International Journal on Science and Technology (IJSAT)
E-ISSN: 2229-7677 ● Website: www.ijsat.org ● Email: editor@ijsat.org

The Impact of Poor Sleep Quality on Psychological and Physical Health in Students

Himanshu Mishra

1st Year General Medicine
Izhevsk State Medical Academy

Summary

Objective - Sleep quality plays a pivotal role in maintaining psychological equilibrium and physical wellness, especially among students facing academic stress.

Methods - This study investigated the influence of poor sleep on students' health and performance using a structured questionnaire administered to 120 participants

Results - The data revealed a significant correlation between insufficient or disrupted sleep and symptoms such as fatigue, irritability, cognitive impairments, skin problems, and academic burnout. Additionally, the lack of institutional support and effective coping mechanisms was highlighted.

Conclusion - Findings suggest a pressing need for policy and structural changes within educational institutions to support student well-being, particularly through sleep education, stress reduction programs, and time management interventions.

Key words – Poor Sleep, Students, Medical Education, Physical Health, Academics

1. Introduction

Sleep is a critical biological function that underpins learning, emotional regulation, immunity, and overall physical vitality. For students—especially those juggling intense academic and extracurricular responsibilities—good sleep hygiene is often compromised. With increased screen time, irregular schedules, and rising academic demands, many students face chronic sleep deprivation, often with little awareness of its cumulative toll. This study explores how poor sleep quality affects both psychological and physical health, focusing on medical and university students. The goal is to identify trends, recognize symptoms, and propose practical recommendations that institutions can implement to address this growing concern.

Anecdotal evidence and prior studies have already established that young adults are particularly vulnerable to sleep disorders due to lifestyle patterns(Bastien, Vallières & Morin,2003). However, quantifying these effects within academic settings and understanding their root causes—be it exam stress, lack of time management, or emotional distress—remains underexplored. By analyzing self-reported data, this study aims to bridge this gap.

2. Methods

A quantitative, cross-sectional survey was conducted among 120 undergraduate students from medical educational backgrounds. The survey consisted of 34 questions grouped into the following categories:

- **Demographics**: Age, gender, and academic level
- **Sleep behavior**: Average hours of sleep, bedtime, night awakenings, and sleep aids
- **Physical symptoms**: Fatigue, skin issues, stamina loss
- **Cognitive and emotional symptoms**: Anxiety, irritability, reduced focus
- **Academic impact**: Changes in performance, concentration, and burnout
- **Institutional support**: Perception of academic burden, availability of wellness support
- **Coping strategies**: Time management, relaxation techniques, healthcare consultation

Descriptive analysis was conducted to assess frequency distributions, and patterns were examined qualitatively based on open-ended responses from January 2025 to June 2025.

Results

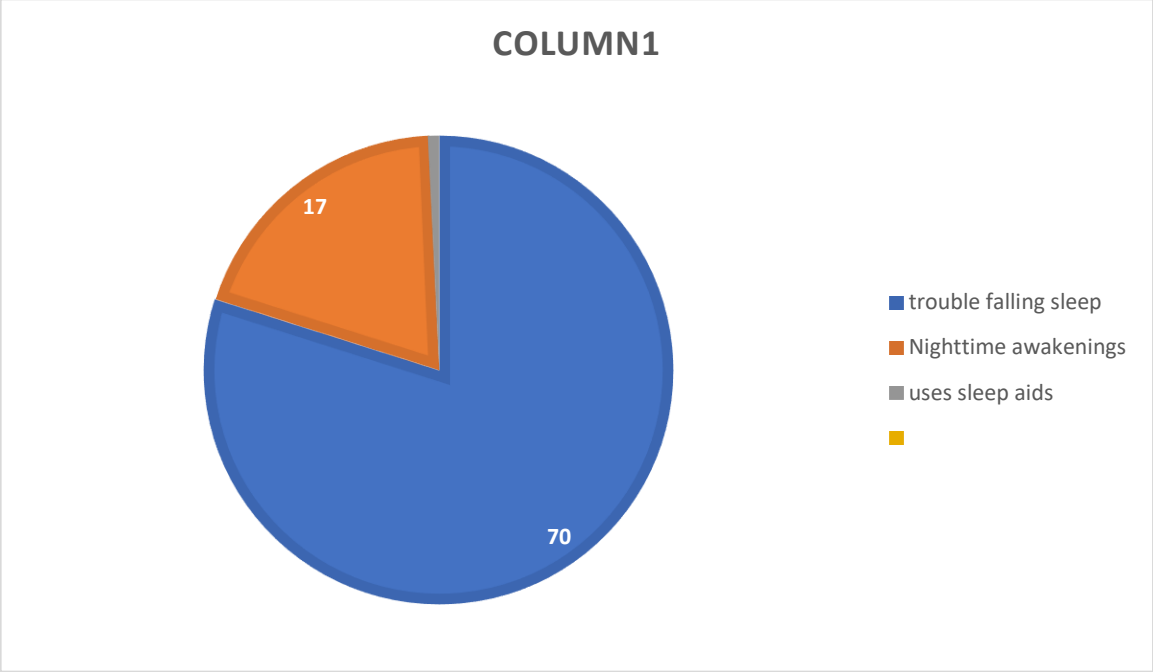
The analysis revealed concerning patterns:

Sleep Patterns and Duration

Most respondents (about 80%) reported sleeping fewer than 7 hours per night, with some students sleeping less than 4 hours regularly. A significant number cited inconsistent bedtimes, often post-midnight, linked to study pressure or screen usage.

Sleep Difficulties

- Over 70% had trouble falling asleep despite feeling tired.
- Nighttime awakenings were frequently reported .
- Nearly half had never used any sleep aid, while others occasionally used methods such as herbal teas, music, or melatonin.

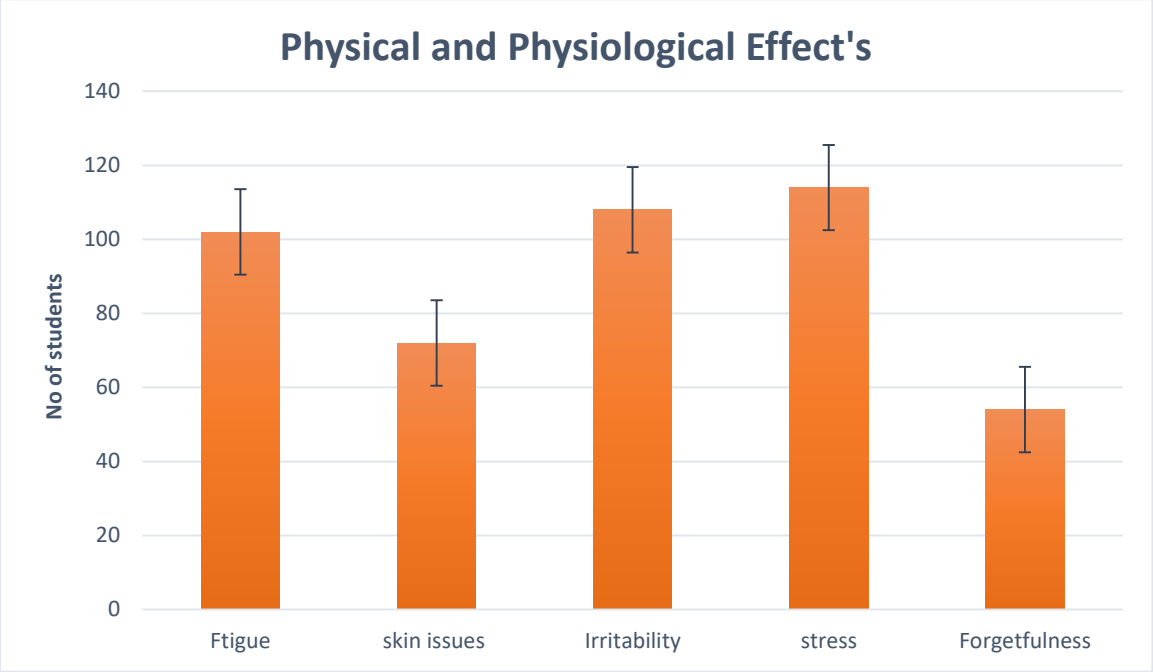


Physical Health Impacts

- **Fatigue and reduced stamina**: 85% felt their energy levels were significantly reduced.
- **Skin issues**: Over 60% reported dullness or breakouts.
- **Physical activity decline**: Many found it difficult to sustain regular workouts due to tiredness.

Psychological Effects

- **Irritability and emotional sensitivity**: Reported by over 90% of participants.
- **Stress and anxiety**: Strongly prevalent, with many connecting these symptoms to sleepless nights before assignments or exams.
- **Cognitive impairment**: Respondents described forgetfulness, lack of focus, and mental fog.



Academic Impact

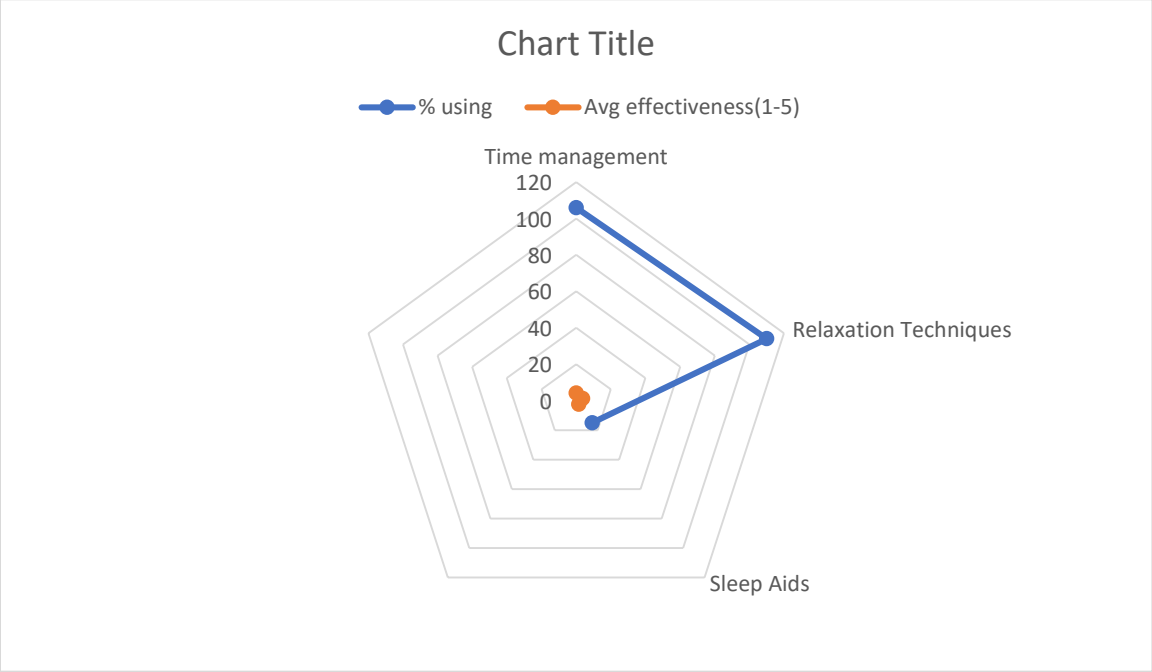
- 80% stated their academic performance had been directly affected by poor sleep.
- Symptoms included procrastination, errors in work, and burnout.

Institutional Role and Support

- Only a minority felt supported by their institutions in managing sleep and academic stress.
- Over 90% were aware of recommended sleep guidelines, but over 70% cited academic duties as the main barrier to achieving them.

Coping Strategies

- **Most common method**: Time management, followed by relaxation techniques.
- **Effectiveness**: Rated as "somewhat effective" by most; only a few found them "very effective".
- Few had consulted a healthcare provider for sleep issues, indicating possible stigma or unawareness.



3. Discussion

The data paints a sobering picture of the challenges students face in maintaining healthy sleep routines. While poor sleep is often normalized in academic culture, its effects are far-reaching. The correlation between inadequate sleep and emotional instability, cognitive dysfunction, and physical ailments aligns with existing literature(Van der Helm,2010;Irwin,2015).

Although most students recognize the importance of sleep, they report feeling powerless due to institutional pressures. The lack of support structures—from counseling services to flexible academic policies—appears to exacerbate the problem.

Open-ended responses revealed a desire for practical changes, such as:

- Limiting nighttime assignments
- Counseling and mindfulness workshops
- Flexible exam schedules
- Sports and recreation breaks

These insights reflect a growing demand for a more holistic academic environment, where productivity is not pursued at the expense of student health.

4. Conclusion

The findings reaffirm that adequate sleep is an essential component of student health, especially for students navigating high-pressure academic settings. The psychological and physical symptoms

associated with poor sleep—ranging from acne and fatigue to anxiety and cognitive lapses—can significantly hamper both personal well-being and academic achievement.

Educational institutions have a responsibility to promote student health by addressing the root causes of sleep disruption. Initiatives such as awareness campaigns, sleep hygiene workshops, and reducing academic overload could significantly improve outcomes. Future research should expand on these findings using larger samples and include intervention studies that track the effectiveness of institutional reforms.

5. Acknowledgment

I would like to express my gratitude to all the participants who contributed their time and personal insights to this survey. Their honesty and openness were critical in uncovering the nuanced challenges students face. We also thank the academic and wellness teams who helped disseminate the survey. Their collaboration ensured we reached a diverse participant base and gathered meaningful data.

References

- Bastien, C. H., Vallières, A., & Morin, C. M. (2003). Prevalence of insomnia and depression in a representative sample of the Canadian population. Sleep, 26(6), 703-709.
- Cappuccio, F. P., D'Elia, L., Strazzullo, P., & Miller, M. A. (2011). Sleep duration and all-cause mortality: A systematic review and meta-analysis of prospective studies. Sleep, 34(5), 585-592.
- Irwin, M. (2015). Sleep and inflammation: Partners in sickness and in health. Nature Reviews Immunology, 15(6), 453-463.
- Killgore, W. D. S. (2010). Effects of sleep deprivation on cognition. Progress in Brain Research, 185, 105-129.
- Van der Helm, E. (2010). Sleep and anxiety: A reciprocal relationship. Sleep, 33(8), 973-983.
- Walker, M. (2017). Why we sleep: Unlocking the power of sleep and dreams. Scribner