



ASSESSMENT OF BURNOUT SYNDROME PREVALENCE AMONG HIGHER EDUCATION STUDENTS AND STRATEGIES FOR ITS PREVENTION.

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Article history:	Abstract:
<p>Received: December 10th 2025 Accepted: February 8th 2026</p>	<p>Burnout syndrome is a common psychological problem among medical students due to high academic workload and emotional stress. This study aimed to evaluate the distribution of burnout components according to gender and academic year and to propose preventive measures. Burnout was assessed using the Maslach Burnout Inventory, measuring emotional exhaustion, depersonalization, and reduced personal accomplishment. The findings showed significant differences in burnout levels depending on gender and course of study, with higher emotional exhaustion observed in certain academic years. These results suggest that academic pressure and adaptation to clinical training negatively affect students' psychological well-being. Based on the results, preventive strategies such as optimizing academic workload, providing psychological counseling services, conducting stress management training, and implementing mentorship programs are recommended to improve mental health and academic performance.</p>

Keywords: Burnout syndrome; emotional exhaustion; depersonalization; medical students; academic stress; gender differences; course-related factors; Maslach Burnout Inventory; prevention; mental health.

INTRODUCTION: In recent years, burnout syndrome has been recognized as a widespread problem among university students. According to international studies, approximately 30–50% of students experience symptoms of burnout at varying levels of severity. In some countries, this figure has been reported to reach up to 60%. According to the World Health Organization, chronic stress is one of the leading factors negatively affecting the mental health of young people worldwide. Meta-analyses conducted among university students indicate that:

- 40–55% experience emotional exhaustion,
- 30–45% demonstrate depersonalization (detachment or indifference),
- 35–60% report a reduced sense of personal accomplishment.

Among medical students, the prevalence of burnout is even higher, ranging from 45% to 65% in several studies. Emotional exhaustion has been identified in more than 50% of students during their clinical training years. Furthermore, among students experiencing burnout: 25–35% show a decline in academic performance, more than 40% report symptoms of anxiety and depression, 30–50% experience sleep disturbances. These statistical findings highlight the high prevalence of burnout syndrome among higher

education students and emphasize the urgent need for effective preventive strategies within academic institutions.

MATERIALS AND METHODS: This study was conducted during the 2025–2026 academic year among 96 students studying at Tashkent State Medical University, from the 2nd to the 6th year. Participants were selected on a voluntary basis, and all provided informed consent prior to participation.

Burnout syndrome was assessed using the Maslach Burnout Inventory (MBI), which evaluates three core components of burnout: Emotional Exhaustion (EE), Depersonalization (DP), and Reduced Personal Accomplishment (PA). The assessment was performed on a 0–6 point scale: 0 – “never,” 1 – “very rarely,” 2 – “sometimes,” 3 – “moderately,” 4 – “often,” 5 – “very often,” 6 – “always.” Higher EE and DP scores combined with lower PA scores indicate a higher level of burnout. Additionally, students' academic workload, perceived stress, emotional state, and coping ability were evaluated using a 0–6 point Likert scale (0 – “strongly disagree,” 6 – “strongly agree”). This scale allowed for the quantification of subjective perceptions and stress levels.

The collected data were analyzed using statistical software. Quantitative variables were expressed as

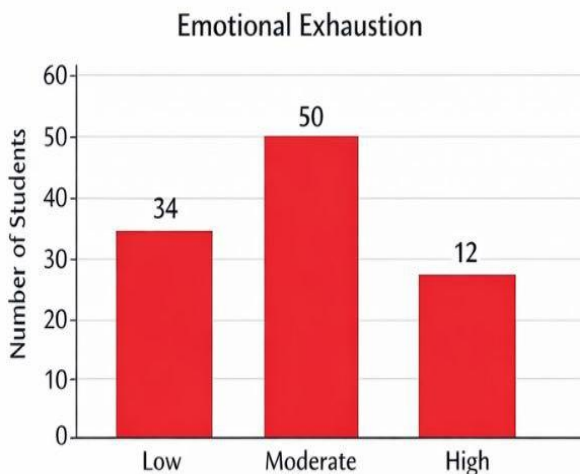


mean ± standard deviation (M ± SD), and categorical variables were presented as percentages (%). Burnout prevalence was determined according to MBI criteria, and correlation analysis was performed to examine the relationship between burnout components and perceived stress levels measured by the Likert scale. This methodology allowed for a comprehensive assessment of the prevalence of burnout syndrome and its associated factors among students.

RESULTS: The study was conducted among 96 students to assess the level of burnout. Burnout components – Emotional Exhaustion (EE), Depersonalization (DP), and Personal Accomplishment (PA) – were measured using a 0–6 point scale.

Emotional Exhaustion (EE)

- Low (low burnout risk): 34 students (35%)
- Moderate: (moderate burnout): 50 students (52%)
- High (high burnout): 12 students (12%)



Depersonalization (DP)

- Low: 28 students (29%)
- Moderate: 52 students (54%)
- High: 16 students (17%)

Personal Accomplishment (PA)

- Low (low personal accomplishment, high burnout): 14 students (15%)
- Moderate: 56 students (58%)
- High (high personal accomplishment, low burnout): 26 students (27%)

Overall Burnout Categories

Based on MBI results, students were classified into the following groups:

- Classic burnout: 16 students
- Initial stage: 7 students
- At-risk group: 20 students
- Compensatory stage: 12 students
- Normal: 41 students

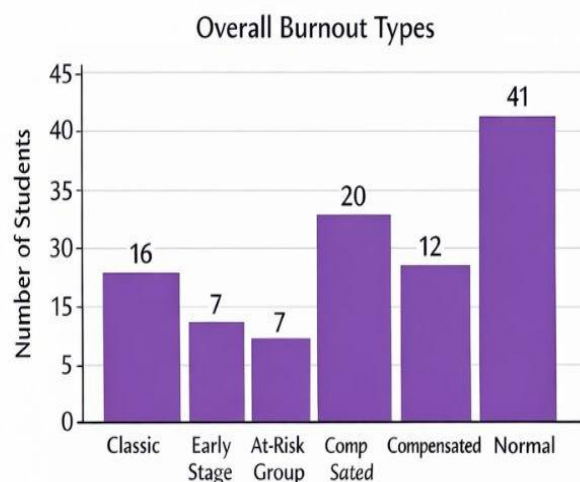
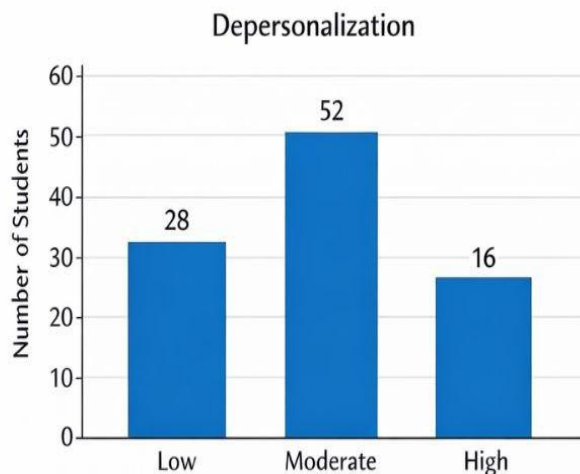


Figure 1: "The diagrams illustrate the distribution of burnout components among students based on the number of participants."

Analysis revealed that burnout risk increases with higher academic years; senior students showed higher levels of emotional exhaustion and depersonalization.

Additionally, female students were found to have a greater tendency toward burnout compared to male students.

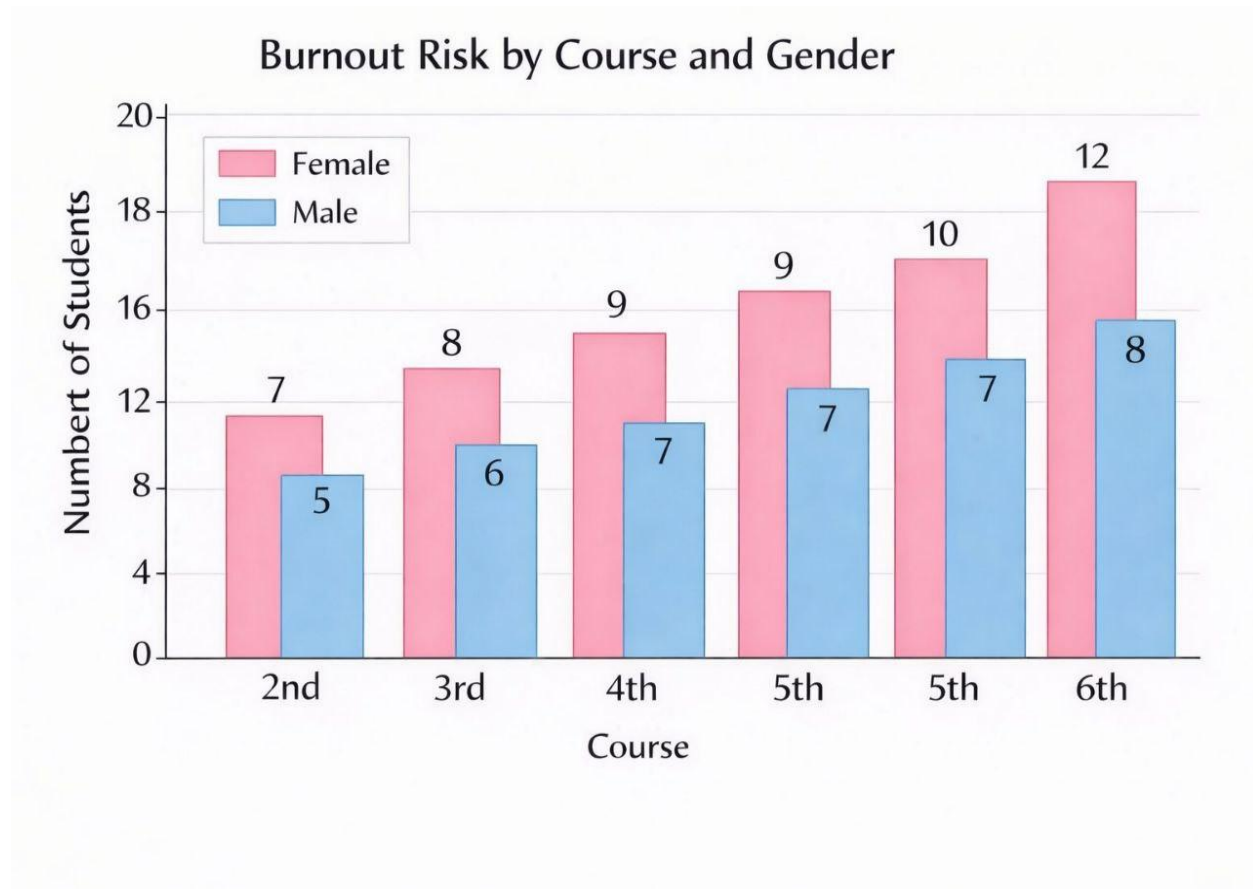


Figure 2: "The diagram illustrates the distribution of burnout syndrome according to students' gender and course year."

CONCLUSION: The findings of this study indicate that burnout syndrome is considerably prevalent among university students. A substantial proportion of participants demonstrated moderate levels of emotional exhaustion and depersonalization, while a notable percentage exhibited high levels of burnout symptoms. Additionally, reduced personal accomplishment was identified in a segment of students, suggesting an increased risk of developing full burnout syndrome. Based on the overall classification, 16 students were identified with classic burnout, 20 were categorized as at risk, 7 were in the initial stage, and 12 were in a compensatory stage, whereas 41 students were classified as normal. These results confirm that

emotional strain and psychological fatigue represent significant concerns within the student population. Furthermore, the analysis revealed that burnout risk increases with advancing academic year, with senior students showing higher levels of emotional exhaustion and depersonalization. Gender differences were also observed, as female students demonstrated a greater tendency toward burnout compared to male students. In conclusion, these findings highlight the necessity of implementing preventive strategies, psychological support programs, and stress management interventions within higher education institutions. Early identification and timely prevention of burnout syndrome are essential to improve students' academic



performance, mental well-being, and overall quality of life.

Preventive measures include:

- A. Optimization of academic workload
 - Reducing excessive control and the number of assignments
 - Providing sufficient breaks between examinations
- B. Establishment of psychological counseling services
 - Offering free consultations for students
 - Conducting burnout screening (for example, using the Maslach questionnaire)
- C. Trainings and seminars
 - Organizing stress management training sessions
 - Holding motivational meetings
- D. Mentorship system
 - Involving senior students in supporting junior students
 - Providing academic and psychological support

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