

# Prevalence of Anxiety among Al-Qadisia Medical Students

## مدى انتشار القلق بين طلبة كلية طب القادسية

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### الخلاصة

**الهدف:** تهدف الدراسة لمعرفة مدى انتشار القلق بين طلاب كلية طب القادسية .

**المنهجية:** أجريت دراسة مقطعية على 290 طالبا وطالبة في كلية طب القادسية (101 من الذكور و 189 من الإناث)، في محافظة الديوانية، للفترة من الأول من آذار إلى الثلاثين من مايس 2012 تم استخدام استبيان التقارير الذاتية للطلاب، والمقابلة وجها لوجه مع الطلاب المشمولين بالدراسة. وقد تم اختيار الطلبة على أساس استعدادهم بعد أن تم شرح الغرض من الدراسة لهم. وقد شملت الدراسة كافة المراحل من المرحلة الأولى إلى المرحلة السادسة. تم استخدام الإحصائي الوصفي كنسبة المئوية والتكرار، وأسلوب تحليل البيانات الإحصائي الاستنتاجي باستخدام مربع كاي باستخدام البرنامج الإحصائي (spss 12)

**النتائج:** من المجموع الكلي (290) كان (139) يعانون من الاضطرابات النفسية الإيجابية (القلق)، مما يعني نسبة انتشار الاضطرابات بمعدل 47.9%. وكانت الأعلى بين طلبة المرحلتين الأولى والثانية (65.7% و 57.5%) بالمقارنة مع بقية المراحل {المرحلة الثالثة 39.5%، الرابعة 30.5%، الخامسة 36.8%، والسادسة 29%} بالتعاقب.

**الاستنتاجات:** استنتج من الدراسة ان هناك نسبة عالية من طلاب كلية طب القادسية يعانون من القلق وفي كافة المراحل .

**التوصيات:** توفير عيادات استشارية للأمراض النفسية لتشخيص حالات الإصابة بالقلق وتوفير الدعم اللازم. وتشجيع الدراسات المستقبلية لاكتشاف الأسباب المؤدية لهذه الحالات .

### ABSTRACT:

**Objectives of the study:** The study aims to determine the prevalence of anxiety among the students of the Faculty of Medicine of Qadisia.

**Methodology:** The study was cross-sectional at 290 students in the Faculty of Medicine Qadisiya (101 males and 189 females) , in the province of Diwaniya , for the period from 1<sup>st</sup> of March up to 31<sup>st</sup> of May 2012. a questionnaire self-reports of the students was used. The students covered study based on their readiness after the purpose of the study was explained to them, the study included all phases of the first stage to the sixth stage. The result was analyzed by using descriptive statistical methods like percentage and frequency, and inferential statistical methods appropriate such as Chi-square by using spss 12.

**Results:** out of (290) there were (139) suffer from mental disorders positive (anxiety), giving a prevalence rate of 47.9%. The prevalence is highest among students of first and second phases (65.7 % and 57.5 %) compared with the rest of the stages {third 39.5 % , fourth 30.5 % , fifth 36.8 % , and sixth 29% } respectively.

**Conclusions:** The study concluded that there is a high percentage of students from the Faculty of Medicine Qadisia suffer from anxiety in all stages.

**Recommendations:** providing psychiatric counseling Clinics, to diagnose cases of concern and to provide the necessary support. In addition, encourage future studies to discover the causes of these cases

**Keywords:** Prevalence , Anxiety , Medical Students

### INTRODUCTION:

Medical education is perceived as stressful. High levels of stress have been documented in medical students in various studies <sup>(1-5)</sup>. Amongst medical students, stress has been reported to be due to academic demands, exams, inability to cope, helplessness, increased psychological pressure, mental tension and too much work load<sup>(6)</sup>. The transition

from preclinical to clinical training has been identified as a crucial stage of medical school regarding student stress <sup>(1)</sup>.

All this can result in decreased life satisfaction among students <sup>(2)</sup>. Stress during medical school can lead to problems later in professional life compromising patient care <sup>(3)</sup>. Several studies have reported high rates of psychological morbidity amongst medical students using various instruments <sup>(4, 5)</sup>. Such findings are most likely related to academic, financial and social demands that college environments place on students at a time when they are also involved in issues related to life style and careers.

Retrieving knowledge about psychiatric morbidity is important as it can help in implementing preventive mental health programs. There is no study available, which assesses the prevalence of anxiety after the change in examination methodology such as the introduction of problem based learning, objective structured performance evaluation and greater integration of disciplines in recent years. We were also unable to find any study assessing psychiatric morbidity in Iraq. The study was, carried out to determine the prevalence of anxiety among medical students of Al-Qadisia medical college.

### **OBJECTIVES OF THE STUDY:**

1. It will yield information about prevalence of psychiatric morbidity (anxiety) in medical students at this area.
2. It will give an idea of the psychological health of the students who suffer from any psychological problem.

### **SUBJECTS AND METHODS:**

This cross-sectional study was carried out on students over the period from 1<sup>st</sup> of March up to 31<sup>st</sup> of May 2012.

The approval was obtained from the Dean of the college before administering questionnaires. Verbal consent taken from students before distributing questionnaires and confidentiality ensured.

Students who had spent more than six months in college were included in this study. Students who reported presence of a physical illness at the time of survey excluded. Data collected via a self-administered questionnaire, which was distributed among students after explaining the purpose of study and taking verbal consent.

The questionnaire was handed out to students who were present at the time of distribution. The students were instructed to return the completed questionnaire. We distributed the forms, which were returned later on. A total of 290 out of 458 distributed forms were received with a response rate of 63.1%.

A self administered questionnaire was given to the students, present in the class and willing to participate in the study.

The instrument used to assess the anxiety level by using CIDI (version 3.0). The CIDI is a comprehensive, fully-structured interview designed to be used by trained interviewers for the assessment of mental disorders according to the definitions and criteria of ICD-10 and DSM IV.

The result was analyzed by using descriptive statistical methods like percentage and frequency, and inferential statistical methods appropriate such as Chi-square P-value of <0.05 was considered statistically significant by using The Statistical Package for Social Sciences Software (SPSS; version 12)

## RESULTS:

**Table (1) : Anxiety according to Bach No. & Gender of respondents:**

Bach No.	No. of students		Total	Anxiety					
	Male	female		Male		Female		Total	
				No.	%	No.	%	No.	%
1 <sup>st</sup> class	26	50	76	14	53.8	36	72	50	65.7
2 <sup>nd</sup> class	27	39	66	12	44.4	26	66.6	38	57.5
3 <sup>rd</sup> class	12	31	43	4	33.3	13	39.4	17	39.5
4 <sup>th</sup> class	12	24	36	4	33.3	7	29.1	11	30.5
5 <sup>th</sup> class	16	22	38	5	31.2	9	40.9	14	36.8
6 <sup>th</sup> class	8	23	31	2	25	7	30.4	9	29.0
Total	101	189	290	41	40.5	98	51.8	139	47.9

Table 1 shows that the prevalence of anxiety in students of 4th year, 3rd year, 2nd year and 1st year was 49%, 47%, 73% and 66% respectively. It was significantly higher in 1st year and 2<sup>nd</sup> year students, as compared to 4<sup>th</sup> year and 3<sup>rd</sup> years students.

**Table-2: Association of anxiety with demographic and social factors**

Variables		No. of students	Anxiety		p value
			No.	%	
Age	< 19 Years	142	88	61.9	0.1
	20-22 Years	117	42	35.89	
	> 22 Years	31	9	29	
Gender	Male	101	41	40.5	0.001
	Female	189	98	51.8	
Locality	Urban	212	114	54.02	0.21
	Rural	78	25	32.04	
Year of Study	1st Year	31	50	66	0.34
	2nd Year	38	38	59	
	3rd Year	36	17	41	
	4th Year	43	11	33	
	5th Year	66	14	37	
	6th Year	76	9	29	
Total Family Income	< 250000 ID	67	28	41.7	0.32
	250000-500000	71	45	63.3	
	500000-1000000	74	36	48.6	
	1000000-300000	78	30	38.4	

Table 2 shows that there were 458 students in 6th year to 1st year. Of these 290 (63.1%) were present during the survey. Among them 101 (34.8%) were males and 189

(65.2%) females. Using anxiety scale it was found out 139 (47.9%) students had anxiety. Among them 93 (66.9%) were females and 46 (33.1%) males. It was seen that monthly household income, and locality did not have any effect on prevalence of anxiety. There were significant relationship between gender and prevalence of anxiety at  $p \leq 0.05$  level.

## DISCUSSION

In this study, 47.9% of the students had anxiety. It is comparable to the prevalence of anxiety reported in US (49%),<sup>(1)</sup> Beirut (63%),<sup>(2)</sup> Turkey (27.1%),<sup>(3)</sup> Sweden (12.9%),<sup>(4)</sup> Bosnia (66.5%),<sup>(5)</sup> Brazil (40.2%),<sup>(6)</sup> Iran (44%),<sup>(7)</sup> and Zimbabwe (64.5%)<sup>(8)</sup>

Medical students have to deal with stressors specific to medical school in addition to normal stressors of everyday life which explains this high prevalence of anxiety.

The results of our study differ significantly from those conducted earlier in Karachi which reported prevalence rates of 60% and 70% respectively<sup>(9)</sup>. This may be due to the difference in teaching and assessment methodologies including introduction of problem based learning and objective structured performance evaluation in the recent years.

Another reason may be the sample size difference (290 vs. 142 and 189). Different sociopolitical situation of the cities and socio demographic background of participants can also be a contributor in this regard.

In the present study anxiety decreased with increasing age. This may be due to better coping strategies adopted by senior students. High prevalence of anxiety in females is consistent with other studies. It may be because females are more likely to report concern, stress due to self expectation, feeling of lack of competence and tendency to over report symptoms.<sup>(10)</sup>

Lower levels of anxiety in 6th Year shows that students adapt to stress of clinical training after spending a year in it. Anxiety can lead to negative outcomes including medical school dropout, impaired ability to work efficiently, deterioration in relationships, burnout, 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.

It has been reported that medical students are reluctant to seek appropriate help for psychological problems and view it as a weakness. This issue needs to be addressed and students should be encouraged to seek help along with provision of adequate facilities<sup>(11)</sup>.

Information about effective coping strategies i.e. active coping efforts and ineffective means i.e. avoidant coping efforts of dealing with stress might be helpful in preventing distress. Medical schools should encourage students to spend adequate time on their social and personal lives and emphasize the importance of health promoting coping strategies. Recreational facilities should be provided at the campus<sup>(12)</sup>.

Preventive programming efforts should begin early in medical education and address a wide variety of concerns from academic to interpersonal relationships and financial worries. Early signs of anxiety symptoms among medical students should be addressed. Individual as well as organizational interventions should be targeted to prevent excessive stress and burnout among medical students.

Anxiety can be taken as reliable indicator for assessment of mental illness in a community<sup>(13)</sup>. The emotional status of students during medical school training has been a source of concern, reported as early as it may affect the overall performance of students and lead to a cascade of consequences at both personal and professional levels.

Several studies have reported significant distress among medical students.<sup>(14-17)</sup> On the other hand some studies have found little or no evidence of stress among medical students<sup>(18)</sup>.

In our study 47.9% students had anxiety. The prevalence appears to be high. Since the questionnaire was self-administered and anonymous, therefore further work-up on students could not be carried out.

### **LIMITATIONS OF THE STUDY:**

1. Lack of baseline information concerning mental status of medical students at the time of entrance in the medical school.
2. Lack of population based data to support our results and compare our findings with the general population.

### **CONCLUSIONS:**

It is concluded that a substantial proportion of medical students had an ongoing psychiatric condition. Interventions addressing the psychological health of medical students might be directed towards those revealing anxious symptoms already present during first year of medical school.

### **RECOMMENDATIONS:**

1. Baseline data should be established at the time of entrance.
2. Further evaluation of positive cases should be done by a psychiatrist to improve mental health of students.
3. Studies for monitoring prevalence of anxiety will help in instituting interventional strategies.
4. Interventions that help students to cope with stress to make a smooth transition from school to medical college and also to adjust to different learning environments during different phases of medical education.

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