

Prevalence of Depression among the Medical Students in Nepalgunj Medical College

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ABSTRACT

Introduction: Mental health is an important aspect of overall health of a person. Depression is a common mental health problem all around the world. According to WHO, as many as 350 million people suffer from depression all over the globe. Medical studies are well known to be stressful for students and psychological problems like depression are quite common among medical students. Although many studies are done on mental health of students worldwide, studies on depression among medical students of Nepal are quite few. **Aims:** To find out the prevalence of depression among medical students in Nepalgunj Medical College. **Methods:** A descriptive study was done in the batch of 2016 with a Beck's Depression Inventory (BDI) Questionnaire. **Results:** The prevalence of depression among the study subjects was found to be 25.9%. Bullying was found to be a strong factor responsible for depression among medical students. **Conclusion:** Depression was highly prevalent among the medical students. Students who were bullied and had appropriate pocket money suffered from higher levels of depression.

Keywords: Bullying, Depression, NGMC

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INTRODUCTION

Mental health refers to cognitive, emotional and behavioral well being¹ and is important at every stage of life. The status of mental health significantly affects a person's thinking, mood and behavior.² Depression is a mood disorder involving a persistent feeling of sadness and loss of interest and affects people of all age groups.³ Anxiety is a feeling of mild or severe unease, such as worry or fear.⁴ American Psychological Association defines anxiety as an emotion characterized by feelings of tension, worried thoughts and physical changes like increased blood pressure.⁵ According to WHO, Depression occurs globally, affecting an estimated 350 million people. It is a serious health issue responsible for about 800,000 suicides per year.⁶ People with anxiety disorders can develop depression later on.⁷

Study of Medicine is a difficult and demanding job and requires continuous hard work and dedication. The overall environment in medical colleges is stressful and generally has a negative impact on psychological health of medical students.⁸ Many

studies suggest that medical students generally have higher levels of depression compared to the general population.^{8, 9, 10} Various factors like academic burden, competition among peers and substance abuse have shown significant association with depression among the medical students.^{8, 11} Some studies also show higher level of depression in female students compared to male students.^{9, 12, 13} Increased use of social media has been found to increase stress levels and also the odds of having depression.^{14, 15, 16, 17} This study aims to find the prevalence of depression among the medical students of Nepalgunj Medical College.

METHODS

A descriptive cross-sectional study was done among the students of Batch 2016. They were given a Beck's Depression Inventory (BDI) Questionnaire individually which was filled up personally on July 30, 2018. Out of 116 students in the batch, 112 were present in the community medicine class and data was collected from them.

Beck's Depression Inventory consists of 21 questions each of which contains 4 options. Each option has a score of 0, 1, 2 or 3. At last, the total score is calculated and evaluated according to the scale below.

Total Score	Levels of Depression
1-10	These ups and downs are considered normal
11-16	Mild mood disturbance
17-20	Borderline clinical depression
21-30	Moderate depression
31-40	Severe depression
Over 40	Extreme depression

RESULTS

A total of 116 questionnaires were distributed to the students, out of which 112 returned them complete. This gives a response rate of about 96.5%. Figure 1 resembles that out of 112 respondents, 65 were males and 47 were females. The age range of students was 18-27 years with mean age of 20.7 years and standard deviation of 1.36. More than half of the students were Nepalese (71.4%) followed by Indians (28.6%).

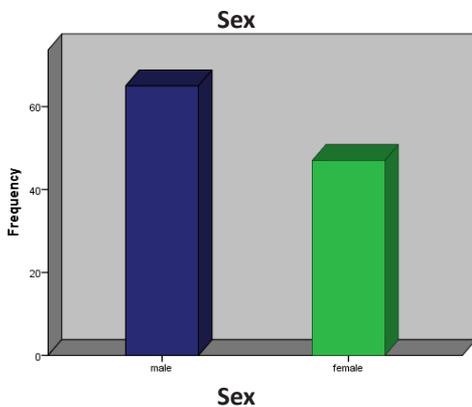


Figure 1: Sex Distribution.

The prevalence of depression in the study group was found to be 25.9%. Among them, 10.7% students were in borderline clinical depression, 11.6% of them had moderate depression while 1.8% had severe and 1.8% had extreme depression as illustrated in Figure 2.

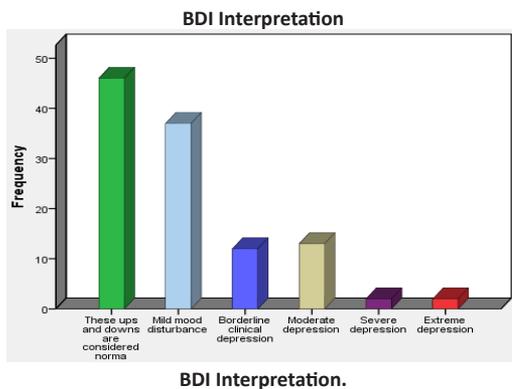


Figure 2: Level of Depression among Study Subjects.

77.7% students responded that they had been bullied by seniors, teachers or staffs in medical college as shown by Figure 3. Students who had faced bullying had higher levels of depression as illustrated in Figure 4.

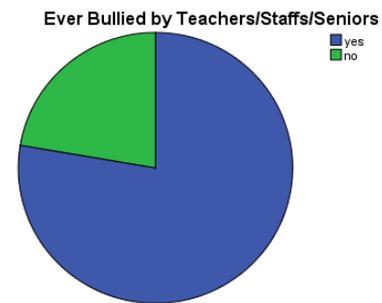


Figure 3: Ever bullied by Teachers/Staffs/Seniors.

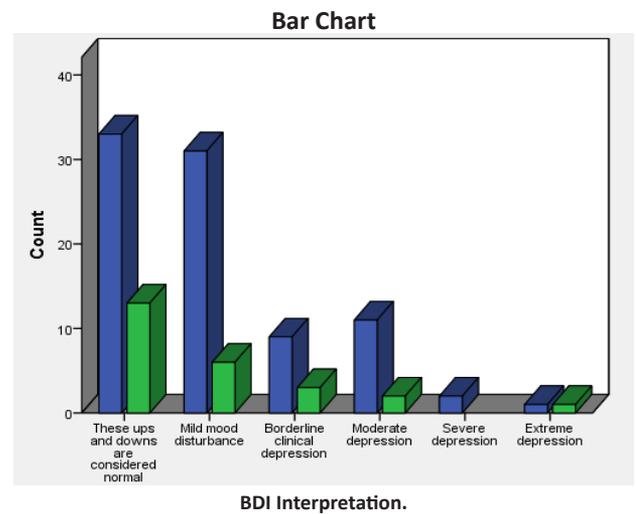


Figure 4: Relationship between Bullied Status and Level of Depression.

Figure 5 shows that 93.8% students responded that they had appropriate pocket money.

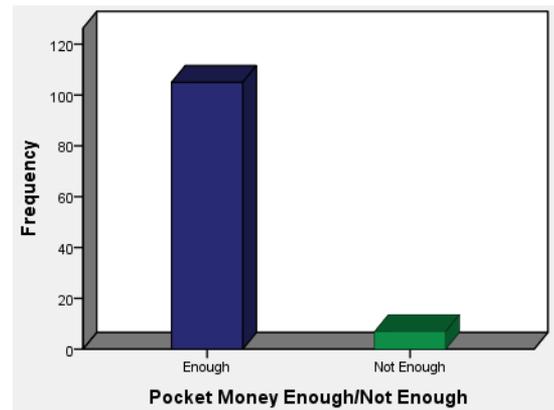


Figure 5: Enough Pocket Money among Study Subjects.

Students who had appropriate pocket money had higher levels of depression than those who had insufficient amount of pocket money as illustrated in Table I.

	Pocket Money		Total
	Enough	Not Enough	
These ups and downs are considered normal	44	2	46
Mild mood disturbance	33	4	37
Borderline clinical depression	12	0	12
Moderate depression	12	1	13
Severe depression	2	0	2
Extreme depression	2	0	2
Total	105	7	112

Table I: Relationship between enough pocket money and depression levels.

Only 28.6% students responded that they had been in love while 71.4% students responded that they had never been in love as shown in Figure 6.

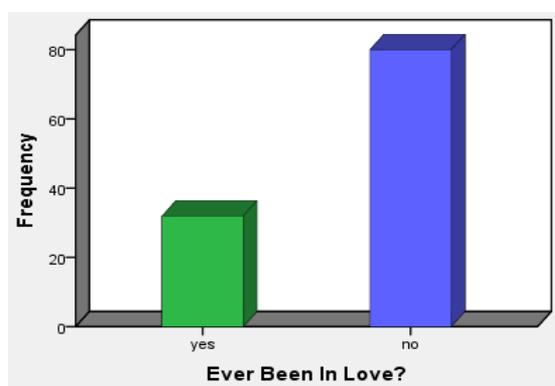


Figure 6: Ever Been in Love?

The students who responded that they had been in love at least once in life had lower levels of depression than those who had never been in love as shown in Table II.

	Ever Been in Love?		Total
	Yes	No	
These ups and downs are considered normal	10	36	46
Mild mood disturbance	16	21	37
Borderline clinical depression	2	10	12
Moderate depression	2	11	13
Severe depression	1	1	2
Extreme depression	1	1	2
Total	32	80	112

Table II: Relationship between relationship status and depression levels.

DISCUSSION

The prevalence of depression was (25.9%), this result is consistent with the results of similar studies done in BPKIHS (29.78%).¹⁸ A study done among medical students in Seoul, Korea showed the prevalence rate of 37.1%¹⁹ of depression which is slightly greater than ours. The results showed that the depression was more prevalent among Nepalese students than Indians. Both males and females had similar

depression levels in our study. However many other studies have suggested that females tend to be more depressed than males.^{9, 12, 13} Another finding shows higher level of depression in students who were bullied in college. This finding is similar to that of a study done in Pakistan which reported that 66% of students had faced bullying²⁰. Similarly, another study done among final year students of six different medical colleges in Pakistan also reports that 52% of the participants had faced some form of bullying during their medical education²¹. A study done in Finland also suggests higher anxiety and stress levels in university students who have been a victim of past or current bullying²².

The prevalence of depression was found to be more in the students who said they had appropriate pocket money than those who said the pocket money was insufficient. Among the students who had appropriate pocket money, 26.6% had depression, out of which 11.4% had borderline clinical depression, 11.4% had moderate depression, 1.9% had severe depression and 1.9% had extreme depression. Only 14.3% of the students who did not have appropriate pocket money had depression. This finding is consistent with the finding of a study done in Jimma University, Ethiopia²³ which also reports students having adequate pocket money having higher levels of depression. The findings showed that students who responded to have been in love at least once in life had lower levels of depression than those who responded to never have been in love. Out of the students who were not involved in a relationship, 28.75% had depression among which 12.5% had borderline clinical depression, 13.75% had moderate depression, 1.25% had severe depression and 1.25% had extreme depression. Only 18.75% of the students who were in love at least once in life had depression. However, this finding is inconsistent with the findings of a study which suggests that being involved in a romantic relationship was associated with depression.²⁴ Also, another study reported that romantic involvement was associated with greater depressive symptoms.²⁵

LIMITATIONS

The study being conducted only among medical students of NGMC might not be applicable to the wider general population and students of other faculties. Also the picture of clinical status of depression might be slightly different in other batches or groups of students. However, this study provides a basic picture of depression status in medical students and helps to assess the situation among them.

CONCLUSION

Depression was highly prevalent among the medical students. Students who were bullied and had appropriate pocket money suffered from higher levels of depression.

Proper addressing should be done in very first years of medical study to help lower the prevalence. Adequate counseling and guidance from the early years can help solve the problem. Parents should also make sure their children are using their pocket money in a proper way.

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