



## Research Article

# Prevalence of anxiety and depression among physiotherapy students of private institutes in Faisalabad

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## Abstract

**Objective:** The objective of this study was to determine the prevalence, incidence, and related variables of anxiety and depressive disorders among physical therapy students in Faisalabad's private institutes.

**Material and methodology:** This is a cross-sectional study including medical students from the University of Faisalabad's Department of Physical Therapy. Using convenient sampling, 98 subjects were enrolled in the study after the ethics committee approved it. Questions about socio-demographic characteristics like gender, age, and parental education were included in the data collection tool. Descriptive results are represented in the form of Mean  $\pm$  S.D. Chi-square test was applied for comparison of anxiety and depression with other variables. Checked significance at p-value 0.05.

**Results:** Out of 98 participants, 63(64%) were male and 35(36%) were female. Out of 98 participants, 31(31.36%) were in age group of 18-22 years, 39(39.79%) were in age group of 23-26 years and 28(27.57%) were in age group of 27-30 year. Average of age was  $25.22 \pm 2.19$  years. Semester wise students included in the study out of 98 26.53% belonged to 2<sup>nd</sup> semester. 32.65% belonged to 4<sup>th</sup> semester and 40.85% belonged to 6<sup>th</sup> semester. After checking the association between variables and anxiety and depression significant difference were found between all variables with p-values less than 0.05.

**Conclusion:** The study discovered high discomfort among physical therapy students. Furthermore, no significant gender variations in the incidence of anxiety and depression were found. Anxiety and depression have a significant societal and individual cost, including failure in clinical and written exams, medical dropouts, professionalism and personality development.

## Introduction

Anxiety and depression rates in society are seen as distinct indications of a person's mental health. Private institutes have long been regarded among the most difficult, frequently devolving into a hostile atmosphere with requirements that have a severe influence on students' academic achievement, physical wellbeing and psychological health [1-3]. These factors lead to the unusually high frequency of mental problem cases

among medical students, particularly anxiety and depression. It is reported that 15 to 25 percent of undergraduate medical students have psychological suffering during their studies, particularly during clinical training [4,5].

Anxiety and depression have a professional and emotional impact on students. Personal repercussions include relationship breakdowns, substance misuse, health degradation, and a loss of physical energy. Academic performance deterioration,



a reduction in empathy and ethics, academic misconduct, a negative effect on their selection of specialization, and a high frequency of medical mistakes are all professional implications [6-8]. Medical students are at significant risk of acquiring anxiety and depression disorders, that can be severe enough to have serious effects on their emotional, intellectual, and physical health. Minimal management techniques are oriented on these concerns, resulting in a lack of understanding of the fundamental causes of these morbidities and how to address them [9-11]. The objective of this study was to determine the prevalence, incidence, and related variables of anxiety and depressive disorders among physical therapy students in Faisalabad's private institutes.

## Material and methodology

This is a cross-sectional study including medical students from the University of Faisalabad's Department of Physical Therapy. After taking approval from the ethical committee using convenient sampling, 98 subjects were enrolled in the study after the ethics committee approved it. Sample size was calculated using OpenEpi calculator. People outside of Faisalabad were excluded from this study. Questions about socio-demographic characteristics like gender, age, and parental education were included in the data collection tool. Aspects related to the medical school, such as the semester in which they were studying at the time of the survey and which campus were included, as well as parental pressure and whether or not parents were physicians; and aspects related to the medical school, such as the semester in which they were studying at the time of the survey and which campus were included. Under the supervision of a qualified psychologist, levels of anxiety and depression were examined using the Beck Depression Inventory (BDI) and the Beck Anxiety Inventory (BAI). The Center for Cognitive Therapy established the following cut-off points for depression: less than 10= minimal or no depression; 10-18= mild to moderate depression; 19-29= moderate to severe depression; and 30-63= severe depression. In terms of anxiety, the manual's guidelines were followed: a score of less than or equal to 10 indicates no anxiety symptoms, 11-19 indicates mild to moderate anxiety, 20-30 indicates moderate anxiety and 31-63 indicates clinically significant anxiety.

## Statistical analysis

Data was analyzed on SPSS version 22. Descriptive results are represented in the form of Mean ± S.D. Chi-square test was applied for the comparison of anxiety and depression with other variables. Checked significance at p-value 0.05.

## Results

Out of 98 participants, 63(64%) were male and 35(36%) were female (Figure 1). Out of 98 participants, 31(31.36%) were in age group pf 18-22 years, 39(39.79%) were in age group of 23-26 years and 28(27.57%) were in age group of 27-30 year. Average of age was 25.22 ± 2.19 years. Semester wise students included in the study out of 98 26.53% belonged to 2<sup>nd</sup> semester. 32.65% belonged to 4<sup>th</sup> semester and 40.85% belonged to 6<sup>th</sup>

semester (Table 1). After checking the association between Gender with anxiety and depression significant differences were found between both male and female with Anxiety at p-values less than 0.000 and with Depression at p-values less than 0.021. Significant association was founded between age and Anxiety with p-value 0.011. Significant association was founded between age and depression with p-value 0.030. Significant association was founded between semester and anxiety, depression with p-value 0.000. Significant association was founded between pressure from parents and Anxiety with p-value 0.006. Significant association was founded between pressure from parents and depression with p-value 0.001. Significant association was founded between Concern about future and Anxiety with p-value 0.001. Significant association was founded between Concern about future and depression with p-value 0.001 (Table 2).

## Discussion

Medical education has long been suspected as including several stresses that might influence the student's mental health. In our study, nearly 85 percent of the students exhibited depression and anxiety and that's similar with another study done on medical students at a private institution. Depression and anxiety can be used as a valid signal for medical assessment of mental disorders in a population [9-11].

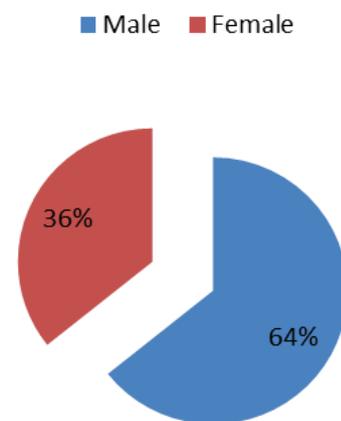


Figure 1: Gender Distribution.

Table 1: Age Distribution of participants.

Variables	Frequency (%)
<b>Age</b>	
18-22	31(31.36%)
23-26	39(39.79%)
27-30	28(28.57)
Total	98(100%)
<b>Semester</b>	
2 <sup>nd</sup> semester	26(26.53%)
4 <sup>th</sup> semester	32(32.65%)
6 <sup>th</sup> semester	40(40.85%)
Total	98(100%)

**Table 2:** Prevalence of Anxiety and depression among physiotherapy students.

Variables		Anxiety			p-value	Depression			p-value
		Yes	No	Total		Yes	No	Total	
Gender	Male	53	10	63	.000	55	8	63	0.021
	Female	30	5	35		28	7	35	
	Total	83	15	98		83	15	98	
Age	18-22	28	3	31	.011	28	2	31	.030
	23-26	36	3	39		37	2	39	
	27-30	26	2	28		24	4	28	
	Total	90	8	98		90	8	98	
Semester	2 <sup>nd</sup> semester	24	2	26	.000	23	3	26	.000
	4 <sup>th</sup> semester	29	3	32		30	2	32	
	6 <sup>th</sup> semester	35	5	40		35	5	40	
	Total	88	10	98		87	10	98	
Pressure from parents	Yes	69	11	80	0.006	71	9	80	.001
	No	10	8	18		8	10	18	
	Total	79	19	98		79	19	98	
Concern about future	Yes	70	15	85	.001	75	10	85	.001
	no	12	1	13		7	6	13	
	Total	82	16	98		82	16	98	

According to studies, females feel higher amounts of stress than males. We found no significant gender differences in the presence of depression and anxiety. Total of 98 students of physical therapy have participated in this study of which 63 were male and 35 were females out of which 55 male participants and 28 females experienced depression and 53 males and 30 females experienced anxiety [12-14].

In this study, among physical therapy (medical) students many students were facing anxiety and depression due to parents' pressure and future concern. Total of 98 students participated in the current study from which 79 experienced anxiety and also 79 experienced depression. It was concluded that there were no significant factors differences in the presence of depression and anxiety [15-17].

Some scholars argue that distinct pressures exist in a university program based on the semester in which the student is enrolled [18-20]. In terms of psychological pressures in medical education, the changeover through pre-clinical towards the clinical training has been regarded as a critical step. During this time, medical students go through psychological changes, were already inexperienced, and are concerned about their future obligations as practitioners. In the current study greater anxiety and depression levels were seen in the students of the 6<sup>th</sup> semester as compared to 2<sup>nd</sup> and 4<sup>th</sup> semesters.

## Conclusion

The study discovered high discomfort among physical therapy students. Furthermore, no significant gender variations in the incidence of anxiety and depression were found. Anxiety and depression have a significant societal and individual cost, including failure in clinical and written exams, medical dropouts, professionalism and personality development.

## Recommendation

Follow-up investigations to monitor the prevalence of depression and anxiety will aid in the implementation of therapeutic techniques at an institutional level.

## Limitation

1. There was no consideration was given to the past family history of stressful or depression occurrences
2. Insufficient sample size was used, higher sample sizes should be explored in future investigations.

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