

CHALLENGES AND OBSTACLES FACED BY MEDICAL STUDENTS: MEDICAL STUDENTS' PERSPECTIVE

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ABSTRACT

Background: Medical school is hard on students, especially in the early years. They have to keep up with a heavy academic load while also dealing with mental strain and upcoming big changes in their social lives. First-year MBBS students tend to feel this the most, since they're moving from the predictable world of school into a tough, self-driven kind of learning that they've never experienced before. Things like high academic standards, frequent exams, lack of sleep, and weak institutional support all pile up, contributing to stress, burnout, and poor well-being in this group. The aim of this study was to examine the difficulties the first-year medical students encounter and to see them from their perspectives.

Methodology: This was a descriptive cross-sectional study conducted at Lahore Medical and Dental College over a six-month period. The participants were first-year MBBS students from the 2024–2025 session, who were recruited using non-probability convenience sampling. Information was collected through a validated, structured questionnaire covering academic, psychological, and social difficulties, along with how students were coping. Students filled out the questionnaire anonymously after their Block 1 exams. We used SPSS version 26 for the analysis and applied descriptive statistics (mean, frequency, and percentage). A p-value of <0.05 was treated as statistically significant.

Results: Out of the 150 students who took part, 58% were female, and 42% were male. Most (67.3%) had come from an F.Sc. background, and 58.7% were day scholars. Quite strikingly, 70% said they were sleeping less than 6 hours a night. Students were dealing with numerous academic pressures at once. Grading policies rated the heaviest burden ($M = 3.79$), with the volume of coursework close behind ($M = 3.53$). Test anxiety, while clearly familiar to most, was rated a bit lower ($M = 3.42$). Around 70.7% said their workload was causing them moderate to high stress. On the psychological side, almost half (49.3%) said that they often felt overwhelmed, and roughly 42% reported moderate-to-high burnout. Institutional support didn't fare well either, with mental health support (1.83) and work-life balance (2.01) both scoring low. Female students generally reported higher stress than males in most areas.

Conclusion: For students who are just starting out in MBBS, the transition can rarely be easy. They're constantly trying to keep up with overwhelming academic demands while their mental health and sleep slip down the priority list. What's perhaps more concerning than these struggles themselves is how often students seem to face them on their own. Our study shows that stress, burnout, and lack of sleep aren't isolated cases; they're widespread and tightly linked. Yet institutional responses haven't kept up with what students actually need. Mental health services remain underdeveloped, and not much real attention is paid to helping the students maintain any kind of balance in their lives. Bridging these gaps will require a more joined-up approach: mentoring that helps newcomers find their footing, accessible mental health care, and skill-based training that prepares students to handle the heavy workload of medical education.

KEYWORDS: medical students, academic stress, burnout, sleep deprivation, institutional support, MBBS, Pakistan, cross-sectional study

INTRODUCTION

For young people, choosing medicine is often described as one of the toughest paths out there, both intellectually and emotionally. From day one, MBBS students step into a high-pressure world where they're expected to absorb dense scientific material while at the same time developing clinical thinking, ethical grounding, along with personal resilience. The shift from secondary school to medical college can feel daunting and unfamiliar, and it often kicks off a long stretch of stress that, when left unaddressed, can spiral into more serious mental health concerns.

The struggles that first-year medical students go through are no secret around the world. Research from many countries and institutions consistently points to high levels of academic stress, psychological strain, burnout, and sleep loss in this group. What sets the Pakistani medical education system apart, though, is its particular blend of fiercely competitive admissions, heavy family and societal expectations tied to becoming a doctor, limited mental health support, and a long-standing teaching culture that has always tended to value exam scores over student welfare.

Lahore Medical and Dental College (LMDC), a private institution with students from a wide range of backgrounds, gives us a useful window into these issues. The first-year MBBS cohort at LMDC for 2024–2025 is starting medical school at a time when Pakistan's higher education system is undergoing significant shifts. A lot of these students come out of very structured school systems and haven't had much practice with self-directed study, managing their own time, or coping with the kind of emotional pressure that medicine throws at them.

While there's plenty of literature on stress in medical students, we still don't have enough specific, locally grounded data from private medical colleges in Pakistan. Getting a clear picture of how LMDC students see and handle their academic, psychological, and social challenges matters because it lets us shape interventions that actually fit their setting. That's the reason behind this study: to dig into what first-year MBBS students are facing and to understand how they feel about different parts of their well-being and life at the institution.

MATERIALS AND METHODS

Study Design and Setting

This was a descriptive cross-sectional study conducted over a period of six months at Lahore Medical and Dental College (LMDC) in Lahore, Pakistan. The work was based in the Department of Physiology, and we received institutional review board approval before starting data collection.

Study Population and Sampling

The participants were first-year MBBS students from the 4th August 2025 to 3rd January 2026 academic session. We used non-probability convenience sampling to recruit them. Anyone present during data collection who agreed to take part verbally was included. Students who didn't want to participate or didn't complete the questionnaire were excluded from the final analysis.

Data Collection Instrument

Data was gathered using a carefully prepared and validated questionnaire that covered four main areas: (i) sociodemographic background; (ii) academic difficulties and stressors; (iii) psychological well-being and institutional support; and (iv) social and personal challenges. Most items used a Likert scale, where 1 meant "strongly disagree / never" and 5 meant "strongly agree / always." Students filled it out anonymously after their first round of assessments, giving them time to reflect back on their academic environment and respond honestly.

Statistical Analysis

We entered and analyzed all the data in SPSS version 26. Descriptive statistics, including means, standard deviations, frequencies, and percentages, were calculated across all variables. To see whether male and female students differed, we compared their average stressor scores separately. Anything with a p-value <0.05 was considered statistically significant.

Ethical Considerations

Taking part was entirely voluntary, and all responses stayed anonymous through coded identifiers. No personal data was collected by us at any stage. Students were told what the study was about and reminded that they could pull out at any point without facing any consequences.

RESULTS

In total, 150 first-year MBBS students took part in this cross-sectional study. There were 63 males (42%) and 87 females (58%), and the average age was 18.87 years, with the range stretching from 17 to 25. Most 67.3% (n=101) came from an F.Sc. (Pre-Medical) background, while the rest, 32.7% (n=49), had done A-Levels. Around 59% (n=88) were day scholars, and 41% (n=62) were living in hostels.



Figure 1. Gender distribution and living arrangement of participants (n=150)

Variable	Category	n	%
Gender	Male	63	42.0%
	Female	87	58.0%
Education	F.Sc. Pre-Medical	101	67.3%
	A-Levels	49	32.7%
Residence	Day Scholar	88	58.7%
	Hostelite	62	41.3%
Sleep per Night	<4 hours	36	24.0%
	4–6 hours	69	46.0%
	6–8 hours	42	28.0%
	>8 hours	3	2.0%

Table 1. Demographic details of the study participants

The sleep data tells us a concerning story: 70% of students (105 of them) reported sleeping less than 6 hours a night, and almost a quarter (24%) were getting fewer than 4. Just 2% managed more than eight hours. Taken together, these points to widespread sleep deprivation across the cohort. ^{1,2}

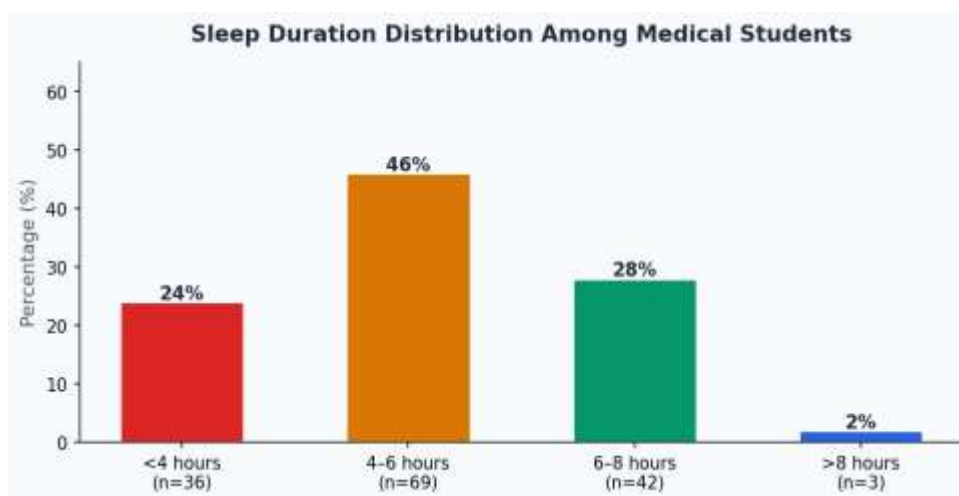


Figure 2. Sleep duration reported by students (n=150).

Academic challenges were measured across several domains using Likert-scale items. The biggest stressor turned out to be test anxiety (Mean = 3.42 ± 1.31), followed by stress tied to workload (Mean = 3.07 ± 0.92). On the whole, 70.7% of

students affirmed that their academic workload contributed to their stress, either significantly or somewhat. Peer pressure also came through strongly, with many students feeling pushed to do better than those around them.

Variable	Label	Mean	SD	Min	Max
Q1_TRAIN	Training Satisfaction	2.52	1.17	1	5
Q2WORKLO	Workload Stress	3.07	0.92	1	4
Q3_STUDY	Study Habits Stress	2.84	0.91	1	4
Q4_TIMEM	Time Management Stress	2.99	0.94	1	4
Q5_PEERP	Peer Pressure	2.89	1.21	1	5
Q6_FACUL	Faculty Expectations	2.45	1.01	1	4
Q7_GRADI	Grading Policy Stress	3.79	1.28	1	5
Q8_CURRI	Curriculum Preparedness	2.85	1.02	1	5
Q9_COURS	Coursework Volume	3.53	1.20	1	5
Q10_EXAM	Exam Fairness	2.94	1.02	1	5
Q11_TEST	Test Anxiety	3.42	1.31	1	5
Q12_PREP	Pre-exam Preparedness	3.01	1.02	1	5

Table 2. Descriptive statistics for academic challenge items (Q1–Q12).

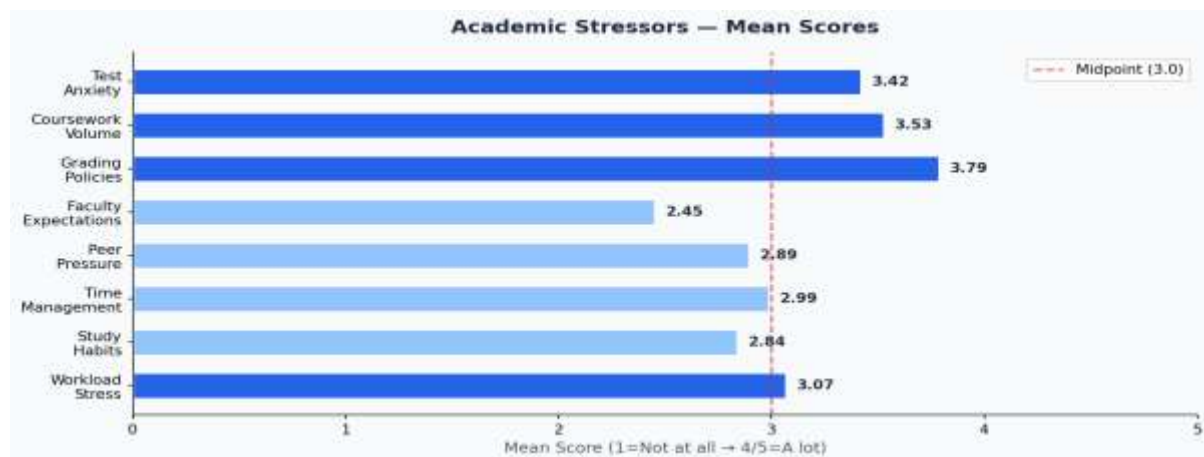


Figure 3. Mean scores for academic stressors (Q2–Q11). Scores above 3.0 are highlighted in dark blue

Looking at psychological well-being, the picture wasn't that great either. Almost half the cohort, 49.3% (n=74), said they "often" or "always" felt overwhelmed by their coursework. Around 42% were dealing with moderate-to-high burnout. On a more reassuring note, only 16.7% had given serious thought to dropping out of medical school, suggesting that, despite everything they're going through, most students are still committed to the path that was chosen.

Institutional support scores came out worryingly low across the board. Average scores for promoting work-life balance (M=2.01), mental health support (M=1.83), and faculty showing care for student well-being (M=2.08) all sat below the midpoint of the scale, which pointed to a real gap between what students needed and what the institution is currently providing.

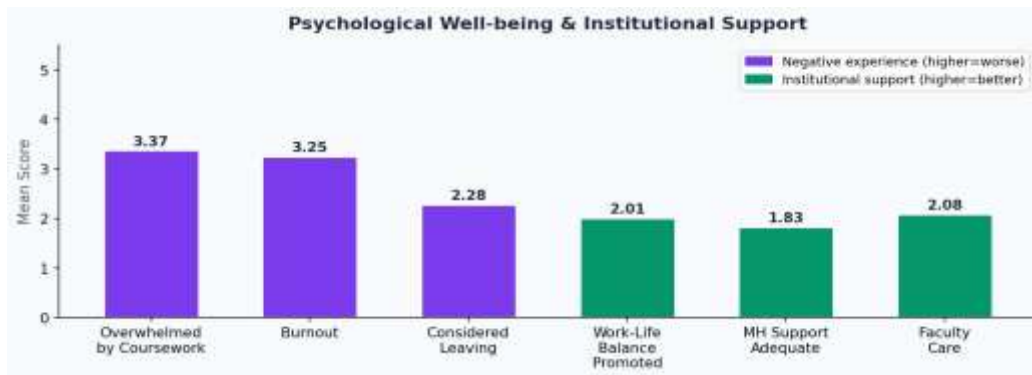


Figure 4. Psychological well-being and institutional support scores (Q16–Q21)

Social difficulties showed up across the board, too. The average isolation score of 3.11 ± 1.08 suggested that students experienced moderate to high levels of loneliness. The most striking social concern was strain in relationships, scoring 3.29 ± 1.14 , which suggested that academic pressure is silently eroding students' connections with family and friends. The college environment was rated as only moderately supportive ($M = 2.27$), and satisfaction with mentor support was low ($M = 2.67$).

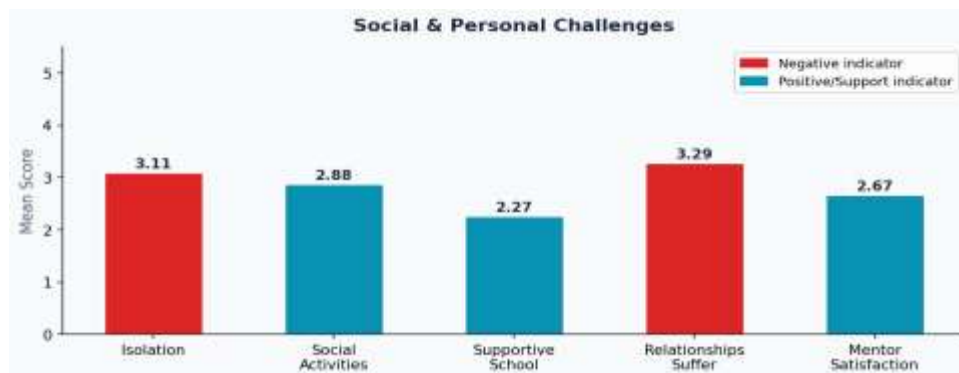


Figure 5. Scores for social and personal challenges (Q27–Q31)

Female students reported a slightly higher average workload stress ($M = 3.16$) than males ($M = 2.94$), and they also reported more stress related to poor study habits ($M = 2.94$ vs. $M = 2.70$). Males, on the other hand, were a bit more satisfied with their training ($M = 2.65$ vs. $M = 2.43$). The gaps aren't huge, but they do hint that female students in this group might be carrying a slightly heavier academic stress load, which aligns with broader international findings on gender and medical student well-being.

Stressor	Male Mean	Female Mean
Workload Stress	2.94	3.16
Study Habits Stress	2.70	2.94
Time Management Stress	2.79	2.94
Peer Pressure	2.81	3.06
Faculty Expectations	2.79	3.01
Test Anxiety	3.22	3.56
Work-Life Balance	1.86	2.13

Table 3. Gender-stratified mean scores for selected stressors

DISCUSSION

This study paints a picture of what life really looks like for first-year MBBS students at Lahore Medical and Dental College. Most of them are fresh out of high school, and many are living away from home for the first time, all while stepping into

one of the most demanding academic environments out there. The numbers here aren't just statistics; they reflect real struggles that need to be acknowledged and met with thoughtful action.

Sleep is a good starting point, since it often reflects how well a student is actually coping. About 70% said they were sleeping less than 6 hours a night, and nearly a quarter were getting fewer than 4 hours. That's not a minor issue. Long-term sleep deprivation at this level can interfere with memory, judgment, and emotional regulation, all things medical students absolutely need. Without proper rest, the hours spent studying simply don't translate into the same level of learning nor performance.

When it comes to academic concerns, test anxiety stands out as the most reported stressor at 3.42, with the heavy academic workload close behind at 3.07. None of this is shocking when you look at a system that demands 90% attendance and a 70% pass mark. What is worth pausing on, though, is that more than 40% of students reported experiencing moderate-to-high burnout.^{5,6} Burnout at this early stage in medical training is a red flag. Left alone, it tends to deepen over time, and it's been tied to consequences that extend far beyond the classroom, poorer clinical performance, risks to patient safety, and lower career satisfaction down the line.

The institutional support scores say a lot on their own. When students were asked whether the school promotes a balance between studies and life, whether mental health resources are sufficient, and whether faculty really care about how they're doing, the answers consistently came in below the midpoint. A mental health support score of just 1.83 makes the need pretty obvious.^{9,10} It's not just that students are struggling, but many feel like they're doing it on their own, without the kind of backing they'd hope for from the institution training them.

The social side adds another dimension to all of this. An isolation score of 3.11 and a relationship strain score of 3.29 suggest that students' personal ties with family, friends, and peers are quietly degrading under the academic load.^{11,12} Hostelites in particular, separated from home, may feel this even more sharply. This is the part of medical education that often goes unspoken: it doesn't just take your time, it can, if left unchecked, slowly chip away at who you are and where you feel you belong.

Female students, who made up 58% of the group, consistently scored higher on stress across most areas than males. This matches up with what international research has been showing^{13,14} and points to the need for more targeted support things like mentorship programs aimed at women, peer support circles, or more flexible scheduling.

Putting all this together, the findings make a clear case for institutions to act upon. The situation isn't catastrophic after all; only 16.7% of students have seriously thought about quitting, but it's serious enough to deserve attention before it gets any worse. Some practical steps could include offering informal mental health drop-in sessions, building peer mentorship programs that pair juniors with seniors, weaving time management workshops into the curriculum, and shaping a culture where reaching out for help isn't seen as a weakness.^{9,15,16}

Limitations

There are some limitations here that warrant highlighting. Because this is a cross-sectional study, it only captured a snapshot in time, so we can't really say that one thing caused another. The fact that participants came from a single institution and were recruited through convenience sampling also means the findings may not apply neatly to other medical schools or other parts of the country. Self-reported data carries the usual risk of social desirability bias, although collecting responses anonymously was meant to lower that risk. Going forward, longitudinal studies that draw from multiple institutions and use validated psychometric instruments would help build a fuller and more comprehensive understanding of these problems.

CONCLUSION

First-year MBBS students at Lahore Medical and Dental College are dealing with a burdening mix of academic, psychological, and social challenges, with high stress, burnout, and disrupted sleep all showing up clearly in the data. These findings also point to real gaps in institutional support, particularly when it comes to mental health services and helping the students to hold on to some sort of work-life balance. The fact that only 16.7% of students are thinking about leaving medical school does suggest that most are still motivated despite the ongoing hurdles. But that shouldn't be read as a sign that everything's fine. Motivation alone can't carry students through a system that isn't properly supporting them. What's required now is a set of considered, evidence-informed steps: mentorship programs that link junior students with seniors, mental health services that students actually feel safe using, time management and study skills workshops built into their training, and a wider push within institutions to recognize and care for the human being behind the medical student. These aren't optional extras; they're necessary investments in the kind of compassion, quality, and staying power we want to see in the doctors of tomorrow.

Report generated by statistical analysis of SPSS dataset (n=150). Lahore Medical & Dental College | Research: Dr. Asma Akram, Dept. of Physiology | April 2025

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