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Barriers Against Seeking Professional Care for Perceived Mental Stress among Medical Undergraduate Students: A Cross-sectional Survey at a Private Medical University of Islamabad

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ABSTRACT

Medical students persistently face a burden of stress which may be a risk factor for depression, suicide, or substance abuse. **Objective:** To assess barriers in seeking professional care for perceived mental stress in medical undergraduate students and to assess their stress. **Methods:** A cross-sectional survey was designed and conducted for six months. Using stratified random sampling, 41 medical students were selected from all five years. A structured questionnaire was used which included a modified BACE 3 scale to find frequencies of perceived barriers and PSS scale to assess perceived stress. Chi square test was applied to look for associations. Ethical approval and informed consent were taken. **Results:** Out of 205 respondents, 78 (24.4%) were male and 127 (75.6%) were female. Mean age was 21 years ± 1.69 SD. 76.96% of respondents reported experiencing moderate stress. Among all years, third year students (26.8%) reported the highest level of severe stress. The barrier reported by majority students was that students wished to solve the issue on their own (72.7%), second was that the issue would resolve by itself (45.4%). The barriers that were considered least frequently, were being unsure where to get help (19%) followed by being too sick to ask for help (18.5%). Chi square test showed significant association between categories of stress and year of education with a significant p value. **Conclusions:** Majority of the students faced moderate stress. However, when dealing with it, the majority wanted to solve the problem on their own.

INTRODUCTION

University students come across a high degree of different issues concerning their mental health and sometimes suffer worsening of some of them like, insomnia or stress [1]. For medical practitioners, postgraduate medical residency is sometimes the most difficult time. Research evidence has found that stress among the residents was associated with poor academic performance, truancy, and poor health of the residents. It was concluded from survey that long work hours (66.2%), a lack of vacation days (52.3%), an unfavorable work environment (35.4%), and academic pressure (41.3%) were the main causes of the stress among medical professionals [2]. According to the results of a cross-sectional study that collected data over the course of a month, 56% (n = 356) of medical students

had overall psychiatric morbidity. Participants most frequently expressed fear of stigmatization (63%; n = 401), desire for handling the issue alone (60%; n = 379); fear of the unknown (59%; n = 365); and inability to recognize symptoms (58%; n = 366) [3]. Medical students encounter numerous obstacles to mental healthcare, many of which stem from their concern of confidentiality violations and of facing consequences in their education and careers. It seems that many medical students find it difficult to get the help they need, even in the face of recent initiatives to lessen the stigma associated with mental illness [4]. The most common mental health issues faced by university students are anxiety and depression [5]. The current research focused on the perceived stress of medical students. It is known that chronic stress increases the risk of developing mental health issues in an individual's future life. Mental illnesses are a common issue of concern in medical students and health workers. Although mental health issues are on the rise in university students in general, they are particularly prevalent in medical students as seen in a meta-analysis conducted on various cross-sectional studies in China [6]. Along with this, medical students consistently reported a high level of stress. A few reasons identified in this study included a high workload and frequency of exams [7]. 86 percent of the students demonstrated health care needs inclusive of mental health issues to minor ailments; however, due to confidentiality and the peculiarity of health education/training institutions, many students either sought help outside the institution [8]. When comparing stress levels between medical and non-medical students: a study from Egypt suggests that medical students feel higher levels of perceived stress compared to non-medical students [9]. A study conducted in Karachi, Sindh, Pakistan showed that levels of stress were much raised in medical undergraduate students in comparison to students of other disciplines [10]. However; another study from Saudi Arabia showed that non-medical students have a higher level of stress [11]. A common theme, though, is that medical students face high levels of stress. It was crucial to start addressing this issue, since (as previously mentioned) stress could have led to mental illness which in turn could lead to complications like substance abuse, self-harm, or impairing the ability of the person to perform their duties. To gather sociodemographic information, a semi-structured pro forma was employed, and the Barriers to Access to Care Evaluation Scale was utilized to determine the reasons behind the lack of mental health treatment. According to the study's findings, 26% of the individuals needed mental health treatment but did not seek it [12, 13]. So, one can conclude, it is important to seek treatment for these issues; however, an analysis of data from Asia and Europe showed a huge proportion of young adults with mental illness do not seek help [14]. A meta-analysis reveals common problems in not seeking help were limited mental health knowledge and stigmatizing beliefs among others [15]. Pakistan, being a developing country, suffers from the fact that there is vast unawareness on many topics including this one. Mental health literacy is very low in this region. People may prefer going to faith healers and may not even recognize these ailments as actually being illnesses that required treatment [16]. Generalized anxiety and stress disorder is a leading psychiatric illness in Pakistan, also among young students. It can lead to several complications that may be preventable by early intervention.

This study, aimed to assess the perceived stress of medical students and the barriers in seeking professional help. Assessing this high-risk group was particularly important in gaining firsthand data to use it to recognize the areas which needed attention. The survey aimed to assess the perceived stress levels among medical undergraduate students of Foundation University Islamabad (FUI) and to determine barriers in seeking care for mental issues among medical undergraduate students of FUI.

METHODS

A cross-sectional survey was carried out on medical undergraduate students enrolled in all 5 years at Foundation University College of Medicine for six months from September 2022 to February 2023. Foundation Medical College, Islamabad's Ethical committee's approval was taken. Ethical Committee no FF/FUMC/215-221-1 PHY/22. Stratified Random Sampling was performed after an informed consent was taken. Inclusion criteria was medical students of all five years in FUMC. Exclusion criteria was those medical students who were already under psychiatric treatment and students who refused to participate. Sample size was calculated using equation– n=z2 p(1-p)/e2, Population size of FUMC= 750, Margin of error= 5%, Confidence interval= 95%, Sample size=184. After adjusting for 10% non-response rate, sample size became 205. According to the inclusion criteria, a sampling frame was developed for all the students enrolled in MBBS from 1st year to 5th year. These lists were obtained from the admission office of FUMC. The students were further divided into 5 strata taking 41 students from each stratum for the final study by applying simple random sampling technique. A structured questionnaire was developed in English language to collect data for this study. The 1st section of questionnaire consisted of the demographic characteristics of the respondents (age, study year, gender) followed by section 2 including the Barrier to Access to Care Evaluation (BACE-3) scale to evaluate and assess barriers in seeking help for mental illnesses. The BACE is a scale with 30 items, the response categories range from 0 (not at all) to 3 (a lot) with higher scores denoting a greater barrier. Out of these we selected the 21

questions that were relevant to our study population. The tool comprises of a 12- item stigma scale, as well as instrumental and attitudinal barrier items. To calculate the overall score, the mean of rating for all the items is calculated. The percentage of respondents who experienced a barrier to any degree and those experiencing a barrier as a major barrier (i.e., % circling 3) are also be accessed. Section 3 of the questionnaire consist of perceived stress scale (PSS), to assess levels of stress in the participants. In this scale we asked 10 questions like "In past month, how frequently have you experience that you were not able to control the vital and important things in life?" The respondents selected an option from the 5 given options (0=never, 1= almost never, 2=sometimes, 3=fairly often, 4=very often). The Scores of each question were compiled and summed up to get a total score for each participant which ranged from 0-40, with higher scores highlighting a raised in the level of stress.

- ➢ 0-13 was denoted as low stress
- ➢ 14-26 was marked as moderate stress
- ➢ 27-40 was high perceived stress

All the participants, selected by stratified random sampling, were given the questionnaire to complete within a specified time slot considering their availability. The privacy and discretion were assured to the best of our abilities. The analysis was performed using software named Statistical packages of social sciences (SPSS) version 21.0. For continuous variables, mean and standard deviation were calculated whereas categorical variables were represented in percentages. Any associations between variables were calculated through chi-square test and was interpreted as significant if P-value is < 0.05.

RESULTS

A total of 204 participants from FUMC completed the questionnaire. Demographics characteristics of participants are described (Table 1).

Table 1: Demographic Profile of Respondents (N=205)

Category		Mean ± SD / (%)
Age		21.1 ± 1.696
Gender	Male	38.0
	Female	62.0

The percentage of respondents who reported each barrier item as a major barrier from acquiring professional care. Every barrier was also ranked in accordance with the items being rated a 'major barrier'. The table shows that out of the stigma related barriers the most reported was 'Assuming the problem would resolve by itself' with 45.4% reporting it as a main barrier. Non-stigma items of the scale are further categorized into attitudinal and instrumental barriers. Among the instrumental items the most reported barriers

are 'Not in a position to pay the finances involved' and 'Do not have anyone who could help me seek expert care' 22% considered it as a major hurdle. For the attitudinal items the most reported is 'Wish to solve the issue on my own' which is also the overall highest reported barrier in the entire BACE scale with 72.7% saying that it would be a main barrier in seeking expert help for a mental illness in the future (Table 2).

Table 2: Percentage Table for BACE 3 Scale (N=205)

Item No.	Barrier	Type of Barrier	Mean ± SD	% Reporting as Major Barrier (a lot)	Rank (1=Item has Highest Ranking as Main/Major Barrier)
1	Not sure where to seek expert/professional care	N-S	1.19 ± 0.393	19	18
2	Wish to solve issue on my own	N-S	1.73 ± 0.447	72.7	1
3	Perception that I might be considered as timid/weak for suffering a mental health issue	S	1.27 ± 0.444	26.8	11
4	Fear of being hospitalized forcefully	N-S	1.20 ± 0.405	20.5	17
5	Thinking the problem would go on its own	S	1.45 ± 0.499	45.4	2
6	Worried about how my family might feel, think, say or do	N-S	1.39 ± 0.488	38.5	5
7	Feeling embarrassed or ashamed	N-S	1.24 ± 0.428	23.9	13
8	Preferring to seek other forms of care	S	1.24 ± 0.430	24.4	12
9	Unable to pay financial expenditure involved	S	1.22 ± 0.415	22	15
10	Worry that I might be considered 'crazy'	N-S	1.23 ± 0.421	22.9	14
11	Assuming that expert care might not work	N-S	1.28 ± 0.449	27.8	9
12	Being too sick to ask for help	S	1.19 ± 0.390	18.5	19
13	Concern that acquaintance might find out	N-S	1.28 ± 0.449	27.8	9
14	Uncomfortable in opening about my thoughts, feelings and emotions	S	1.54 ± 1.519	43.4	3
15	Worry how others will treat me if they got to know about me seeking professional care	N-S	1.27 ± 0.447	27.3	10
16	Concerns about the treatments available	N-S	1.38 ± 0.485	37.6	6
17	Not wanting a mental health issue to be on my medical history	S	1.36 ± 0.481	36.1	7
18	Previous bad experiences with mental health treatment	N-S	1.21 ± 0.408	21	16
19	Preferring to seek care from peers, relatives, family, friends	S	1.40 ± 0.492	40.5	4
20	Feeling I do not have a mental health issue	N-S	1.33 ± 0.470	32.7	8
21	Do not have anyone who could assist me in getting expert care	S	1.22 ± 0.415	22	15

Majority of students (76.96%) were found to be in moderate stress range. 15.69% were showing high stress while only

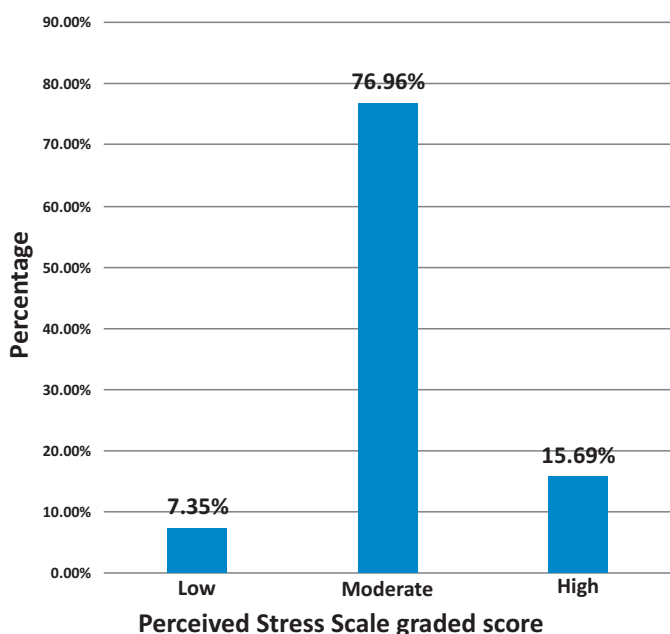7.35% lie in the low perceived stress category (Figure 1).

Figure 1: Perceived Stress Scale Graded Score

Majority of the participants in all five years were having a moderate level of perceived stress. 3rd year students had the highest perceived stress levels with 26.8% reporting high stress, followed by 4th year (17.1%) then 1st year (12.5%). 5th year (12.2%) and 2nd (9.8%) year students had the least participants in the high stress category. P Value less than 0.05 (Table 4).

Table 4: Percentages of Respondent's in PSS Categories (N=205)

PSS CATEGORIES					
Respondent's MBBS Year	Low Stress %	Moderate Stress %	High Stress %	Total	p-value
1st year	0.0	87.5	12.5	100.0	<0.05
2nd year	7.3	82.9	9.8	100.0	<0.05
3rd year	4.9	68.3	26.8	100.0	<0.05
4th year	17.1	65.9	17.1	100.0	<0.05
5th year	7.3	80.5	12.1	100.0	<0.05

DISCUSSION

The present survey has tried to identify the barriers that are obstacles in seeking expert care for perceived mental stress among medical undergraduate students. The final sample consisted of 204 participants from FUMC. Respondent's mean age was 21.17 years with a standard deviation of 1.696. The survey reported majority respondents as female (75.6%) and only (24.4%) male; these findings bore similarity to a study conducted in Karachi in which (83.5%) of the respondents were female and (16.5%) were male [17]. The results from attitudinal items illuminated "Wish to solve the issue on my own" as the most common barrier in the entire BACE scale with 27.3% considering it to any degree while 72.7% saying that it would be a major hurdle in seeking expert care for a mental illness in the future. Similar results were reported by a study done in Mansoura University, Egypt where 55.99% of the medical students revealed "I want to solve the issue on my own" as main barrier that hindered them from seeking professional healthcare [18]. Majority respondents (76.96%) reported that they experienced moderate stress. This result is analogous with a study carried out in Lahore [19]. Yet another study performed in Syria highlighted 87.6% of Syrian undergraduate medical student's experienced moderate stress [20]. A small sample size, data from students of only one medical college and cross-sectional nature of the study limits generalization of the findings. Future research studies in this area should be designed taking these limitations into account so that higher quality evidence is generated which is both reproducible as well as generalizable.

CONCLUSIONS

Majority of medical undergraduate students faced moderate stress levels. Most students are aware of the resources regarding seeking care for mental health but are hesitant to use them.

Authors Contribution

Conceptualization: SZ, UIS, JK

Methodology: MFH

Formal analysis: SZ, FAB, AW

Writing, review and editing: AW, SAR

All authors have read and agreed to the published version of the manuscript.

Conflicts of Interest

The authors declare no conflict of interest.

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