



A STUDY OF DEPRESSION, ANXIETY AND STRESS AMONG THE UNDERGRADUATE STUDENTS OF GAUHATI MEDICAL COLLEGE AND HOSPITAL, GUWAHATI

Community Medicine

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ABSTRACT

Background: Medical students confront significant academic, psychological, & existential stressors throughout their training.

Objective: To find the prevalence of depression, anxiety and stress among the undergraduate medical students.

Materials and methods: An institutional based cross-sectional study was done among the undergraduate medical students of Gauhati Medical College and Hospital, Guwahati from 1st December 2017 to 31st January 2018. Each of the students were given a questionnaire which consisted of two parts. Inclusion Criteria: 1) Students of all the semesters were included. 2) Those who gave consent.

Exclusion criteria: Those who did not fill up the questionnaire completely. Therefore, a total of 400 students were included in the study. The data was compiled using Microsoft Excel and Graph Pad INSTAT (Version 3.05).

Results: There is a high prevalence of anxiety 164(41%) followed by depression 144(36%) and stress 127(31.75%) among the undergraduate medical students.

KEYWORDS

depression, anxiety, stress.

INTRODUCTION:

University life during medical training entails full-time commitment and responsibility of undergraduates regarding academic tasks and care provided to patients and their companions.¹ Medical colleges are recognized as a stressful environment that often exert a negative effect on the academic performance, physical health, psychological well-being with a high frequency of depression, anxiety, stress and even attrition from medical course. Failure to detect these disorders unfortunately leads to increase psychological morbidity with unwanted effects throughout their careers and lives.²

OBJECTIVE: To find the prevalence of depression, anxiety and stress among the undergraduate medical students.

MATERIALS AND METHODS: An institutional based cross-sectional study was done among the undergraduate medical students of Gauhati Medical College and Hospital, Guwahati from 1st December 2017 to 31st January 2018. The objective of the study was explained to the students and the confidentiality was assured. Verbal consent was taken from the students who were willing to participate in the study. Each of the students were given a questionnaire which consisted of two parts. The first part consisted of self-structured questionnaire and the second part consisted of DASS-42 for depression, anxiety and stress. **Inclusion criteria:** 1) Students from first year till final year were included. 2) Those who gave consent. **Exclusion criteria:** Those who did not fill up the questionnaire completely. Therefore, a total of 400 students were included in the study. The data was compiled using Microsoft Excel and Graph Pad INSTAT (Version 3.05).

RESULTS:

In table 1, out of 400 students, majority of the students (57.25%) belonged to the age-group of 21- 23 years and among them males were 215 (53.75%) and females were 185 (46.25%). Most of the students belonged to Hindu 315 (78.75%) followed by Muslim 60 (15%).

While assessing the status of depression using Depression, Anxiety and Stress Scale -42 (DASS-42)(in table 2) , it was found that out of 400 students, 256 (64%) students were normal whereas mild, moderate, severe and extremely severe depression was found to be more in males i.e., 37 (17.21%), 28 (13.02%), 17 (7.91%) and 3 (1.04%) respectively. For anxiety, out of 400 students, 236 (59%) were normal; mild anxiety was found to be more in females 25 (13.51%)

whereas males had more moderate, severe and extremely severe anxiety which was found to be 35 (16.28%), 17 (7.91%) and 20 (9.30%) respectively. For stress, out of 400 students, 273 (68.25%) were found to be normal; mild and severe stress was found to be more in females 25 (13.51%) and 13 (7.03%) respectively whereas moderate stress was more in males which was found to be 30 (13.95%). By statistical analysis, the p- value for depression, anxiety and stress was found to be 0.3783, 0.1215 and 0.16 respectively which is statistically not significant. Moreover, the degree of freedom for depression, anxiety and stress was found to be 3, 4 and 3 respectively.

In table 3, regarding the satisfaction of the students in their academic performance, it was found that 76% were satisfied whereas 24% were not satisfied. Out of the 400 students, 349 (87.25%) were satisfied with their peer relationship; 230 (57.5%) were satisfied with their faculty relationship; 198 (49.5%) were satisfied of the college overall and 192 (48%) students feels the pressure of study burden.

Out of 400 students, 313(78.28%) students stayed in hostel while 87(21.75%) stayed at home. Out of 400 students, medical profession was the first choice of 308(77%) students. All the 400 students were unmarried. Out of 400 students, 33 (8.25%) students has family conflicts or issues and 373 (93.25%) students were satisfied with their family environment.

Table1: Showing the distribution of age, sex and religion of the students.

		No. of students	Percentage (%)
AGE(in years)	18-20	157	39.25
	21-23	229	57.25
	24-26	14	3.5
	Total	400	100
SEX	Male	215	53.75
	Female	185	46.25
	Total	400	100
RELIGION	Hindu	315	78.75
	Muslim	60	15
	Christian	18	4.5
	Others	7	1.75
	Total	400	100

Table2: Showing the status of depression, anxiety and stress of the students.

		Normal	Mild	Moderate	Severe	Extremely severe	Total	p- value
DEPRESSION	MALE	130(60.47%)	37(17.21%)	28(13.02%)	17(7.91%)	3(1.40%)	215(100.01%)	0.3783
	FEMALE	126(68.11%)	22(11.89%)	21(11.35%)	14(7.75%)	2(1.08%)	185(100%)	
	TOTAL	256(64%)	59(14.75%)	49(12.25%)	31(7.75%)	5(1.25%)	400(100%)	

ANXIETY	MALE	116(53.95%)	27(12.56%)	35(16.28%)	17(7.91%)	20(9.30%)	215(100%)	0.1215
	FEMALE	120(64.86%)	25(13.51%)	18(9.73%)	11(5.95%)	11(5.95%)	185(100%)	
	TOTAL	236(59%)	52(13%)	53(13.25%)	28(7%)	31(7.75%)	400(100%)	
STRESS	MALE	151(70.23%)	29(13.49%)	30(13.95%)	5(2.33%)	-	215(100%)	0.16
	FEMALE	122(65.95%)	25(13.51%)	25(13.51%)	13(7.03%)	-	185(100%)	
	TOTAL	273(68.25%)	54(13.5%)	55(13.75%)	18(4.5%)	-	400(100%)	

Table3: Showing the status of academic performance and satisfaction of the students with the college environment.

		No. of students	Percentage (%)
ACADEMIC PERFORMAN CE (N=400)	Not satisfied	96	24
	Satisfied	304	76
	Total	400	100
SATISFACTIO N WITH	Peer relationship (N=400)	349	87.25
	Faculty relationship (N=400)	230	57.5
	College overall (N=400)	198	49.5
FEELS STUDY PRESSURE (N=400)		192	48

DISCUSSION:

In the study, out of 400 students majority were males (53.75%) whereas females were 46.25%. As compared to the study done by Teh C K, Ngo CW, Zulkifi RA, Kellasamy R and Suresh K³, they found that majority of the students were males i.e. 63.2% whereas females were 36.8%.

In the study, the satisfaction of the students regarding academic performance was found that majority (76%) of the students were satisfied whereas 24% of the students were not satisfied. As compared to the study done by Teh C K, Ngo CW, Zulkifi RA, Kellasamy R and Suresh K³, they found that majority 275 (69.3%) of the students were least satisfied followed by 111 (28%) students who were satisfied and 11 (2.8%) students were very satisfied.

The overall prevalence of depression in this study was found to be 36% where majority had mild depression (14.75%). It was found that males (39.54%) were more depressed than females (31.89%). As compared to the study done by Yadav R, Gupta S, Malhotra AK,² the prevalence of depression was 57% and majority had mild depression (21.82%) . Moreover, females (63%) were more depressed than males (54%). According to the study done by Teh C K, Ngo CW, Zulkifi RA, Kellasamy R and Suresh K³, they found that the prevalence of depression was 45.8% and majority had moderate depression (20.9%).

The overall prevalence of anxiety in this study was found to be 41% where majority had moderate anxiety (13.25%). It was found that males (46.05%) were more anxious than females (35.14%). As compared to the study done by Yadav R, Gupta S, Malhotra AK,² the prevalence of anxiety was 71% and majority had moderate anxiety (25.15%). Moreover, males (72%) were more anxious than females (68%). According to the study done by Teh C K, Ngo CW, Zulkifi RA, Kellasamy R and Suresh K³, they found that the prevalence of anxiety was 64% and majority had moderate anxiety (30.5%).

The overall prevalence of stress in this study was found to be 31.75% where majority had moderate stress (13.75%). It was found that females (34.05%) were more stressed than males (29.77%). According to a study done by Teh C K, Ngo CW, Zulkifi RA, Kellasamy R and Suresh K³, they found that the prevalence of stress was 68% and majority had mild anxiety (15.4%).

CONCLUSION:

There is higher prevalence of anxiety followed by depression, anxiety and stress. Therefore, there is a need to assess these factors which might be helpful for the healthy environment of the undergraduate students for their success and satisfaction in their professional as well as personal lives.

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Ethical approval: Approved by the Institutional Ethical Committee.

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