




Prevalence of Generalised Anxiety Disorders Among Clinical Training Students at the University of Sharjah

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Introduction: This study aimed to determine the prevalence of anxiety among clinical training students. Despite the existence of interventions that address anxieties, lack of data on the size of the problem, especially in the Middle East where mental health stigmatized, means that outcomes may not be maximized.

Materials and Methods: Our study was cross-sectional survey of the University of Sharjah (UOS), the United Arab Emirates students undergoing clinical training in health sciences. The participants were selected from all the three UOS campuses: medical and science colleges; women's colleges; and men's colleges. A sample of 219 clinical training students were randomly sent an electronic link to participate on an online survey. The study received ethical approval from the UOS Research Ethics Committee number is REC-20-03-04-02-S.

Results: The mean score for state anxiety was 47.24 ± 1.31 and the mean score for trait anxiety was 46.82 ± 1.21 . These scores indicated a high level of anxiety among students undertaking clinical training. Overall, 63% of the sample were classified as having high state anxiety, and 62% had high trait anxiety.

Conclusion: This study shows clinical training students experience high levels of state and trait anxiety. It is necessary to address this issue to improve the conditions and circumstances for students entering clinical training. It may also be necessary to implement strategies to enable students with anxiety to perform well in clinical training.

Keywords: anxiety, clinical students, clinical practice, mental health, STAI

Introduction

Experiencing occasional stress and tension is a normal part of life. However, individuals with anxiety disorders often experience excessive and continual fear and worry about various situations, including daily life situations. Often, anxiety disorders, such as Generalized Anxiety Disorders involve repeated episodes of sudden feelings of excessive anxiety and fear or terror that can cause panic attacks. The National Health Service (NHS) defines Generalized Anxiety Disorder as a long-term condition. It makes you feel anxious about a wide range of conditions. For those with Generalized Anxiety Disorder, anxiety is felt most days and difficulty feeling relaxed. It can cause both mental and physiological signs, such as: feeling restless or worried, trouble concentrating or sleeping, and dizziness.¹ The general cause of generalized anxiety disorder is not fully understood. Anxiety disorders develop from a complex set of risk factors, including genetics, brain chemistry, personality, and life events. Treatment can involve psychological

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therapies, such as cognitive behavioral therapy (CBT) and psychiatric prescribed medications such as antidepressant called selective serotonin reuptake inhibitors (SSRIs). This can interfere in day-to-day activities, and may be difficult to control regardless of general personal characteristics.²

Stress and burnout are common among practicing physicians, nurses, and physiotherapists, as well as among medical students. Perceived stress is associated with elevated rates of depression, relationship problems, anxiety, and suicide.³ Healthcare professionals and medical students who are anxious may not be able to offer as good quality treatment as those who do not experience anxiety. In addition to being a widespread mental health condition, anxiety is also among the most misunderstood.

Globally, about one in three medical students have anxiety—a prevalence rate which is higher than the general population. Quek et al argue that stress or anxiety is an important issue in medical education because it has the potential to impede clinical learning and performance.⁴ They found the prevalence of anxiety was 33.8% among medical students globally, which is substantially higher than the general population. Francis et al believe that the effort to destigmatize help-seeking behavior for anxiety, and mental health issues in general, should start with the administrators and leaders of medical schools.⁵ Medical students are vulnerable to anxiety due to the nature of their academic life. In Malaysia,

the prevalence of anxiety symptoms among medical students in a local university were lower than the international studies done, reflecting perhaps increased resilience in this population.⁶

Stress is a particularly important issue in education because it has the potential to impede learning and performance.⁷ Some studies also support that nursing students suffer from stress in their clinical practice.^{8,9} The US National Institute of Mental Health indicates anxiety disorder symptoms can be classified by feelings of restlessness, fatigue, and difficulty maintaining focus.⁴ Anxiety disorders have the highest prevalence compared with other common mental health disorders, with a lifetime prevalence of over 15%.⁴ For example, anxiety disorders are the most common mental health problem in the US, affecting 40 million adults or 18% of the population each year. However, the prevalence of anxiety disorders in the Middle East remains less known, including in the United Arab Emirates (UAE).

Clinical practice is an essential part of the nursing education program. In Indonesia, nursing students experienced stress and anxiety during their clinical activities.⁹ Another study conducted in Malaysia indicated that among nursing students, clinical assignment was the main stressor and cause of anxiety.¹⁰

In Saudi Arabia, a study revealed that half of the pharmacy students suffered from anxiety incidence during their studies at the university.¹¹ Anxiety is a leading concern among college students. It affects 41.6% of students, with depression affecting 36.4%.⁵ Stress and anxiety can interfere with learning, affect academic performance, and impair performance in clinical practice.³ Research suggests that high levels of stress and anxiety in medical education may have negative effects on students' learning process and clinical success.¹² This anxiety and stress among medical students may be related to difficulties in clinical practice and the lack of experience in performing academic tasks.⁷ Anxiety and stress among medical students have received research attention because of the significant implications.⁸ Educational practice demands, and stress cause a negative effect on the students' psychological well-being. This condition can precipitate depression and anxiety.¹³

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In nursing education, clinical training is essential to provide students with experience so they can achieve success in the education process. Nursing students have been reported to experience high levels of stress and anxiety during their education.³ A previous study found nursing students considered clinical training as one of the most anxiety-producing aspects of the curriculum, and this anxiety had negative impacts on their learning, performance, and well-being.⁹ Another study reported the clinical setting was the main cause of stress and anxiety among students, with initial clinical practice considered the most stressful period in a student's education.^{9,10} Similarly, physiotherapy students commonly experience psychological distress during clinical training, with specific stressors being patients' suffering, academic pressure, and tension during interaction with clients.¹⁴

A previous study reported feeling unprepared was a common thread among anxious students, meaning students felt anxious while anticipating their clinical practical, and even afterward when they thought about their clinical experience.³ Most research concerning anxiety among students focused on general anxiety in the medical, dental, and nursing fields.^{4,11} Medical school is perceived more stressful and a cause for general anxiety compared with other graduate programs. However, research and information concerning the prevalence and severity of anxiety among students in other healthcare professions is limited and difficult to find.^{13,14}

A study conducted in Turkey investigated medical students' anxiety related to clinical training, and compared this anxiety between two medical schools that applied different preclinical curricula.¹⁵ The two university samples had similar distributions of sex and age (60.0% male, mean age 21.67±1.06 years; 59.3% male, mean age 21.96±0.98, years), and the difference in mean overall anxiety scores between the two student groups was not statistically significant.¹⁵

Anxiety may decrease students' academic performance, professionalism, and ability to manage their patients' healthcare. A previous study reported the prevalence of study-related anxiety among female medical students (N=93) was 72.26%.¹⁶ That study found anxiety was more common among final-year students (83.10%), followed by first- and second-year students (75%), but less common among fourth-year students (63.23%). In terms of severity, the majority of students had mild (41.07%) or moderate (37.51%) anxiety.¹⁶ Another study investigated anxiety and depression among students

(288 males, 105 females) at a medical college in Saudi Arabia and reported the prevalence of anxiety and depression was 66.6% for females and 44.4% for males (p=0.01).¹⁷ Among first-year students the prevalence was 89.7% in females and 60% in males (p=0.006), although no suicidal ideation was reported by either males or females.¹⁷ It is of concern that no such information is available for students in the UAE. Therefore, we surveyed students who entered clinical training regarding anxiety to establish whether this problem existed among students at the University of Sharjah (UOS). Specifically, we aimed to determine if students from the UOS College of Health Sciences experienced anxiety when they attended clinical training and clarify the prevalence of anxiety in this population.

Methodology

Research Design

This study used a descriptive cross-sectional design to investigate anxiety among undergraduate clinical training students at the UOS College of Health Sciences. Simple random sampling was used to enrol participants, which gave an equal chance for all participants to be involved in the study.¹⁸

Research Population and Sample

Participants in this study comprised undergraduate students from the seven departments in the College of Health Sciences, University of Sharjah (UOS) undergoing the clinical training programs as part of their degree training. The seven departments include: Medical Diagnostic Imaging, Medical Laboratory Sciences, Physiotherapy, Nursing, Nutrition, Health Services Administration, and Environmental Health. Female students comprise about 96% of students in the College of Health Science. We reflected this female ratio in the sample estimation. We estimated the sample size to be approximately 300 students using Centers for Disease Control and Prevention, Atlanta, Statistical Epi-Info 7 calculator.¹⁹ The team distributed the questionnaires to more than 220 students, but 10 of these participations were excluded from the analyses because of invalid answers. We were not able to achieve our target of 300 participants due to the Covid-19 Pandemic and other several University constraints such as students undertaking exams and other activities – constituting the limitation of the study. Only 210 participants participated.

Consent and Ethical Approval

The consent form and information sheet were provided to the respondents in both Arabic and English. Ethical approval for this study was obtained from the UOS Research Ethics Committee. The Committee approval number is REC-20-03-04-02-S. All participants provided informed consent, and this study was conducted in accordance with the Declaration of Helsinki.

Patient and Public Involvement

No patients were involved in this study.

Research Instrument

The State-Trait Anxiety Inventory for Adults (STAI) was used to collect data on anxiety among participants. The STAI is commonly used to measure anxiety among adults, and was developed by Spielberger in 1968.²⁰ The STAI has been validated in various countries with clinical and non-clinical samples.^{6,21,22} It uses a relatively brief self-report scale to assess both state and trait anxiety and is suitable to be administered in both clinical practice and research. The STAI has been translated into the Greek, Dutch, Japanese, Chinese, and Malaysian languages, with these versions consistently reported to have acceptable reliability.²¹

In this study, the survey was conducted online, and distributed to students using multiple social media platforms. The questionnaire was available in both the English and Arabic languages. The Arabic version of the STAI had adequate internal consistency reliability similar to that reported in the international literature, suggesting it was appropriate for assessing anxiety in Arabic speaking populations.^{20,21}

Scoring Method

The STAI is a commonly used measure of state and trait anxiety.²⁰ It comprises separate self-report subscales for state anxiety (STAI-S) and trait anxiety (STAI-T). The STAI-T subscale comprises 20 statements that ask people to describe how they generally feel. The STAI-S subscale includes 20 statements that investigate their feelings at a particular moment in time. The STAI-S subscale can be used to determine actual levels of anxiety intensity induced by stressful procedures or events. The validity of the STAI rests on the assumption that the respondent has a clear understanding of the instructions for the “State” and “Trait” subscales.^{6,23} Each question is rated on

a 4-point scale (not at all, somewhat, moderately so, very much so), giving a range of possible scores of 20–80 for each subscale. STAI subscale scores are commonly classified as “no or low anxiety” (20–37), “moderate anxiety” (38–44), and “high anxiety” (45–80).^{20,21,24}

Statistical and Data Analysis

Data were coded and cleaned using IBM SPSS Version 13.0.²⁵ Statistical analysis was also performed using the SPSS software and emphasis was mainly on descriptive statistics. Data analysis was performed for numerical values. Data for categorical variables were first coded and then analysed using descriptive statistics (eg frequency and percentage). These were reported as frequencies and percentages, means and confidence intervals from quantitative data. Results were also presented using tables. We were not able to test the effect of the different variables on anxiety since this was mainly a descriptive study.

Results

Demographic Data

Participants’ demographic data are summarized in [Table 1](#) below. Most participants were female (89%, n=187) which was in line with gender distribution within the population of study at the College of Health Sciences. Most of the participants (84%, n=72) were aged 18–22 years, and 72% of them (n=152) lived off-campus. Fifty-nine (28%) students were from the Nursing department, and 21% (n=44) were from the Physiotherapy department.

Table 1 Participants’ Demographic Data

Variables	n	%
Gender		
Male	23	11
Female	187	89
Residency		
Off-campus	152	72
On-campus	58	28
Age, years		
18–22	177	84
23–25	33	16
Marital status		
Single	194	92
Married	12	6
Other	4	2

Table 2 Percentage Participants in the Study

Department	n	%
Medical Diagnostic Imaging	23	11
Medical Laboratory Sciences	29	14
Physiotherapy	44	21
Nursing	59	28
Nutrition	33	16
Healthcare Management	10	5
Environmental Health	12	6
Academic level	n	%
Sophomore	11	5
Junior	64	31
Senior	135	64
Sleep, hours		
≤3	10	5
4–5	74	35
6–7	100	48
≥8	26	12
Physical activity, per week		
0 times	78	37
1–2 times	86	41
3–4 times	29	14
5 times	17	8
Smoking status		
Never	170	81
Former	12	6
Current	28	13

Table 2 shows that the majority of participants (64%, n=135) were seniors, reflecting the years of study (senior level) when Departments require their students to undertake clinical training. Some Disciplines require their students to undergo clinical training a later time of their study. Most of the participants were single (92%, n=194), and many of the participants had never smoked (81%, n=170). Over half of the participants had adequate sleep (6–7 hours: 48%, n=100; 8 hours: 12%, n=26). However, most participants reported relatively low physical activity: 1–2 times per week (41%, n=86) and no activity (37%, n=78).

Tables 3 and 4 present the mean State and Trait anxiety scores by the demographic variables. The mean State and Trait anxiety levels were a little higher for females than for males, and higher in those aged 18–22 years compared with older students. In addition, higher mean State and Trait anxiety scores were observed among students living off-campus than those living on campus. Among all departments, students from the Health Services Administration

department showed the highest State and Trait Anxiety scores. Students that slept for 5 hours or less had higher State and Trait anxiety scores than those that slept for more than 5 hours. Students that reported no physical activity had higher State and Trait anxiety scores than other students, and those that had never smoked had lower scores than former or current smokers. We chose to use confidence intervals to estimate intervals in which the true value of the means would lie.

Table 5 presents the prevalence percentages for levels of State and Trait anxiety (no/low, moderate, or high) based on the STAI cut-off points.²⁰ Over half (57%, n=33) of the students living on campus had high State anxiety and 53% (n=31) had high Trait anxiety. The female students had higher Trait Anxiety than males, although the male numbers were small. In absolute numbers, Physiotherapy, Nursing and Nutrition had the largest number of students with high Trait Anxiety. However, in terms of percentages, the lowest Trait Anxiety was exhibited by Nursing students.

Most of the senior students had high State (64%, n=87) and Trait (63%, n=85) anxiety (Table 6). Only 63% of the junior participants had high anxieties. Those who were single, smokers or not involved in physical activity had high State and Trait Anxiety in general.

Results showed that 63% (n=132) of the sample had high level of State anxiety, and 62% (n=130) had a high level of Trait anxiety. The overall mean score for State anxiety was 47.24±1.31, and that for Trait anxiety was 46.82±1.21 (Table 7). These mean scores suggested there was a high level of anxiety in the sample population. Given the sample size, we can safely generalize to the rest of the UOS population.

Discussion

The present study revealed a high prevalence of both State and Trait anxiety among the sample population. Fewer female students had high levels of State and Trait anxiety (62% and 60%, respectively) compared with male students (70% and 74%, respectively). These findings were inconsistent with a study involving students in healthcare professions that found a higher percentage of females had high anxiety compared with males.²⁶

Our findings of high State (89%) and Trait (68%) anxiety among students that reported sleeping for 4–5 hours or less (60%) was consistent with previous research that suggested sleep deprivation was associated with anxiety disorders.²⁶

Table 3 Mean Anxiety Scores and Confidence Intervals by Demographic Characteristics

Demographic Characteristics		Anxiety	Mean	Std Dev	95% CI	Anxiety	Mean	Std Dev	95% CI
Gender	Male	State	46.00	9.77	±3.99	Trait	46.22	8.58	±3.50
	Female	State	47.39	9.67	±1.39	Trait	46.89	9.03	±1.29
Age, years	18–22	State	47.51	9.70	±1.54	Trait	47.05	9.14	±1.45
	23–25	State	45.79	9.50	±2.44	Trait	45.61	7.95	±2.05
Accommodation	Off-campus	State	48.13	9.79	±1.44	Trait	47.65	9.09	±1.34
	On-campus	State	44.90	9.00	±3.07	Trait	44.64	8.31	±2.83
Marital status	Single	State	47.11	9.65	±1.36	Trait	46.64	8.93	±1.26
	Married	State	47.17	10.85	±6.14	Trait	48.08	9.96	±5.63
	Others	State	53.75	5.12	±5.02	Trait	51.75	7.93	±7.77
Department	MDI	State	51.23	11.18	±4.57	Trait	49.00	9.06	±3.70
	MLS	State	47.45	8.08	±2.94	Trait	47.07	9.02	±3.28
	Physio	State	44.59	9.04	±2.67	Trait	44.20	8.35	±2.47
	Nursing	State	46.97	9.45	±2.41	Trait	46.44	8.67	±2.21
	Nutrition	State	46.67	9.90	±3.38	Trait	47.06	9.20	±3.14
	HCM	State	53.90	9.37	±5.81	Trait	52.50	9.30	±5.76
	Env. Health	State	44.33	10.85	±6.14	Trait	44.00	9.96	±5.63
Academic level	Sophomore	State	46.45	8.32	±4.92	Trait	45.55	8.14	±4.81
	Junior	State	50.08	9.79	±2.40	Trait	49.02	9.24	±2.26
	Senior	State	45.96	9.49	±1.60	Trait	45.88	8.77	±1.48

Those who were current smokers also reported high State (86%) and Trait (89%) anxiety. A previous study on smoking and anxiety found a strong association between smoking and new-onset mood and anxiety disorders among younger adults.²⁸ Although this finding highlighted the association between smoking and anxiety, the direction of the relationship again remains unclear.

Over half (57%, n=33) of the students living on campus had high State anxiety and 53% had high Trait anxiety. Similarly, the majority (64%, n=87) of senior students had high State anxiety and high Trait anxiety of about 63%. Thus, being a resident off-campus was increased your chances of scoring high State and Trait anxiety. This is consistent with the literature findings.²⁹ In terms of marital status, it did not matter whether one was single or was married, majority of the respondents scored high on the Trait anxiety above 50% and above 50% for the State anxiety.

The overall mean score for State anxiety and Trait anxiety were significantly high, suggesting a high level of anxiety in the university students involved in clinical practice as demonstrated in the literature. This calls for the University to put in place policies and support structures for students engaged in clinical/practicum subjects. The literature indicated that nursing students considered clinical training, an anxiety-producing aspects of their study.³⁰ This also included their learning, performance, and well-being.³¹ Other causes considered initial clinical practice the most stressful period causing psychological distress. However, STAI scores by those who were involved in physical activity kept decreasing as the number of weekly physical activity increased.^{13,31} At the very minimum, physical activity, more than twice a week reduced the level of anxiety. This would imply that, students should be given opportunity and chances to be involved in more physical activity to keep their anxieties down.

Table 4 Mean Anxiety Scores and Confidence Intervals for non-Demographic Variables

Sleeping hours								
≤3	State	48.50	11.30	±7.00	Trait	49.40	9.67	±6.00
4–5	State	49.81	9.56	±2.18	Trait	49.16	9.21	±2.10
6–7	State	45.45	9.17	±1.80	Trait	45.13	8.46	±1.66
≥8	State	46.31	10.07	±3.87	Trait	45.65	8.66	±3.33
Physical activity, times per week								
0	State	49.71	9.97	±2.21	Trait	49.18	9.50	±2.11
1–2	State	46.51	9.34	±1.97	Trait	46.09	8.41	±1.78
3–4	State	43.21	9.06	±3.30	Trait	43.03	8.48	±3.09
5	State	46.47	8.56	±4.07	Trait	46.12	7.53	±3.58
Smoking status								
Never	State	46.27	9.12	±1.37	Trait	46.13	8.66	±1.30
Former	State	51.42	12.94	±7.32	Trait	50.42	11.48	±6.49
Current	State	51.32	10.18	±3.77	Trait	49.46	9.10	±3.37

Table 5 State and Trait Anxiety prevalence Levels by Demographic Characteristic

Demographic Characteristics		State Anxiety n (%)			Trait Anxiety n (%)		
		N/Low	Medium	High	N/Low	Medium	High
Gender	Male (n)	5 (22)	2 (9)	16 (70)	4 (17)	2 (9)	17 (74)
	Female	29 (16)	42 (22)	116 (62)	29 (16)	45 (24)	113 (61)
Residency	Off-campus	24 (16)	29 (19)	99 (65)	20 (13)	33 (22)	99 (65)
	On-campus	10 (17)	15 (26)	33 (57)	13 (22)	14 (24)	31 (53)
Age, years	18–22	28 (16)	39 (22)	110 (62)	28 (16)	42 (24)	107 (60)
	23–25	6 (18)	5 (15)	22 (67)	5 (15)	5 (15)	23 (70)
Department	Medical Diagnostic Imaging	3 (13)	8 (35)	12 (52)	4 (17)	5 (22)	14 (61)
	Medical Laboratory Sciences	3 (10)	4 (14)	22 (76)	3 (10)	5 (17)	21 (72)
	Physiotherapy	8 (18)	10 (23)	26 (59)	3 (7)	12 (27)	29 (66)
	Nursing	14 (24)	11 (19)	34 (58)	13 (22)	14 (24)	32 (54)
	Nutrition	2 (6)	9 (27)	22 (67)	6 (18)	7 (21)	20 (61)
	Healthcare Management	0 (0)	1 (10)	9 (90)	0 (0)	2 (20)	8 (80)
	Environmental Health	4 (33)	1 (8)	7 (58)	4 (33)	2 (17)	6 (50)

Table 6 State and Trait Anxiety Levels by Demographic Characteristic

Demographic Characteristics		State Anxiety n (%)			Trait Anxiety n (%)		
		N/Low	Medium	High	N/Low	Medium	High
Academic Level	Sophomore	4 (36)	2 (18)	5 (45)	5 (45)	1 (9)	5 (45)
	Junior	11 (17)	13 (20)	40 (63)	9 (14)	15 (23)	40 (63)
	Senior	19 (14)	29 (21)	87 (61)	19 (14)	31 (23)	85 (63)
Marital status	Single	29 (15)	39 (20)	124 (64)	28 (14)	45 (23)	121 (62)
	Married	3 (25)	3 (25)	6 (50)	3 (25)	2 (17)	7 (58)
	Other	1 (28)	1 (25)	2 (50)	0 (0)	2 (50)	2 (50)
Sleep hours	≤3	1 (10)	3 (30)	6 (50)	1 (10)	3 (30)	6 (60)
	4–5	8 (11)	14 (19)	66 (89)	11 (15)	13 (18)	50 (68)
	6–7	18 (18)	20 (20)	62 (62)	13 (13)	26 (26)	61 (61)
	≥8	7 (27)	7 (27)	12 (46)	8 (31)	5 (19)	13 (50)
Physical activity per week	0 times	10 (13)	12 (15)	56 (72)	9 (12)	16 (21)	53 (68)
	1–2 times	14 (16)	17 (20)	55 (64)	15 (17)	19 (22)	52 (60)
	3–4 times	6 (21)	10 (34)	13 (45)	6 (21)	10 (34)	13 (45)
	5 times	4 (24)	5 (29)	8 (47%)	3 (18)	2 (12)	12 (71)
Smoking status	Never	32 (19)	39 (23)	99 (58)	30 (18)	44 (26)	96 (56)
	Former	1 (8)	2 (17)	9 (75)	2 (17)	1 (8)	9 (75)
	Current	1 (4)	3 (11)	24 (86)	1 (4)	2 (7)	25 (89)

Conclusions, Implications and Limitations

The primary purpose of this study was to investigate the extent of anxiety among university students undertaking clinical practice. This study indicates that there is a high prevalence of anxiety among clinical training students at the UOS, as 63% of the sample had high State anxiety and 62% had high Trait anxiety. The scores for State and Trait anxiety were high across all demographic variables, with overall mean scores of 47.24 and 46.82 for State and Trait anxiety, respectively. This suggests there is an urgent need

to clarify factors associated with anxiety among these students to inform strategies to reduce anxiety and improve the conditions and circumstances for students undergoing clinical training. It is important for educators to recognize students' anxiety during clinical training, and develop anxiety management strategies or interventions to ensure optimal clinical experiences for these students.

This study suggests that the UOS could enhance the clinical orientation program to reduce anxiety and stress among students. UOS administration could raise awareness on campus for students with anxiety and provide support, which could include offering counseling programs and sessions. We suggest that the UOS and training placements provide students with education and training about anxiety and mental health so that students and medical staff will be aware of the physiological aspects of anxiety reactions. Orientation to the hospital and training program may reduce stress and anxiety among students entering clinical training, especially sophomore and

Table 7 Summary Statistics for the Total Sample

Statistics	State Anxiety	Trait Anxiety
Mean	47.24	46.82
Standard deviation	9.67	8.96
Confidence interval (CI)	±1.31	±1.21

senior students, although the stressors may differ for each group. We recommend further comprehensive research on this topic. We also suggest more awareness on mental health and anxiety is needed in the general community to reduce the stigma associated with mental health problems that may make students reluctant to seek help and support.

The present results have important implications for policy, practice, research, and for students themselves. First, having policies that can protect and provide care and attention for students with anxiety may motivate and encourage students to speak up and seek help when needed. Second, determining the prevalence of anxiety in the UAE population will help the university to better understand the areas or situations that trigger anxiety among students, and work toward reducing or eliminating these factors. Third, this study can serve as a base for further investigation focused on improving the clinical training curriculum and providing the best training environment for students. Finally, the present findings can be used to inform specific measures to support students. This will help to provide a better training environment for students, with improved outcomes and benefits.

This study however had some limitations that should be taken into consideration. Firstly, the calculated sample size (n=219) was not achieved as nine of the original 220 participants were excluded because of unreliable data. However, the change in the sample size (n=210) is unlikely to have affected the results, as almost 96% of desired sample size was reached. Secondly, the sample was supposed to be selected using a simple random probability and got affected by COVID-19 pandemic. Furthermore, the survey was supposed to be conducted face-to-face, but an online survey had to be used because of restrictions associated with the COVID-19 pandemic. The results were descriptive and not inferential and this limits the application of the information generated. The survey was disseminated using different social media platforms, and was distributed among students with mutual connections; this might have led to the unreliability of some responses.

Data Sharing Statement

The datasets used and/or analyzed during the current study are available from the corresponding author on reasonable request.

Ethics Approval and Consent to Participate

The consent form and information sheet were provided to the respondents in both Arabic and English. Ethical approval for this study was obtained from the UOS Research Ethics Committee. The Committee approval number is REC-20-03-04-02-S.

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Disclosure

The authors have no competing interests to declare.

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