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Original Research Article

DETERMINATION OF DEPRESSION AND ANXIETY AMONG MEDICAL UNIVERSITY OF LARKANA

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Abstract: *A stressful environment is concerned with medical colleges, and often, they have an adverse effect on physical health, academic performance, and psychological wellness. There is a high percentage of anxiety and depression in the medical curricula, and still, it is unfortunate to see the faces behind the white coats. The study aimed to determine the prevalence of depression and anxiety among medical students at Shaheed Mohtarma Benazir Bhutto Medical University Larkana. The research was conducted from March to June 2023 and included all medical students who had spent at least six months in SMBBMU Larkana and had no physical illness. The results were analyzed using percentages and proportions through SPSS 24. The study found a high incidence of depression and anxiety in medical students, which can negatively affect their learning, productivity, and quality of life, as well as the care of patients. The research highlights the need for proper intervention and early detection measures to reduce the effects of depression in education and career.*

Keywords: Prevalence, Psychological Assessment, Mental Health, Stress Factors, Psychological Support

Introduction

The main objective of education about the medical field is to train competent, knowledgeable, and professional physicians to promote public health and advance medical science (Unar et al., 2020). A stressful environment is concerned with medical colleges, and often, they have a negative effect on physical health, academic performance, and psychological wellness. Having a high percentage of anxiety and depression from the medical curricula, and still, it is unfortunate to see the faces behind the white coats. By 2020, depression will be the second most prevalent condition globally. These disorders are not diagnosed properly, and because of that, there is an increase in psychological morbidity having unwanted effects throughout their lives and careers (Kua and Fones, 1999; Tyssen et al., 2001). Depression is a disorder that involves mood, body, and thoughts. It plays with the person's natural process, how they eat and sleep, and how they feel about themselves and other things (Yousuf et al., 2011).

Depression in medical students, whom we consider as our future, will lead to reduced quality of life and less productivity, difficulty in learning, and negatively affecting the care of patients (Firth-Cozens, 1989; Rosvold and Bjertness, 2001). It is essential to reduce the effects of depression in education and career by proper intervention and taking early detection measures. Unfortunately, depression in medical students is being neglected in Pakistan, and high incidences of depression and anxiety in medical students have been reported worldwide (Goebert et al., 2009; Peterlini et al., 2002). The depression prevalence among medical students varies and is dependent on the year of training, gender, scale for measurement of depression, and age (Gore et al., 2011; Singh et al., 2010). Other factors include drug abuse, family issues, alcohol usage, family history, and staying away from home. It is very important to quantify depression and anxiety and its related issues in medical students for their rehabilitation and counselling (Kumar et al., 2012; Lwanga et al., 1991). This present study is conducted at Shaheed Mohtarma Benazir Bhutto Medical University Larkana to assess the prevalence of anxiety and depression.

Methodology

This cross-sectional study was conducted at Shaheed Mohtarma Benazir Bhutto Medical University Larkana from March to June 2023. This study included all medical students who had at least spent 06 months in SMBBMU Larkana and had no physical illness. A questionnaire was given to the students of the first year to final year who were randomly selected. Before the start of the study, the objectives of this study were made clear to the students, as well as their confidentiality; the questionnaire was not used before the exams due to the chances of anxiety being high in pre-exam periods. The questionnaire contains information about demography and questions about anxiety

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and depression. Data in percentages and proportions was analyzed with the help of SPSS 24.

Results

The study evaluated depression and anxiety symptoms among 385 participants with a mean age of 22.4 ± 5.27 years. Table 1 presents the assessment of depression symptoms. Participants were asked to rate their experiences on a scale ranging from "Not at all" to "Always" for various indicators. The results indicate that a substantial proportion of participants reported experiencing symptoms of depression. For instance, 39.2% of participants admitted to getting upset quickly, with 37.1% responding "Sometimes," 15.7% "Most of the time," and 8.1% "Always." Similar patterns were observed for other symptoms, such as getting upset quickly by trivial things, experiencing no positive feelings, feeling worthless, and having difficulty initiating things. These findings suggest a noteworthy prevalence of depressive symptoms among the study population.

Table 2 focuses on the evaluation of anxiety symptoms among the same group of participants. The responses reveal varying degrees of anxiety symptoms experienced by the participants. Notably, 50.4% of participants reported difficulty swallowing, marking a significant proportion grappling with this symptom. Other prevalent anxiety symptoms include experiencing breathing difficulty (42.2%), overreacting to situations (32.2%), feeling anxious in situations (30.3%), and using a lot of nervous energy (42.6%). The results underscore the diverse manifestations of anxiety among the participants, ranging from physiological symptoms like breathing difficulty and shakiness of legs to emotional indicators such as feeling close to panic and irritability.

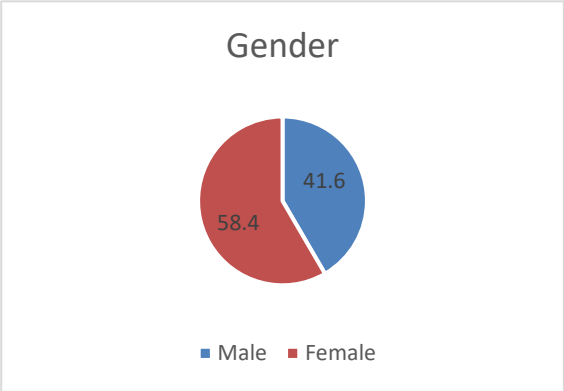

Figure 1: Gender differences among participants (n=385)

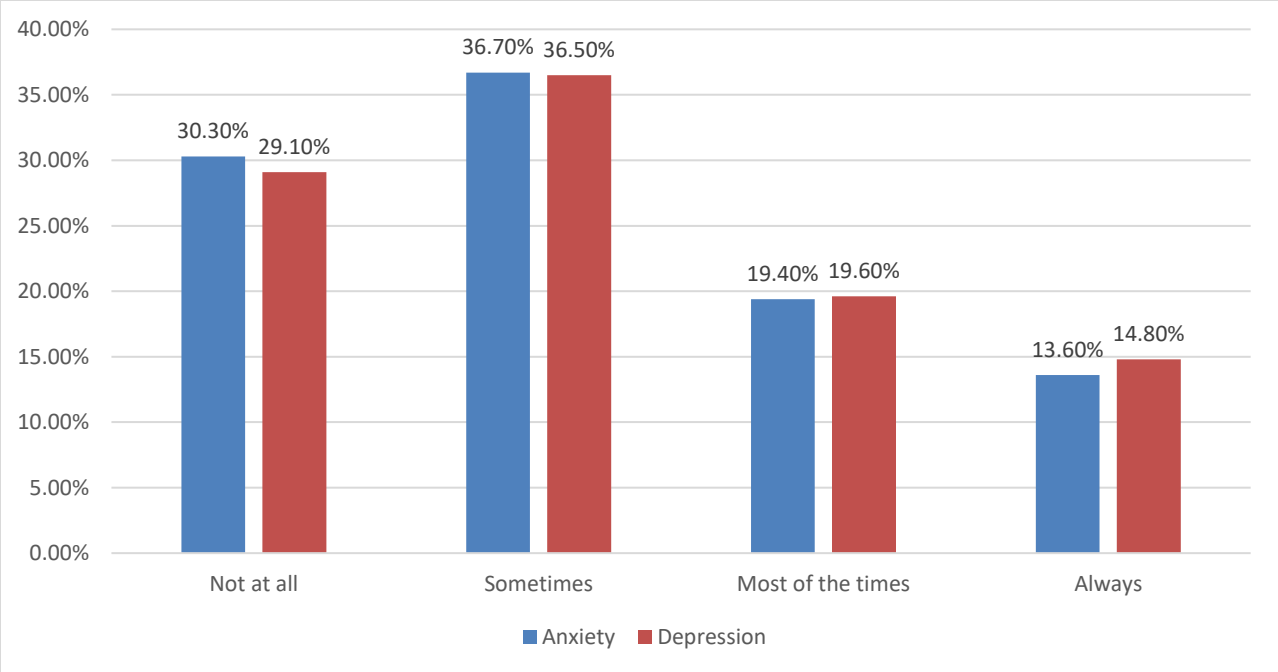

Figure 2: Anxiety and Depression among Participants (n=385)

Table 1: Evaluation of depression symptoms among participants (n=385)

Question	Response			
	Not at all	Sometimes	Most of the time	Always
Get upset easily	150 (39.2%)	142 (37.1%)	60 (15.7%)	31 (8.1%)
Get upset quickly by trivial things	134 (35.1%)	149 (39%)	65 (17%)	34 (8.9%)
Experience no positive feeling	155 (40.9%)	142 (37.5%)	59 (15.6%)	23 (6.1%)
Feel worthless as a person	137 (36.2%)	121 (32%)	76 (20.1%)	44 (11.6%)
Get no enjoyment out of things	132 (35%)	133 (35.5%)	69 (18.3%)	43 (11.4%)
Difficult to initiate things	129 (34.4%)	127 (33.8%)	69 (18.4%)	51 (13.6%)

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Table 2: Evaluation of anxiety symptoms among participants (n=385)

Question	Response			
	Not at all	Sometimes	Most of the time	Always
Experience breathing difficulty	159 (42.2%)	131 (34.7%)	51 (13.5%)	36 (9.5%)
Over-react on situations	121 (32.2%)	142 (37.8%)	60 (16%)	53 (14.1%)
Experience shakiness of legs	163 (43%)	120 (31.7%)	51 (13.5%)	45 (11.9%)
Feel anxious in situations	114 (30.3%)	138 (36.7%)	73 (19.4%)	51 (13.6%)
Dryness of mouth	170 (44.9%)	113 (29.8%)	58 (15.3%)	38 (10%)
Use a lot of nervous energy	118 (31.2%)	161 (42.6%)	59 (15.6%)	40 (10.6%)
Feel impatient in delayed situations	132 (34.8%)	132 (34.8%)	75 (19.8%)	40 (10.6%)
Perspire noticeably in the absence of high temperature or physical exertion	158 (41.7%)	130 (34.4%)	56 (14.8%)	35 (9.2%)
Scared without any reason	125 (33%)	137 (36.1%)	73 (19.3%)	44 (11.6%)
Palpitation without any physical exertions	137 (36.2%)	123 (32.5%)	70 (18.5%)	48 (12.7%)
Feeling close to panic	129 (34.2%)	113 (30%)	80 (21.2%)	55 (14.6%)
Feeling irritability	134 (35.5%)	124 (32.9%)	65 (17.2%)	54 (14.3%)
Difficult to tolerate interruptions	124 (32.8%)	121 (32%)	86 (22.8%)	47 (12.4%)
Difficulty in swallowing	190 (50.4%)	98 (26%)	45 (11.9%)	44 (11.7%)

Discussion

For medical students, psychological well-being is very much mandatory. The current education system exposes medical students to some endogenous and some exogenous stressors. In our study, we have used a very reliable depression and anxiety screening tool. The prevalence ratio of depression is between 5 to 70 percnetage (Chan, 1991; Clark and Zeldow, 1988); depression reported in our respondents was found to be 71.9% in comparison to a study conducted by Singh A and others, which was 49.1% (Singh et al., 2010). The higher percentage of depressive symptoms was found in undergraduates in medical colleges in northern India and Mangalore, Karnataka, India, which was about 71.25%16. In one of the studies in Hong Kong by Chan, it was found that nearly half of the medical students are depressed (Chan, 1991), but in Pakistan, it was found to vary from 49% to 66% in one of the studies (Inam et al., 2003).

In one of the studies, about 39.4% of students were found to be depressive with the help of the DASS instrument (Vaidya and Mulgaonkar, 2007). In our study, we found that as the depression level increases, the social relations of the respondents with their parents and friends also worsen, which emphasizes that during medical training, medical educators should also pay attention to developing some strategies for the reduction of stress of their students. This study showed that a greater proportion of males had anxiety than females, but depression was found to be more common among females. Our findings were similar to the findings of other studies where they found rates of depression among women were higher as shown by Deborah Goebert and others in a Multischool study in Hawaii (Goebert et al., 2009).

Conclusion

There is a high prevalence of anxiety and depression among medical students. In addition, there have been some risk factors apt from academic stressors which expose students to anxiety and depression, and because of that, early screening and counselling are very much important.

Declarations

Data Availability statement
All data generated or analyzed during the study are included in the manuscript.
Ethics approval and consent to participate
Approved by the department Concerned.
Consent for publication
Approved
Funding
Not applicable

Conflict of interest

The authors declared absence of conflict of interest.

Author Contribution

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Supervision, funding acquisition.
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