Questionnaire Revised (SBQ-R) for identification of suicidal ideation among medical students. The coefficient of reliability for questionnaire was 0.794. Total 300 cases were analyzed which includes all the

five years of MBBS in Federal Medical College, excluding BDS and other modality students. For data analyzation, SPSS 27 was used. Data was analyzed using mean with standard deviation and frequency with percentages. The questionnaire was distributed personally but the names of students were not recorded. Variables of questionnaire were gender, year of study, ethnicity, marital status, life style, any psychological traumas, degree of depression and suicidal ideation and coping mechanisms.

Results

Among 300 participants, majority of cases belong to female, 61%, with the mean and standard deviation for gender as 150 and 46.66 respectively. Equal number of participants were taken from each year of MBBS. In consonance with this study, Table 1 indicates various variables characterized by different attributes in relation to participants.

Table I: Variables according to various Characteristics of Participants.

Variable	Sub-division	N	%
Gender	Male	117	39
	Female	183	61
Year of Study	1st Year	60	20
	2nd Year	60	20
	3rd Year	60	20
	4th Year	60	20
	5th Year	60	20
Ethnicity	Punjabi	110	36.67
	Pathan	48	16
	Baloch	23	7.67
	Sindhi	39	13
	Urdu	80	26.67
Marital Status	Married	5	1.67
	Single	205	68.34
	Committed	89	29.67
	Divorced	1	0.34
Living Conditions	Hostelites	198	66
	Dayscholars	102	34
Lifestyle	Exercise	18	6
	Free Time with family/friends	84	28
	Free time Alone	79	26.34
	Watch tv/cell phone use in free time	84	28
	Sports in free time	13	4.34
	Any leisure activity/Productive work	22	7.34
Sleeping Time	<8 hrs	209	69.67
	>8 hrs	91	30.34
Sleeping Pattern	Sound Sleep	98	32.67
	Disturbed sleep	202	67.34
Psychological Traumas	Harassment/Bullying	17	5.67
	Death of Family member/Friend	23	7.67
	Social Pressure	70	23.34
	Failure to meet expectations in studies.	95	31.67
	Disturbed relationships	34	11.34
	Family issues	61	20.34
Degrees of Depression	No depression	78	26
	Mild	102	34
	Moderate	88	29.34
	Severe	32	10.67
Suicidal Ideation	All the time	4	1.34
	Often	29	9.67
	Sometimes	122	40.67
	Never	145	48.34
Coping Mechanism	Talking to Friend/Family	39	13
	Sleeping	76	25.34
	Ignoring	95	31.67
	Optimism	68	22.67
	Meditation	22	7.34

Large part of ethnicity belongs to Punjabi with 36.67% and almost 68.34% were single. Mostly the participants were hostelites, 66% and majority of them spent their free time indulged in TV/cell phones (28%) or even some who spent with family/friends (28%). An important factor which contributes greatly is the sleeping time and majority of participants used to sleep less than 8 hours a day (69.67%) and 67.34% people had disturbed sleep whenever they try to get some sleep. In regards to psychological traumas, unable to meet expectations in studies took the lead, 31.67% and social pressures stood out at 23.34%. According to this study, 34% participants were suffering from mild depression and 29.34% from moderate depression. A small amount of people suffers from suicidal ideation, almost 1.34%. In regards to coping mechanism, majority of people used to ignore their inner feelings and keep them ignoring for so long, almost 31.67%, which builds up their inner insecurities and boils the level of depression up. 25.34% participants chose sleep to comfort themselves in times when they feel severely low. Only 13% students talk about their problems with family and friends, which is very less

number, as majority feel insecure and hesitant to unveil themselves in their low time. Figure no:1 and 2 indicated degrees of depression and suicidal ideation respectively, whereas figure no:3 indicates values of Mean and Standard Deviation.

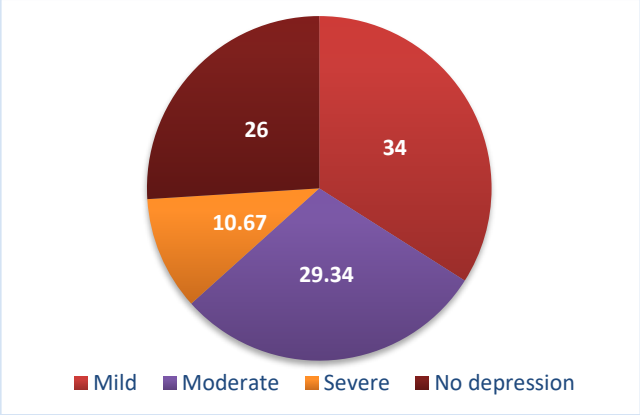

Figure 1. Degrees of Depression.

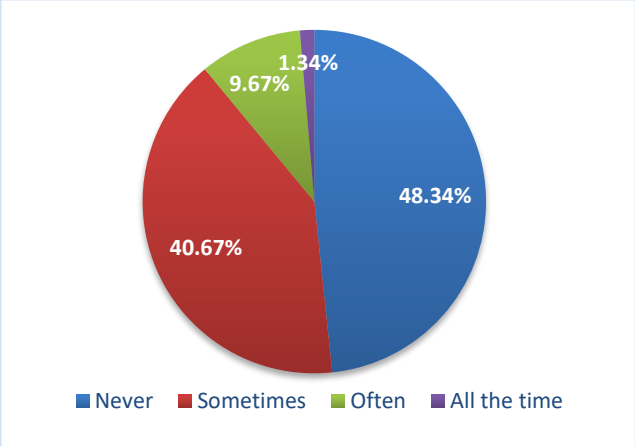

Figure 2. Degrees of Suicidal Ideation.

Discussion

The prevalence of depression among medical students is a multifaceted issue globally, specially in under developed countries like Pakistan. According to a study conducted in Nepal, medical students belong to under developed countries are suffering from depression, anxiety and suicidal ideation on a larger scale with predominance of female population.[13] Another significant study, done in Karachi revealed that cases of depression among medical students are rising day by day, almost 41% students suffer from mild depression and almost 26% of them having suicidal ideation.[14]

Similar study done in Abbottabad indicates that depression and suicidal ideation is experienced more in medical students as compared to non-medical students.[15] according to research conducted in Karachi, majority of depression cases belong to students who live in hostels.[2] One study emphasized that out of many important factors contributing towards depression and suicidal ideation among medical students, bullying and social pressures also play vital roles.[16]

According to another study in Pakistan, it is revealed that almost 42.66% students were suffering from depression during their medical life.[17] A distinct analysis summarized that depression is significantly corelated with suicidal ideation among medical students.[18] A separate study organized in Lahore showed that 75% medical students were depress and

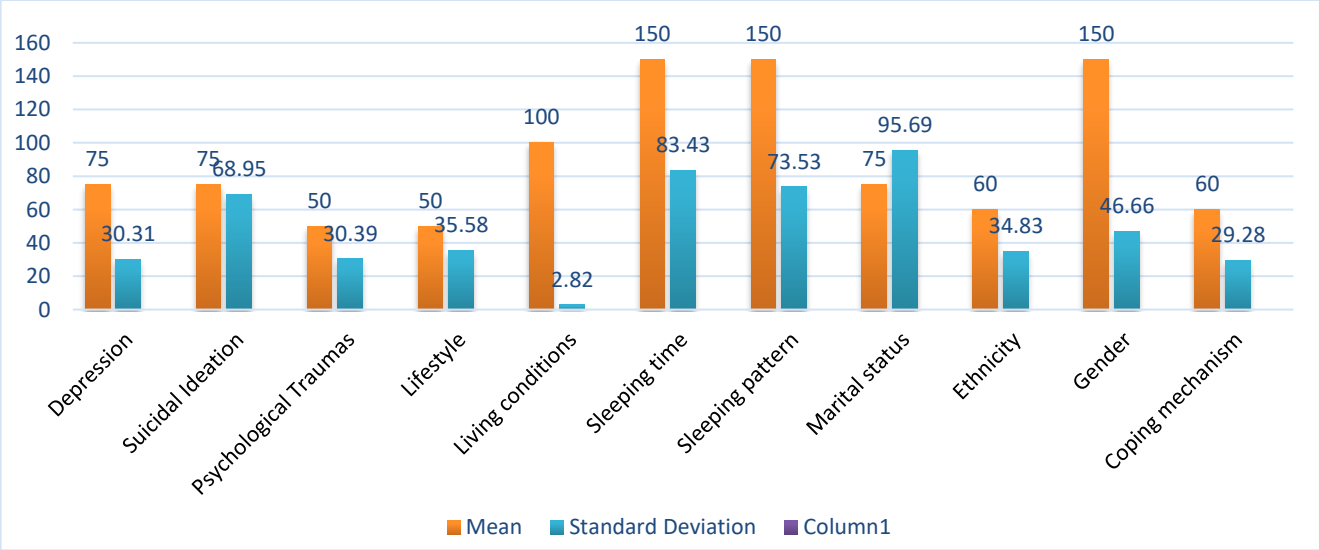

Figure 3. Mean and Standard Deviation.

their depression is prevalent among female students and corelated with negative perception of learning environment.[19] Furthermore, a mixed method study explained that poor lifestyles, financial restraints, lack of support services for stress management, lack of physical and recreational services and curricular innovations are contributing factors in causing depression among medical students.[20]

This study divulges many essential aspects correlated with soaring number of depression and suicidal ideation among medical students. Improper and distracted sleep, lack of motivation and basic extra-curricular activities, lack of emotional support, bullying, psychological traumas due to life stressors, social pressures, rising expectations, pooling of emotions inside and not letting themselves expressed out in-front of anyone and poor lifestyles with financial restraints, all are major contributing factors. Majority of students suppress their feelings and thoughts and try to ignore them, which in turn badly affects their mental health. Social and peer pressure lead them to avoid discussing their thoughts and they keep on snubbing them, which leads to piles up levels of depression. Poor lifestyles, improper life conditions, sleep and meal disturbances and high expectations to complete daily tasks and show progress, all affects their mental well-being.

Need of the hour is not only to acknowledge and address the unique stressors faced by medical students, but also to establish a proper foundation for healthier and more resilient future doctors, by devising multifaceted solutions. As a community, we must prioritize the mental health care of our future healthcare professionals, not only for their sake, but also for the well-being of patients they will serve, which in turn stabilize the healthcare system in our country and will benefit the entire nation to progress. It is only possible through a concerted effort to understand, support and empower medical students that we can create a thriving and compassionate healthcare workforce for the future.

It is crucial to devise properly planned systems for medical students, in which they feel safe to let their thoughts out and undergo catharsis to help them feel less depress over the time. Systematized counselling sessions, working on their mental as well as physical well-being can play vital role in positive modification of their entire health care. It is recommended to set up counselling system for medical students in their respective institutes and also to set up a framed environment in which medical students, who are undergoing stages of depression due to any financial, social or any other recognizable problem, could be empathetically helped out in every possible way.

Conclusion

It is concluded that cases of depression are soaring among medical students and many of them suffer from suicidal ideation too. Lifestyle habits and conditions, social and financial pressures, rising expectations, pooled up thoughts, unable to share their feelings and poor to none coping techniques, all correlate and contribute greatly to revolting cases of depression on daily basis. The need of the hour is not only to acknowledge this mental crisis among them, but also to develop strategies to minimize the risk and to modify mindset to tackle such cases by generating techniques like, holding seminars, programs, workshops to educate and train parents, family members, teachers and students, by encouraging them to share their feeling and thought processes and normalize counselling sessions without making it a taboo.

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