

PREVALENCE OF MENTAL STRESS AMONG MBBS STUDENTS OF PRIVATE MEDICAL COLLEGES OF PUNJAB, PAKISTAN

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ABSTRACT: Mental stress is defined as a disturbing and terrible mental-passionate state characterized by dread, tension, misery, disarray, and emotional episodes that frequently obstruct one's ability to perform daily tasks. Different epidemiological studies on the prevalence of mental gloom among school-aged teenagers and pubescent have found a wide range of percentages ranging from 20% to 40%. The goal of this study was to determine the prevalence of mental stress among undergraduates in Punjab's private medical colleges, as well as the relationship between mental distress and socio-demographic, personal, and academic-related variables. As a result, useful intervention strategies could be proposed in the future to reduce mental stress and improve student capacities. In Punjab's private medical colleges, cross-sectional research was used. The information was gathered from MBBS students in private medical colleges in Punjab, Pakistan. A self-structured questionnaire was used to collect information on socio-demographic, personal, and academic-related variables. The questions are about specific symptoms and issues that may have caused difficulty for the participants in the previous 30 days. A Google-generated form was used to collect data from 1200 participants, which was distributed via a link. Mental stress was found to be present in 74% of the 1200 students studied. The majority of the study participants (18.6%) were under the age of 23. Males made up 52.2 percent of the study participants, while females made up 47.5 percent. 20.8 percent were in their first year of medical school, 19.6 percent in their second year, 18.3 percent in their third year, 18.8 percent in their fourth year, and 22.6 percent in their fifth. Students at private medical colleges, where the majority of the respondents are from the middle class, had a significant association with socioeconomic status as a contributing factor of stress ($p = 0.04$). The history of parental conflict was considered a stress factor by 51.1 percent of the participants. Mental distress affected 76% of university students. However, there is a need for care, help, and counselling.

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KEY WORDS: Mental distress, University Students, MBBS, Medical Colleges, Stress

INTRODUCTION

Mental Stress is defined as disturbance and terrible mental-passionate state like dread, tension, misery, disarray and emotional episodes frequently hindering the capacity to perform everyday tasks (1). Individual and ecological occasions that cause stress are referred as stressors (2). Because of progression in way of life and fast urbanization, the psychological well-being is upset by different reasons and mental issues represent almost 12% of the worldwide weight of illness. By 2020, it turned out to be the second most significant reason for

incapacity in the world (3). Distinctive epidemiological examinations on the commonness of mental grimness amongst school-going teenagers and pubescent have comprehensive variation from 20% to 40% (4). Stress which starts in understudy age may impact the proficient turn of events that decreases understudy's confidence, which may appear as wear out or physical and mental disability (5, 6). Stress was likewise found to diminish concentration, lack of performance and consideration, delay of courses, encroach clinical decision making, decrease student's capacities to set up great

connection with patients, and may put extensive tension on the establishment staff and on the household as well as on the community who genuinely and monetarily support them (7). Different pressure factors revealed in examinations among medical students are academic burden, tests, failure to adapt, helplessness, expanded mental pressing factor, mental strain and excessive amount of responsibility (8). The expanded stress that appeared was related with progress from fundamental science training to the clinical training (9) In today's world of competition, medical students are extra susceptible to mental sufferings, prestige of mental well-being between other medical students and investigation of diverse aspects of psychological suffering will be key to proper mental running that will enhance well-balancing besides lessen exhaustion. Hence the objective of this study was to determine prevalence of mental stress among undergraduates of private medical colleges of Punjab, Pakistan and to observe the association between mental distress and socio-demographic, personal and academic-related variables. So that helpful intervention strategies could be proposed to diminish mental pressure and upgrade student's capacities in future.

METHODOLOGY

Cross-sectional study was adopted in private medical colleges of Punjab. Inclusion Criteria was; Undergraduates who provided their informed consent to show active participation in study. And Exclusion Criteria was; Undergraduates identified with mental disorder and was on medications now. The data was collected from students of MBBS in private medical colleges of Punjab, Pakistan. As recognized by Pakistan Medical and Dental Council, Punjab has 32 private sector medical colleges. A self-structured questionnaire was administered to collect information on socio-demographics, personal as well as academic-related

variables. Mental Distress was assessed using K-10. It is an instrument having 10 questions. The questions are concerned with definite symptoms and problems that might cause difficulties to the participants in the last 30 days. Sample size was 1200. Purposive convenient sampling process was adopted for study participants. Questionnaire was generated on Google form and link was distributed to maximum participants. It took 10-15 minutes of participants to fill the questionnaire. Before submission of response, the study objectives were fully explained to them and consent to join the study was obtained. The questionnaire was in English. Responses were collected from Excel Spread Sheets and analyzed by using SPSS version 23. To determine association between stress and students of private sectors, chi-square test was used on SPSS. Cross checking of data and results were done to ensure data credibility.

RESULTS

The overall prevalence of mental stress was 74% of total of 1200 students. Majority (18.6%) of the study participants were at the age of 23 year. 52.2% study participants were males, 47.5% were females. 20.8% were in 1st year, 19.6% was in 2nd year, 18.3% was in 3rd year, 18.8% was in 4th year and 22.6% was in 5th year of different medical colleges. 24.8% & 26.0% of participants fallen in the category of mild and moderate stress respectively, 23.6% having severe stress while 26% reported no stress. 24.6% female students were suffering from severe stress which is greater than male students (22.7%). According to our survey, Socioeconomic status has a significant association as a contributing factor of stress among students of private medical colleges ($p=0.04$), where most of the respondents fall in the category of middle class. With respect to academic related variables, 50.7% of the participants were unsatisfied with their

academic course which is greater than those who are satisfied with their academic course (49.3%) and this association was statistically insignificant. 51.1% of the participants were considered the history of parental conflict as a stress factor.

DISCUSSION

Mentally troubled people made up around three fifth of the research participants in our conducted survey (76%). This is higher than the prevalence of mental discomfort recorded in Malaysia, Spain, the United Kingdom, Singapore, the United States, and Australia, which ranged from 30% to 57 percent (10).

Socioeconomic, cultural, and environmental variables all play a role in the disparity. Furthermore, the majority of these research were conducted among students at medical colleges, where the medical training atmosphere is regarded to be intense and related to emotional and psychological problems (11).

When compared to the current study, other groups of people, including university students in Ethiopia, reported lower, comparable, and greater amounts of mental anguish (12).

Our research was done in the middle of the year to guarantee that the students were not influenced by any college event or examination.

According to our findings, 76% percent of the university students surveyed in this study were in distress as research conducted in various parts of India reflects a variety of scenarios. Similar results were reported in

the Kolkata research, which revealed that 14.5 percent of medical students suffer from mental suffering during their mid of academic year (13).

The females had a larger proportion of severe mental discomfort (24.6 percent) than males (22.7%), this difference was not statistically significant in our survey although research conducted at the University of Hargeisa in Somaliland found a statistically significant link between gender and mental distress (14).

Mental discomfort was not substantially connected with factors such as parental conflict history, degree of study, life contentment, course satisfaction and fear of future. In our study, socioeconomic status was shown to be highly linked to mental suffering. Similar findings have previously been reported by the Canadian National Survey, Ankara University, and Mid-Atlantic University (15).

CONCLUSION

University students frequently experience mental distress, yet many are either ignorant of their situation or hesitant to seek treatment. Mental distress affected 76% of university students. Students with a family history of mental illness, unsatisfied with academic courses, and who had middle and low socioeconomic status were more likely to be in emotional discomfort. However, there is a need for care, help, and counselling, which will add to the urge for multi-centric longitudinal research to test the causative hypothesis.

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Table 1: Baseline characteristics of participants from Observational study

Baseline characteristics	All (n=1200)	Male (n=630)	Female (n=570)	p-value
Age (Years $\pm$ SD)	21.00 $\pm$ 1.71	20.49 $\pm$ 1.73	20.67 $\pm$ 1.68	0.07
Total Stress Score (Mean $\pm$ SD)	29.00 $\pm$ 11.86	29.89 $\pm$ 12.11	29.51 $\pm$ 11.58	0.58
Physical Stress (Mean $\pm$ SD)	1.00 $\pm$ 0.50	1.49 $\pm$ 0.50	1.48 $\pm$ 0.50	0.97
Academic Stress (Mean $\pm$ SD)	3.00 $\pm$ 1.43	2.95 $\pm$ 1.45	2.97 $\pm$ 1.40	0.82
Level of study MBBS- n (%)	249 (20.8%)	127 (20.2%)	122 (21.4%)	0.74
1 st year	235 (19.6%)	130 (20.6%)	105 (18.4%)	
2 nd year	220 (18.3%)	109 (17.3%)	111 (19.5%)	
3 rd year	225 (18.8%)	118 (18.7%)	107 (18.8%)	
4 th year	271 (22.6%)	146 (23.2%)	125 (21.9%)	
5 th year				
Stress Level- n (%)				0.86
NonMild	307 (25.6%)	165 (26.2%)	142 (24.9%)	
Moderate	289 (24.8%)	159 (25.2%)	139 (24.4%)	
Severe	312 (26.0%)	163 (25.9%)	149 (26.1%)	
	283 (23.6%)	143 (22.7%)	140 (24.6%)	
Socioeconomic Status-n (%)				0.04
Low Class	381 (31.8%)	175 (27.8%)	206 (36.1%)	
Middle Class	419 (34.9%)	233 (37.0%)	186 (32.6%)	
Upper Class	400 (33.3%)	222 (35.2%)	178 (31.2%)	
Satisfaction with academic course- n (%)				0.17
Unsatisfied	608 (50.7%)	331 (52.5%)	277 (48.6%)	
Satisfied	593 (49.3%)	299 (47.5%)	293 (51.4%)	
History of Parental Conflict- n (%)				0.74
Absent	587 (48.9%)	311 (49.4%)	276 (48.4%)	
Present	613 (51.1%)	319 (50.6%)	294 (51.6%)	

Table-2: ANOVA for comparison

Stress variables (Mean $\pm$ SD)	1st Year	2nd Year	3rd Year	4th Year	Final Year	p-value
Overall Stress Score	29.56 11.58	$\pm 29.60 \pm 11.36$	29.19 ± 11.98	29.80 ± 12.30	30.30 ± 12.12	0.88