

# Anxiety and Depression among Medical Students during Exams

FARAH AMIR ALI<sup>1</sup>, NAIMA JAVED<sup>2</sup>, FARIDA MANZUR<sup>3</sup>

## ABSTRACT

**Aim:** To find frequency of anxiety and depression among medical students of Aziz Fatima Medical & Dental College during exams.

**Methods:** In a cross sectional observational study, conducted by administering The Aga Khan University Anxiety & Depression Scale (AKUADS) questionnaire to 200 students enrolled in first and second professional MBBS at Aziz Fatima Medical & Dental College.

**Results:** Depression was present in 121 (66.4%) students during exams. Female students were more prone to depression during exams. In our study trends show more than half students had disturbed sleep, lack of habits and interest in daily routine

**Conclusions:** In our study we found that majority of students experience depression during exams. There is need for greater attention to the psychological well being of medical students.

**Keywords:** Anxiety, depression, examination

## INTRODUCTION

Young medical students are considered in significant psychological distress during their training<sup>1</sup>. Several studies suggest a high prevalence of stress and depression among medical students as compared to their aged match peers<sup>2,3</sup>.

Academic demands, exams, too much work load, inability to cope, these factors are considered to be cause of depression<sup>4</sup>. Associated risk factors are female gender, having family history of depression, loss of relative and substance abuse. It has been observed that medical students have marked undue stress during pre and examination period<sup>5</sup>.

Many studies are conducted to determine anxiety and depression in medical students so far. Previous studies in Pakistan have shown higher prevalence of anxiety and depression in medical students. Anxiety and depression were found to be present in 60% and 70% according to two Pakistani studies<sup>6,7</sup>. Few studies are conducted locally to find somatic and psychiatric symptoms of anxiety and depression during examination.

## SUBJECTS AND METHODS

This study utilized a cross sectional survey design. The Aga Khan University Anxiety & Depression Scale (AKUADS) was applied to assess the level of depression in participants with a cut off score of 19 points. It is 25 items questionnaire which includes 12 psychiatric and 13 somatic symptoms<sup>8</sup>. It was conducted by administering questionnaire to 200

Department. of Physiology<sup>1</sup>, Pharmacology<sup>2</sup>, Community Medicine<sup>3</sup>, Aziz Fatimah Medical & Dental College Faisalabad

Correspondence to Dr. Farah Amir Ali, Associate Professor  
Email: farah.zulfiqar@yahoo.com Cell 03466689004

students enrolled in first and second professional MBBS at Aziz Fatima Medical & dental College. Data collection was done over three weeks during send up Viva Voce/ OSPE examination in Aug-Sep 2014. 182 students returned complete Performa. Data was compiled and descriptive analysis was done.

## RESULTS

Two hundred questionnaires were distributed, out of which 182 students returned completely filled performa. 89 students of 1<sup>st</sup> year, 49 students of 2<sup>nd</sup> year and 44 students of 3<sup>rd</sup> year MBBS were participated in study. There were 114(62.6%) male participants and 68(37.3%) female participants. Depression was present in 121(66.4%) students during exams. There were 64(56.6%) male students and 54(79.4%) female students score 20 or more on AKUADS. The percentage of female depressed students was significantly higher than male in all batches. 58.6% depressed students had complaint of sleeping less, while 62.8% had feeling of impending doom. 20.6% students had thought of taking their lives.

Table 1: Distribution of MBBS students along with their AKUADS scores

	n	Score 19 or less	Score => 20
1 <sup>st</sup> year Male	57	26 (46.4%)	31 (54.3%)
1 <sup>st</sup> year Female	32	07 (21.8%)	25 (78.1%)
2 <sup>nd</sup> year Male	33	14 (42.4%)	18 (54.5%)
2 <sup>nd</sup> year Female	16	02 (12.5%)	14 (87.5%)

3 <sup>rd</sup> year Male	24	09 (37.5%)	15 (62.5%)
3 <sup>rd</sup> year Female	20	05 (25%)	15 (75%)

Table 2: Comparison of psychiatric symptoms in both gender scored=>20

During the past 2 weeks:	Response	Male	Female	Total
Have you been sleeping less?	Always	18	8	26(21%)
	Mostly	21	24	45(37%)
	Sometimes	17	19	36(29.7%)
	Never	08	5	13(10.7%)
Have you had lack of interest in your daily activities?	Always	8	8	16(13.2%)
	Mostly	22	15	37(30.5%)
	Sometimes	27	30	57(47%)
	Never	06	3	9(7%)
Have you lost interest in your hobbies?	Always	12	10	22(18%)
	Mostly	36	18	54(44.6%)
	Sometimes	07	16	23(19%)
	Never	09	12	21(17%)
Have you been anxious?	Always	21	10	31(25.6%)
	Mostly	26	29	55(45%)
	Sometimes	12	13	52(42.9%)
	Never	03	5	8(6.6%)
Have you had sensation of impending doom?	Always	11	5	16(13.2%)
	Mostly	15	11	26(21%)
	Sometimes	29	32	61(50%)
	Never	06	8	16(13.2%)
Have you had difficulty in thinking clearly?	Always	3	5	8(6.6%)
	Mostly	18	12	30(24.7%)
	Sometimes	30	29	59(48.7%)
	Never	10	10	20(16.5%)
Have you preferred to be alone?	Always	20	10	30(24.7%)
	Mostly	16	18	34(28%)
	Sometimes	20	21	41(33.8%)
	Never	9	5	14(11.5%)
Have you felt unhappy?	Always	5	6	11(9%)
	Mostly	15	17	32(26%)
	Sometimes	35	26	61(50%)
	Never	09	7	16(13.3%)
Have you felt hopeless?	Always	2	2	4(3%)
	Mostly	4	8	12(9.9%)
	Sometimes	25	20	45(37%)
	Never	33	25	58(47.9%)
Have you felt helpless?	Always	3	1	4(3%)
	Mostly	6	11	17(14%)
	Sometimes	25	19	44(36%)
	Never	28	22	50(41.3%)
Have you been worried?	Always	4	10	14(11.5%)
	Mostly	22	19	41(33.8%)
	Sometimes	29	22	51(42%)
	Never	7	3	10(8.2%)
Have you cried?	Always	2	4	6(4.9%)
	Mostly	5	14	19(15.7%)
	Sometimes	26	28	54(44.6%)
	Never	30	9	39(32%)

Table 2: Comparison of somatic symptoms in both gender scored=>20

During the past 2 weeks:	Response	Male	Female	Total
Have you had loss of appetite?	Always	04	06	10(8.2%)
	Mostly	19	21	40(33%)
	Sometimes	30	19	49(40%)
	Never	12	10	22(18%)
Have you had retrosternal burning?	Always	02	02	04(3%)
	Mostly	07	08	15(12%)
	Sometimes	27	26	53(43.8%)
	Never	27	22	49(40%)
Have you had indigestion?	Always	6	8	14(11.5%)
	Mostly	9	11	20(16.5%)
	Sometimes	23	27	50(41%)
	Never	25	18	43(35.5%)
Have you had nausea?	Always	02	05	07(5.7%)
	Mostly	10	07	17(14%)
	Sometimes	28	27	55(45%)
	Never	21	20	41(33.8%)
Have you had constipation?	Always	02	02	04(3%)
	Mostly	05	11	16(13%)
	Sometimes	24	27	51(42%)
	Never	31	18	49(40%)
Have you felt difficulty in breathing?	Always	01	03	04(3%)
	Mostly	04	07	11(9%)
	Sometimes	18	23	41(33.8%)
	Never	37	23	60(49.5%)
Have you felt tremulous?	Always	3	6	9(7%)
	Mostly	08	04	13(10.7%)
	Sometimes	35	33	68(56%)
	Never	15	16	31(25.6%)
Have you felt numbness of hands and feet?	Always	02	0	02(1.6%)
	Mostly	11	13	24(19.8%)
	Sometimes	30	29	59(48.7%)
	Never	20	16	36(29.7%)
Have you felt a sensation of tension in your neck and shoulders?	Always	05	10	15(12%)
	Mostly	19	10	29(23.9%)
	Sometimes	28	26	54(44.6%)
	Never	15	08	23(19%)
Have you had headaches?	Always	03	10	13(10.7%)
	Mostly	16	12	28(23%)
	Sometimes	39	33	72(59.5%)
	Never	05	03	08(6.6%)
Have you felt pain all over your body?	Always	03	05	08(6.6%)
	Mostly	17	20	37(30.5%)
	Sometimes	31	27	58(47.9%)
	Never	10	08	18(14.8%)
Have you passed urine more frequently?	Always	08	05	13(10.7%)
	Mostly	17	17	34(28%)
	Sometimes	29	27	56(46%)
	Never	08	10	18(14.8%)

## DISCUSSION

Psychological wellbeing is essential for medical students, for the patients they met and for their future medical practice. The fear of exams is not unreasonable but excessive fear interferes with performance. Excessive worry can be very debilitating and interfere with the results if not managed properly.

In our study we found that majority of students experience depression during exams. This study shows more proportion of female medical students have depression as compare to male students. This finding is in accordance with finding of Deborah Goebert and others<sup>9,10</sup>.

In our study 66.4% students had depression. It is comparable to studies conducted in Beirut, Turkey and US<sup>11,12</sup>. We conducted this study during exams, so percentage was significantly high. This is in accordance with the study conducted on Chinese medical students<sup>13</sup>, where more than half were found to be depressed with 2% having severe depression. In our study trends show more than half students had disturbed sleep, lack of habits and interest in daily routine.

Anxiety and depression can lead to negative outcomes including medical school dropout, impaired ability to work efficiently, deterioration in relationships and increased suicidal tendency and compound existing problems of health care provision. There is need for greater attention to the psychological well being of medical students.

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