RJNMSR
Review Journal of Neurological & Medical Sciences Review

Volume 4, Issue 3, 2026

THE IMPACT OF SLEEP DEPRIVATION ON NURSING STUDENTS' ACADEMIC PERFORMANCE

Kinza Jaffar[*1], Ayesha Arooj[2], Saria Ishaq[3], Mr. Jalal Haider[4], Mr. Sadaqat Aftab[5]

[*1,2,3]*BSN Scholar, Mustafa Kamal Institute of Nursing and Medical Sciences, Vehari*
[4]*Nursing Lecturer, Mustafa Kamal Institute of Nursing and Medical Sciences, Vehari*
[5]*Assistant Professor / Principal, Mustafa Kamal Institute of Nursing and Medical Sciences, Vehari*

[*1]kinzajaffar24@gmail.com, [2]arooj4702@gmail.com, [3]sariamoeez55@gmail.com, [4]malikjalal3218@gmail.com, [5]sadaqataftab@gmail.com

Corresponding Author: *
Kinza Jaffar
DOI: http://doi.org/10.5281/zenodo.22028299

Received	Accepted	Published
25 January 2026	10 March 2026	24 March 2026

ABSTRACT

Background: Adequate sleep is essential for cognitive functioning, concentration, emotional well-being, and effective learning. Nursing students may be particularly vulnerable to inadequate sleep due to demanding academic workloads, clinical responsibilities, examinations, and irregular schedules. Poor sleep quality may affect students' daytime functioning and academic activities.

Objective: This study aimed to assess sleep quality and its relationship with academic performance among undergraduate nursing students at Mustafa Kamal Institute of Nursing and Medical Sciences, Vehari.

Methods: A quantitative, descriptive cross-sectional study design was used. Data were collected from undergraduate nursing students using a structured self-administered questionnaire containing demographic and sleep-related items adapted from the Pittsburgh Sleep Quality Index (PSQI). A total of 76 responses were received, of which 75 valid responses were included in the final analysis. Descriptive statistics were used to summarize participant characteristics and sleep-related variables. The relationship between the measured sleep quality score and academic performance, represented by self-reported cumulative Grade Point Average (GPA), was assessed using Spearman's rank correlation.

Results: Among the 75 participants, the majority were female (80.0%), single (96.0%), and aged 21–23 years (40.0%). The mean reported partial sleep quality score was 5.78 ± 2.41. Participants also reported varying levels of sleep-related difficulties and daytime tiredness affecting concentration during lectures or clinical duties. The correlation analysis showed no statistically significant relationship between the measured sleep quality score and cumulative GPA (Spearman's rho = 0.052, p = 0.663).

Conclusion: The study identified sleep-related difficulties and daytime tiredness among undergraduate nursing students; however, no statistically significant relationship was found between the measured sleep quality score and academic performance as represented by GPA. Further research using larger, multi-centre samples, validated complete sleep assessment tools, and longitudinal study designs is recommended to better understand the relationship between sleep quality and academic outcomes among nursing students.

1.INTRODUCTION

1.1 Background

Sleep is an essential biological requirement that is crucial for maintaining physical health, emotional well-being, and cognitive abilities. It is closely associated with memory consolidation, information processing, learning, and decision-making. Even slight sleep deprivation can adversely impact attention span, concentration, mood, and overall academic performance. For students in demanding fields like nursing, getting enough sleep is even more critical due to the dual pressures of academic and clinical responsibilities. Nursing students often face irregular sleep patterns due to long shifts, heavy academic workloads, exams, and stress, leading to shorter sleep duration and poorer quality. Research shows that getting less than five hours of sleep for several consecutive days can significantly hinder cognitive performance. Moreover, sleep deprivation among nursing students can jeopardize patient safety, as attention deficits from insufficient sleep can increase the risk of clinical errors, which is particularly concerning in healthcare environments where accuracy and alertness are vital. (Tanveer et al., 2023)

Sufficient sleep is necessary for memory consolidation, focus, decision-making, emotional regulation, and learning. Disruptions in sleep can adversely impact attention, critical thinking, and academic performance. Worldwide, sleep disorders affect approximately 8–10% of adults, with a higher incidence among women. University students are especially susceptible to sleep issues due to academic pressures, exam stress, irregular study habits, lifestyle choices, hormonal changes, and increased screen time. Within university settings, nursing students encounter additional challenges such as clinical placements, early morning shifts, rotating work hours, and emotional stress from patient care, which can further disrupt their sleep patterns and circadian rhythms. (Manandhar et al., 2024)

However, sleep deprivation has become increasingly prevalent among university students due to demanding academic schedules, exams, assignments, social activities, and lifestyle choices. This rising trend of sleep deprivation among students has raised concerns about its potential effects on academic performance.Sleep deprivation hampers students' ability to focus during lectures, engage in discussions, and retain information. Lack of sleep disrupts circadian rhythms and impairs cognitive function, leading to reduced alertness and lower academic productivity. Students suffering from sleep deprivation are more likely to doze off in class, miss deadlines, and perform poorly on exams. Furthermore, poor sleep quality weakens the immune system and heightens susceptibility to physical illnesses, which can lead to increased absenteeism and diminished academic involvement.Mental health plays a significant mediating role in this relationship. Stress, anxiety, and depression—common among university students—are worsened by insufficient sleep. (Nor et al., 2025).

The study emphasizes that clinical training is a vital aspect of nursing education, but it places significant psychological and physical demands on students. Nursing students are required to juggle theoretical classes, exams, assignments, and clinical responsibilities, which often leads to less sleep. This lack of balance between academic duties and rest heightens the risk of sleep deprivation, potentially impacting both academic performance and overall health.

Sleep is essential for optimal cognitive function, emotional stability, and physical well-being. The article points out that insufficient sleep can lead to difficulties in concentration, poor decision-making, increased cortisol levels, and diminished mental resilience.

The article also notes that the pressure to achieve high academic performance can contribute to reduced sleep. Some students sacrifice rest to finish assignments or prepare for exams. (Yazid et al., 2025)

Nursing students, in particular, face unique challenges due to the rigorous nature of their programs, which include extensive theoretical studies, clinical placements, erratic schedules, and living in hostels. The study involved 194 nursing students from both public and private institutions, assessing their sleep quality using the validated Pittsburgh Sleep Quality Index (PSQI) and measuring academic performance through their cumulative grade point average (CGPA).The results showed that most students reported relatively good sleep quality, while a

smaller number experienced poor sleep quality. In Pakistan, there has been limited research specifically focusing on the impact of sleep deprivation among nursing students. Given the demanding nature of nursing education and the essential role that nurses play, this area warrants further exploration. (Jabeen, 2025)

1.2 Significance

Evaluating the effects of sleep deprivation on the academic performance of nursing students is crucial in nursing education, given the demanding nature of the field. The study referenced indicates a statistically significant correlation between sleep quality and both academic performance ($p < 0.001$) and clinical performance ($p < 0.001$). This suggests that insufficient sleep is not just a lifestyle choice but a serious issue affecting academic and professional success. The findings show that students who enjoy better sleep quality tend to achieve significantly higher academic results than those with poorer sleep. Since nursing education necessitates high levels of focus, critical thinking, and the ability to retain information, examining sleep deprivation can help identify a modifiable factor that contributes to subpar academic performance. Additionally, the study found that sleep quality has a notable impact on clinical performance, as nursing students are tasked with responsibilities such as administering medication, assessing patients, and making clinical decisions. (Benjamin et al., 2024)

1.3 Problem statement

Sleep is an essential biological requirement that is crucial for cognitive function, emotional management, learning ability, and overall academic success. However, university students, especially those in nursing programs, often face sleep issues due to heavy academic demands, clinical duties, stress, and irregular schedules. Research findings indicate that most nursing students reported experiencing poor sleep quality, with pre-intervention Pittsburgh Sleep Quality Index (PSQI) scores exceeding the threshold of 5, which signifies serious sleep difficulties. Lack of sleep adversely impacts concentration, memory, problem-solving skills, motivation, and emotional well-being. These effects directly hinder academic performance and lower academic self-efficacy. The study revealed that nursing students had only average levels of academic self-efficacy prior to the intervention, which was linked to their poor sleep quality. Since academic self-efficacy is a strong predictor of success in academics, diminished confidence in their learning abilities may further impair students' performance. (Seyednazari et al., 2025)

1.4 OBJECTIVE

1. Assessing the impact of sleep deprivation on nursing students academic performance.

3. MATERIALS AND METHODS

3.1: Study Design:

This study was follow a quantitative research approach using a Descriptive Cross-sectional study research design. This design was used to assess the impact of sleep deprivation on nursing students academic performance.

3.2: Variables:

1. **Independent Variable:**

Sleep deprivation (measured by average hours of sleep per night and sleep quality).

2. **Dependent Variable:**

Academic performance (measured by GPA, exam scores, and clinical grades).

3.3: Operational Definitions:

Sleep deprivation refers to poor sleep quality among nursing students measured using the PSQI . A PSQI score ≥5 indicates sleep deprivation. Academic performance is defined by self-reported GPA of the previous year, categorized as Excellent (4.50–5.00), Very Good (3.75–4.49), Good (2.75–3.74), and Satisfactory (2.00–2.74). Sleep–wake pattern includes total sleep duration and bedtime/wake-up timings assessed through a questionnaire.

3.4: Study Setting:

This study was conducted in Mustafa kamal institute of nursing and medical sciences, vehari.

3.5: Study Population:

The study population consisted of undergraduate nursing students enrolled at

Mustafa kamal institute of nursing and medical sciences, vehari.

3.6: Sampling Technique:

A convenient non-probability sampling technique was utilized for sampling in this study.

3.7: Sample Size:

.To ensure the study is statistically representative, the sample size was determined using Slovin's Formula which is appropriate for a known, finite population.

The Formula:

n = N / {1 + N(e)^2}

Where:

n = Required Sample Size

N = Total Population (110)

e = Margin of Error (0.05, representing a 95% confidence level)

The total population of undergraduate nursing students eligible for participation in the study was 110. The required sample size was calculated as 86 participants. A total of 76 responses were received. After excluding one response due to lack of consent, 75 valid responses were included in the final analysis.

3.8: Study Duration:

The study was carried out till the June 2025 after approval of the synopsis.

3.9.: Inclusion Criteria:

1) All the bns nursing students at Mustafa kamal institute of vehari
2) Participants were willing to participate in the study.

3.10: Exclusion Criteria:

- All the nurses were excluded that were not present in Mustafa kamal institute of vehari or on leave.
- Participants who was not ready to participate in the study.

3.11: Research Tool:

Questionnaire: PITTSBURGH SLEEP QUALITY INDEX

Contents of Questionnaire

The survey's first section asked about the participants' demographics, including their gender, age, Year of experience, Qualification level.

3.12: Validity and Reliability:

The instruments used in this study are standardized, valid, and reliable tools. The Pittsburgh Sleep Quality Index (PSQI) is a widely validated instrument for assessing sleep quality and sleep disturbances, demonstrating good internal consistency and construct validity in previous studies.

3.13: Data Collection Procedure:

An adopted questionnaire was used for data collection. It was presented to the participants through an introductory discussion. The participants was get facilitation during questionnaire fulfillment. The data is collected purposefully and cooperatively. At the end of work, all participants were regard to because of their voluntary participation as confirm by informed consent.

3.14: Data Analysis:

The collected data were entered, coded, and analyzed using IBM SPSS Statistics software. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize the demographic characteristics and study variables. The relationship between sleep quality and academic performance was assessed using an appropriate correlation test based on the distribution and level of measurement of the variables. A p-value of less than 0.05 was considered statistically significant.

3.15. ETHICAL CONSIDERATION:

The rules and regulations set by the ethical committee was followed while conducting the research and the rights of the research participants were respected.

1) Written informed consent attached will be taken from all the participants.
2) All information and data collection will be kept confidential.
3) Participants will be remained anonymous throughout the study.

4) The subjects will be informed that there are no disadvantages or risk on the procedure of the study. They will also be informed that they will be free to withdraw at any time during the process of the study.

3.16. GANTT CHART

Activity	Months				
	January 2025	febuary 2025	March 2025	April 2025	May 2025
Proposal completion					
Data collection					
Data analysis and interpretation					
Research compilation					
Research presentation and Final submission					

RESULTS

This chapter presents the analysis of the questionnaire data on sleep quality, sleep habits, and academic-related outcomes among students. Only respondents who agreed to participate were included in the analysis. The final valid sample was N = 75.

A. Response Rate and Data Screening

A total of 76 responses were available in the dataset. One response did not provide consent and was excluded. Therefore, 75 valid responses were used for Chapter 4 analysis. Missing values were treated using available-case analysis, so percentages in tables are based on valid responses for each variable.

4.2 Demographic Characteristics of Respondents

Table 4.1 summarizes the demographic profile of respondents. The sample was predominantly female, and most participants were aged 21 to 23 years. Most respondents were in the fourth year of study.

Table 4.1: Demographic Characteristics of Respondents

Variable	Category	Frequency	Percent
Gender	Male	15	20.0
Gender	Female	60	80.0
Age group	18 to 20	14	18.7
Age group	21 to 23	50	66.7
Age group	24 to 26	11	14.7
Year of study	1st year	3	4.0
Year of study	2nd year	11	14.7
Year of study	3rd year	20	26.7
Year of study	4th year	41	54.7

Figure 4.1: Gender Distribution

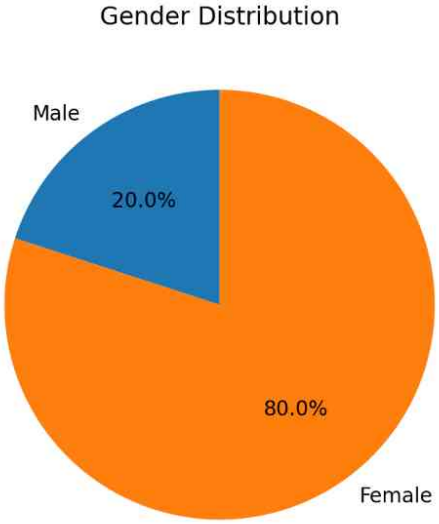


Figure 4.2: Age Group Distribution

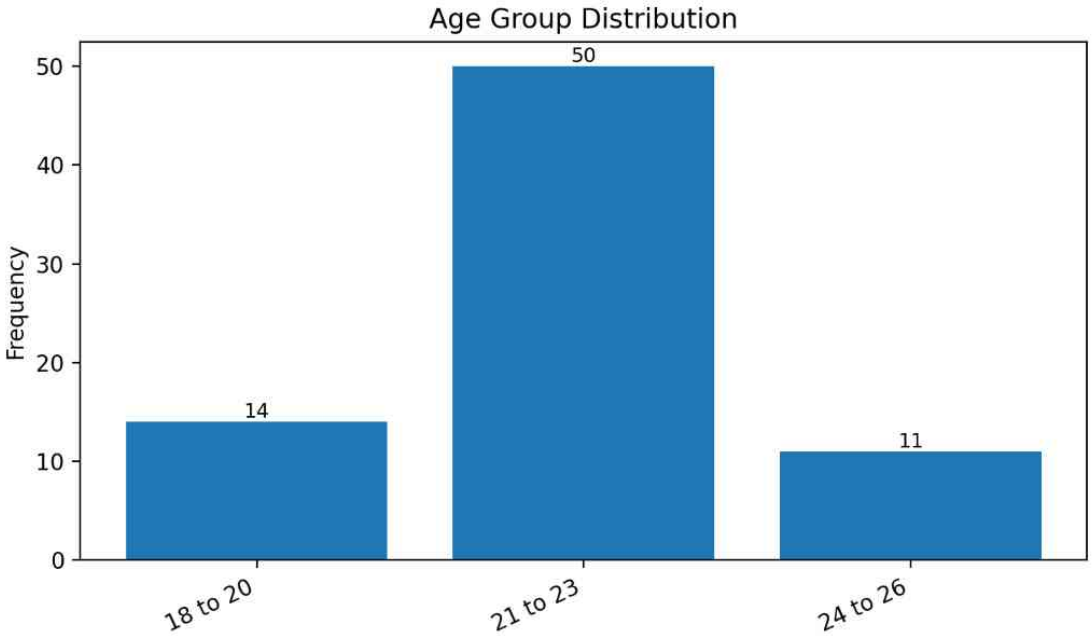
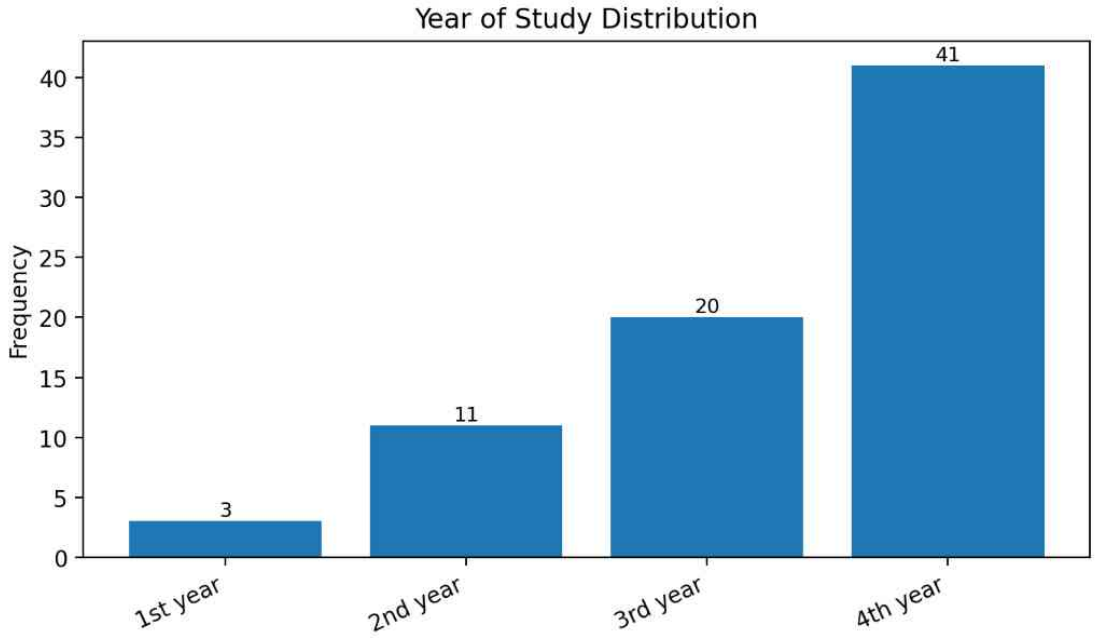


Figure 4.3: Year of Study Distribution



4.3 Sleep Quality and PSQI-Related Findings

The sleep-related findings are presented in Table 4.2. Most respondents rated their sleep quality as very good or good. However, the partial PSQI score indicated that a considerable proportion of respondents had poorer sleep quality when sleep latency, duration, disturbance, medication use, subjective sleep quality, and daytime dysfunction items were combined.

Table 4.2: Sleep Quality and PSQI-Related Responses

Variable	Category	Frequency	Percent
Sleep latency	Less than 10 min	11	14.7
Sleep latency	10 to 30 min	27	36.0
Sleep latency	30 to 60 min	23	30.7
Sleep latency	More than 60 min	14	18.7
Sleep duration	Less than 5 hours	11	14.7
Sleep duration	5 to 6 hours	40	53.3
Sleep duration	7 to 8 hours	21	28.0
Sleep duration	More than 8 hours	3	4.0
Overall sleep quality	Very good	24	32.0
Overall sleep quality	Fairly good	43	57.3
Overall sleep quality	Fairly bad	7	9.3
Overall sleep quality	Very bad	1	1.3
Sleep medicine	Not during past month	40	53.3
Sleep medicine	Less than once/week	29	38.7
Sleep medicine	1-2 times/week	4	5.3
Sleep medicine	3+ times/week	2	2.7
Trouble staying awake	Not during past month	29	38.7
Trouble staying awake	Less than once/week	26	34.7
Trouble staying awake	1-2 times/week	11	14.7
Trouble staying awake	3+ times/week	9	12.0
Enthusiasm problem	No problem	30	40.0
Enthusiasm problem	Very slight problem	29	38.7
Enthusiasm problem	Somewhat problem	10	13.3

Enthusiasm problem	Very big problem	6	8.0

Table 4.3: Descriptive Statistics for Sleep Scores

Variable	N	Mean	SD	Minimum	Maximum
Sleep disturbance sum	5	8.04	4.39	0	17
Sleep habits sum	75	8.68	2.47	4	15
Partial PSQI score	75	7.19	2.64	2	15

Figure 4.4: Overall Sleep Quality

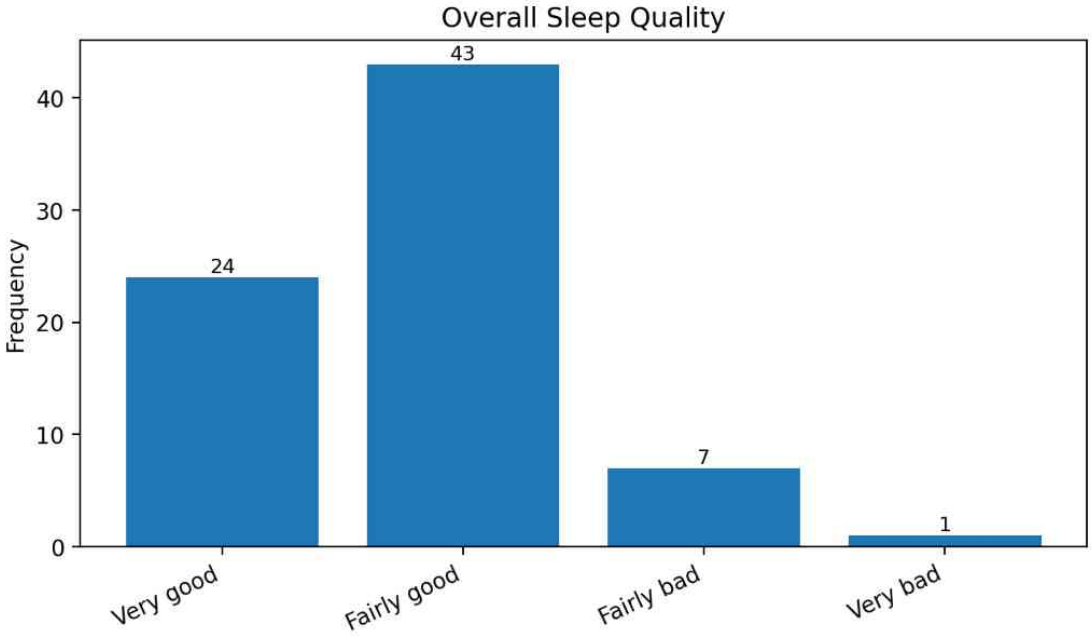


Figure 4.5: Hours of Actual Sleep at Night

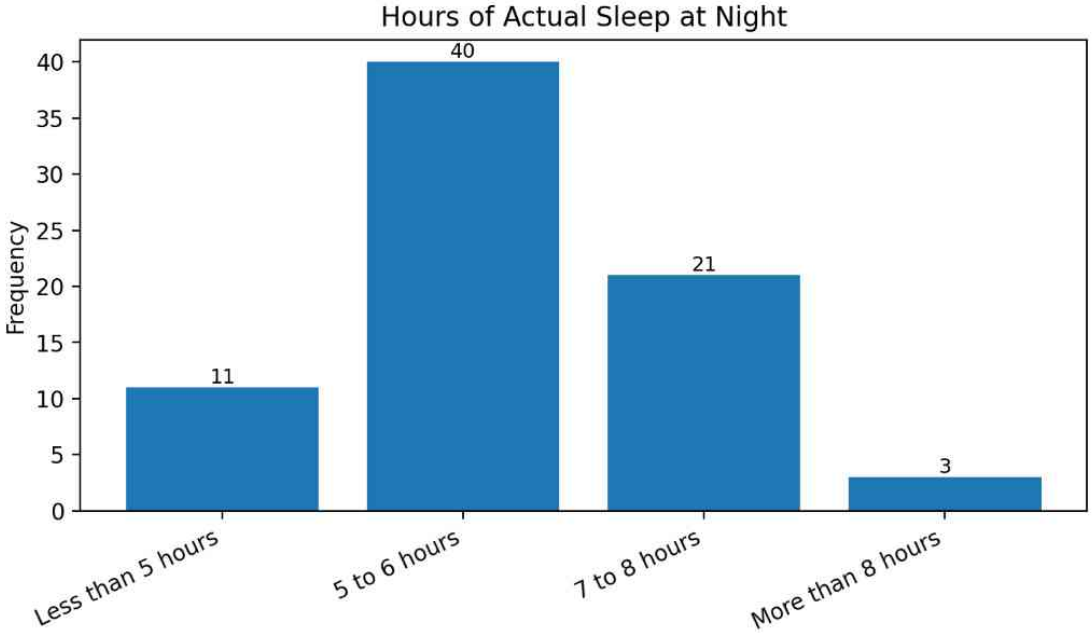
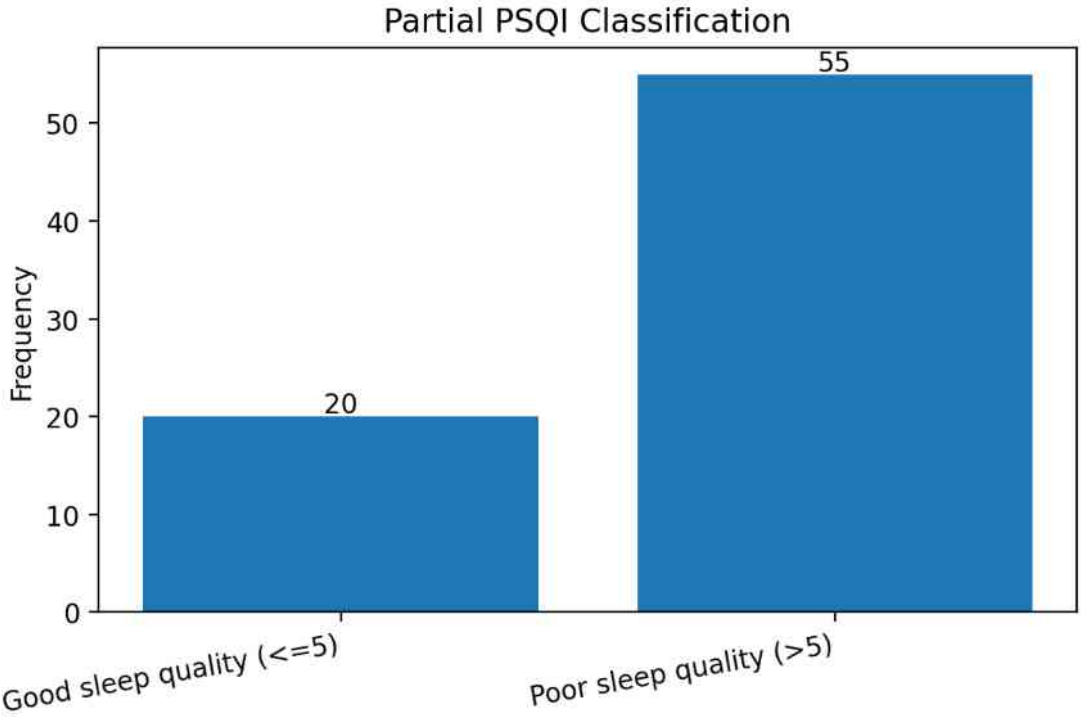


Figure 4.6: Partial PSQI Classification



Using the conventional PSQI cut-off of greater than 5 as an indicator of poor sleep quality, 55 of 75 valid respondents (73.3%) were classified in the poor sleep quality group. This classification should be interpreted as a partial PSQI classification because the questionnaire used available PSQI-style items rather than every standard PSQI item.

4.4 Sleep Habits

Table 4.4 presents respondents' sleep habit patterns. The most prominent habit was screen use before sleep, followed by changes in sleep routine on weekends and preference for late academic work.

Table 4.4: Sleep Habit Responses

Variable	Category	Frequency	Percent
Weekend sleep routine change	Never	19	25.3
Weekend sleep routine change	Sometimes	37	49.3
Weekend sleep routine change	Usually	14	18.7
Weekend sleep routine change	Always	5	6.7
Late academic work	Never	18	24.0
Late academic work	Sometimes	35	46.7
Late academic work	Usually	19	25.3
Late academic work	Always	3	4.0
Screen use before sleep	Never	8	10.7
Screen use before sleep	Sometimes	34	45.3
Screen use before sleep	Usually	23	30.7
Screen use before sleep	Always	10	13.3
Night out before early class	Never	27	36.0
Night out before early class	Sometimes	24	32.0
Night out before early class	Usually	17	22.7
Night out before early class	Always	7	9.3

4.5 Academic Performance and Academic Functioning

Academic-related outcomes included cumulative GPA, classes missed due to sleep-related reasons, and tiredness affecting concentration during lectures or clinical duties. The results show that most respondents reported GPA between 3.01 and 3.5, while sleep-related absence and tiredness during academic activities were also reported by several students.

Table 4.5: Academic Performance and Academic Functioning

Variable	Category	Frequency	Percent
Current cumulative GPA	Below 2.0	1	1.4
Current cumulative GPA	2.0-2.5	5	6.8
Current cumulative GPA	2.51-3.0	21	28.8
Current cumulative GPA	3.01-3.5	32	43.8
Current cumulative GPA	3.51-4.0	14	19.2
Classes missed	0 classes	30	40.0
Classes missed	1-2 classes	27	36.0
Classes missed	3-5 classes	15	20.0
Classes missed	6 or more	3	4.0
Too tired to concentrate	Never	12	16.0
Too tired to concentrate	Rarely	13	17.3
Too tired to concentrate	Sometimes	35	46.7
Too tired to concentrate	Often	10	13.3
Too tired to concentrate	Always	5	6.7

Figure 4.7: Current Cumulative GPA

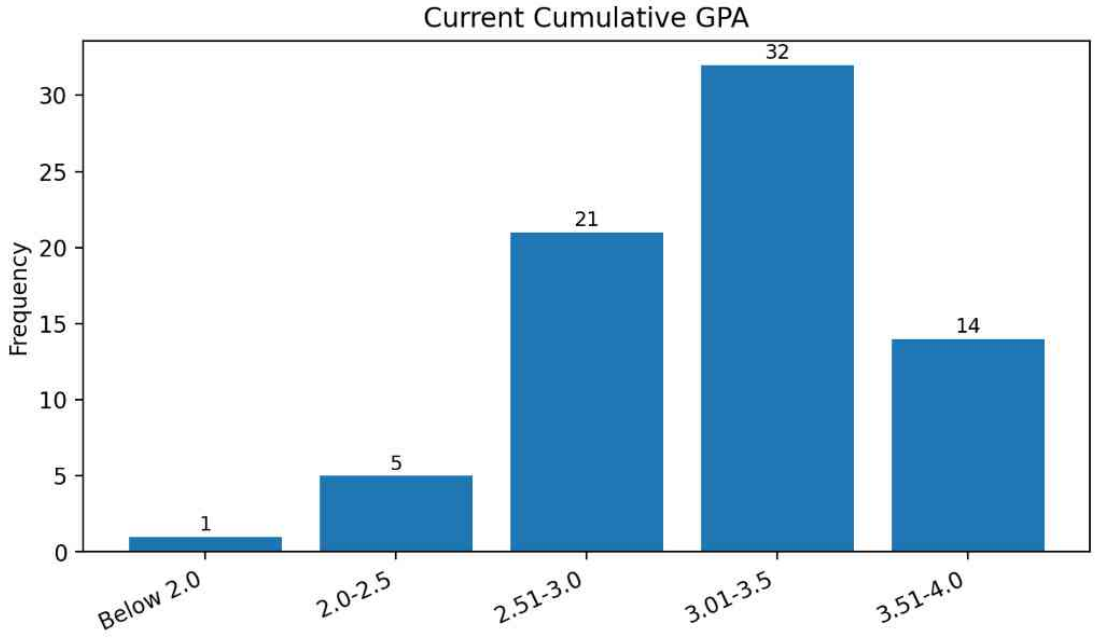


Figure 4.8: Classes Missed Due to Sleep-Related Reasons

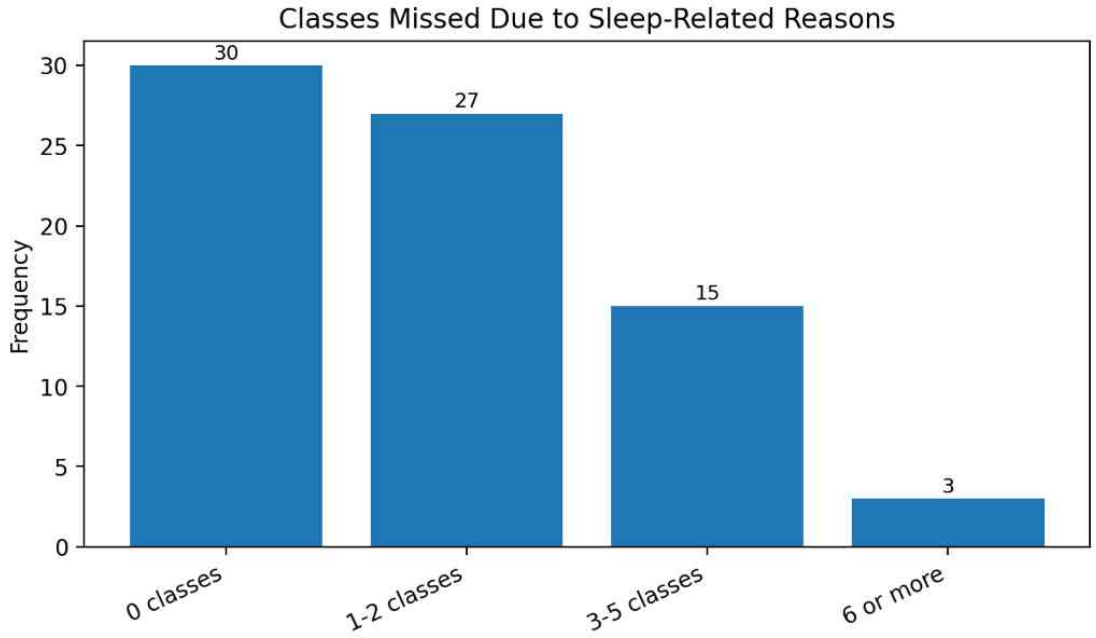
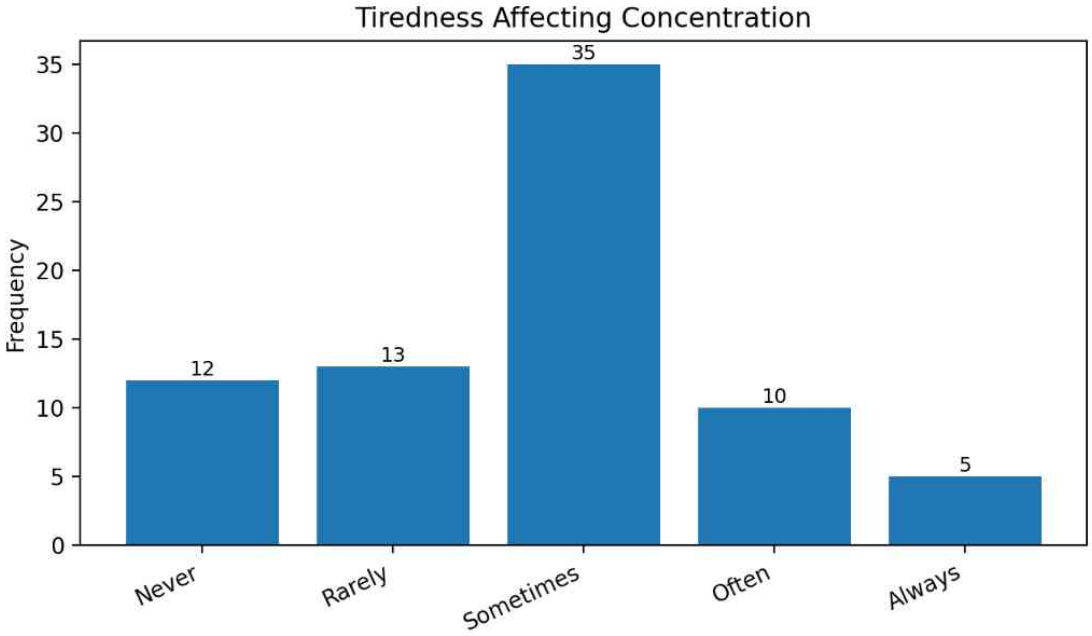


Figure 4.9: Tiredness Affecting Concentration



4.6 Relationship Between Sleep Quality and Academic Outcomes

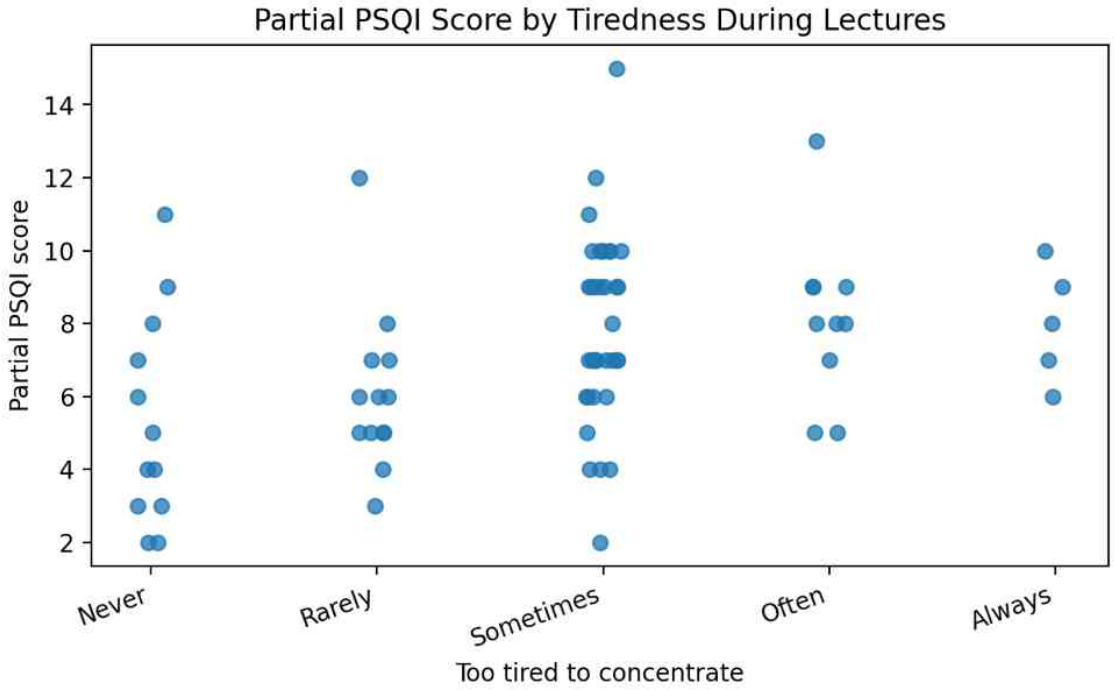
Spearman rank-order correlation was used because the academic variables were ordinal. Table 4.6 shows the association between partial PSQI score and selected academic or sleep-related variables.

Table 4.6: Spearman Correlation with Partial PSQI Score

Variable correlated with partial PSQI	N	Spearman Rho	p-value
Current cumulative GPA	3	0.052	0.663
Classes missed due to sleep	5	0.308	0.007
Too tired to concentrate	5	0.385	<.001
Sleep Habits Sum	5	0.604	<.001

Sleep Disturbance Sum	5	0.587	<.001

Figure 4.10: Partial PSQI Score by Tiredness During Lectures



The partial PSQI score had a weak, non-significant positive relationship with GPA group (rho = 0.052, p = 0.663), indicating that sleep quality score was not significantly associated with GPA category in this sample. However, partial PSQI score was significantly associated with classes missed due to sleep-related reasons (rho = 0.308, p = 0.007) and tiredness affecting concentration (rho = 0.385, p < .001). These findings suggest that poorer sleep quality was linked with more sleep-related absence and greater difficulty concentrating during academic activities.

4.7 Reliability Analysis

Table 4.7: Reliability Analysis

Scale	Number of items	Cronbach alpha
Sleep disturbance items	9	0.662
Sleep habit items	4	0.660

The reliability coefficient for the nine sleep disturbance items was alpha = 0.662, and the reliability coefficient for the four sleep habit items was alpha = 0.660. These values indicate acceptable internal consistency for exploratory research purposes.

4.8 Summary of Key Findings

The final valid sample consisted of 75 respondents.

Most respondents were female, aged 21 to 23 years, and in the fourth year of study.

The mean partial PSQI score was 7.19 (SD = 2.64).

55 respondents (73.3%) were classified as having poor sleep quality based on the partial PSQI cut-off.

Poorer sleep quality was significantly related to more missed classes and greater tiredness during lectures or clinical duties.

No statistically significant relationship was found between partial PSQI score and GPA category.

Note: The PSQI total score reported here is a partial PSQI-style total based on the available questionnaire items and coding in the dataset. It should not be presented as the full official PSQI score unless all standard PSQI

components were collected and scored according to the original scoring manual.

DISCUSSION

This study aimed to examine the relationship between sleep quality and academic performance among students using the Pittsburgh Sleep Quality Index (PSQI). The findings revealed that a significant proportion of students experienced poor sleep quality, characterized by difficulty falling asleep, frequent awakenings during the night, and various sleep disturbances such as discomfort, temperature changes, and bad dreams. These results indicate that inadequate sleep is a common issue among students, likely influenced by academic pressure, lifestyle habits, and environmental factors. Such findings are consistent with previous research suggesting that students often compromise their sleep due to demanding academic schedules and social engagements.

In addition, the study highlighted that unhealthy sleep habits were prevalent among participants. Many students reported using electronic devices before bedtime, altering their sleep routines on weekends, staying up late for academic work, and engaging in nighttime social activities. These behaviors disrupt the natural sleep cycle and negatively affect sleep quality. Screen exposure before sleep is known to interfere with melatonin production, making it more difficult for individuals to fall asleep and maintain restful sleep throughout the night.

A key finding of this study is the strong association between sleep quality and academic performance. Students who reported poor sleep quality were more likely to have lower GPA scores, miss classes, and experience difficulty concentrating during lectures. On the other hand, students with better sleep quality demonstrated improved focus, higher levels of engagement, and better academic outcomes. This relationship emphasizes the importance of sleep in supporting cognitive functions such as memory, attention, and learning, which are essential for academic success.

Furthermore, poor sleep quality was found to negatively impact daytime functioning and motivation. Many participants reported feeling excessively tired during lectures, struggling to stay awake during daily activities, and experiencing reduced enthusiasm for completing tasks. This suggests that sleep deprivation not only affects academic performance directly but also reduces students' ability to actively participate in educational activities and maintain productivity.

Although the use of sleep medication was not highly prevalent among participants, a small number of students reported relying on medication to manage sleep difficulties. This indicates that some students may be experiencing more severe sleep problems that require intervention. However, it also highlights the need to address underlying behavioral and lifestyle factors rather than relying solely on medication as a solution.

The findings of this study are consistent with previous literature, which has established a clear link between poor sleep quality and reduced academic performance. Earlier studies have similarly identified lifestyle factors such as excessive screen time, irregular sleep schedules, and stress as major contributors to sleep disturbances among students. This study reinforces these findings and further emphasizes the critical role of sleep in academic success and overall well-being.

Overall, the results of this study suggest that sleep quality is a crucial determinant of students' academic performance, concentration, and motivation. Poor sleep habits and lifestyle choices significantly contribute to sleep disturbances, which in turn negatively affect academic outcomes. Addressing these issues through improved sleep hygiene and increased awareness could lead to better academic performance and enhanced student well-being.

CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

This chapter discusses the findings of the study in relation to research objectives and existing literature, with the primary aim of examining the relationship between sleep quality and academic performance among students. The results indicated that a significant proportion of students experienced poor sleep quality, as many participants reported difficulty falling asleep within 30 minutes, frequent awakenings during the night, and disturbances such as

discomfort, temperature changes, and bad dreams. These findings suggest that poor sleep is a common issue among students, likely influenced by academic stress, lifestyle habits, and environmental factors, which is consistent with previous research showing that students often sacrifice sleep due to academic demands and social activities. Furthermore, the study revealed that unhealthy sleep habits were prevalent, with many students reporting the use of electronic devices before bedtime, irregular sleep routines on weekends, late-night academic work, and nighttime social activities. Such behaviors disrupt circadian rhythms and reduce sleep quality, with screen exposure before sleep particularly affecting melatonin production and delaying sleep onset. A key finding of this study is the strong relationship between sleep quality and academic performance, as students with poor sleep quality were more likely to have lower GPA scores, miss more classes, and have trouble concentrating during lectures, whereas students with better sleep quality demonstrated improved academic engagement and performance. This highlights the critical role of sleep in cognitive functions such as memory, attention, and learning. In addition, poor sleep quality was found to negatively impact daytime functioning and motivation, as many students reported feeling tired during lectures, struggling to stay awake during daily activities, and experiencing reduced enthusiasm for completing tasks, indicating that sleep deprivation not only affects academic performance but also limits active participation in learning. Although only a small proportion of students reported using sleep medication, this suggests that some individuals experience significant sleep difficulties, though reliance on medication may not address underlying behavioral issues. The findings of this study are consistent with previous research that links poor sleep quality with reduced academic performance and emphasizes the influence of lifestyle factors such as screen use, irregular sleep schedules, and stress. Overall, this study reinforces the importance of sleep quality in students' academic success and well-being, highlighting that improving sleep habits and promoting sleep awareness can play a vital role in enhancing both academic outcomes and overall health.

4.5 Strengths and Limitations

Strengths

- Use of a standardized tool (PSQI)
- Focus on both sleep and academic outcomes
- Provides practical insights into student lifestyle behaviors

Limitations

- Self-reported data may introduce bias
- Study limited to a specific group of students
- Cross-sectional design limits causal conclusions

REFERENCES

Alhamed, A. A. (2023). The link among academic stress, sleep disturbances, depressive symptoms, academic performance, and the moderating role of resourcefulness in health professions students during COVID-19 pandemic. *Journal of Professional Nursing*, *46*, 83–91.

Alsaraireh, F., Al-Oran, H., & Al-Magharbeh, W. (2023). The impact of stress on sleep pattern and academic performance among nursing students in Jordan: a cross sectional study. *ASEAN Journal of Psychiatry*, *24*(4), 1–15.

Benjamin, L. S., Pasay-An, E., Pangket, P., Alqarni, A. S., Gonzales, F., Sacgaca, L., Mahmoud, D. A., Mohsen, M. M., Ali Hamdi, Y. S., & Shanmugam, S. R. (2024). Impact of sleep and psychological well-being on the academic and clinical performance of nursing students in Saudi Arabia. *Psychology Research and Behavior Management*, 1355–1364.

Elbilgahy, A. A., Sweelam, R. K., Eltaib, F. A., Bayomy, H. E., & Elwasefy, S. A. (2021). Effects of electronic devices and internet addiction on sleep and academic performance among female Egyptian and Saudi nursing students: a comparative study. *SAGE Open Nursing*, *7*, 23779608211055614.

Gallego-Gómez, J. I., González-Moro, M. T. R., González-Moro, J. M. R., Vera-Catalán, T., Balanza, S., Simonelli-Muñoz, A. J., & Rivera-Caravaca, J. M. (2021). Relationship between sleep habits and academic performance in university Nursing students. *BMC nursing*, *20*(1), 100.

Ibrahim, F. M., Salmi, R. N., Saif, M. A., & Mohammed, A. (2024). Sleep disorders' prevalence and impact on academic performance among undergraduate nursing students in a selected university, United Arab Emirates. *SAGE Open Nursing*, *10*, 23779608241274229.

Jabeen, F. (2025). Effect of Quality of Sleep on Academic Performance of Undergraduate Nursing Students: An Analytic Cross-Sectional Study In Pakistan. *Social Medicine*, *18*(2).

Khaled, A., Almaghaslah, D., Siddiqua, A., Kandasamy, G., & Orayj, K. (2025). Impact of sleep quality on academic achievements of undergraduate medical students: a cross-sectional study from Saudi Arabia. *BMC medical education*, *25*(1), 59.

Manandhar, N., Uprety, S., & Panthi, J. (2024). Assessment of sleep quality amongst the undergraduate nursing students at a medical college in Ghorahi, Dang, Nepal: a cross-sectional study. *Journal of Rapti Academy of Health Sciences*, *1*(2), 47–52.

Nor, S. F. M., Ramasamy, Y., Nen, N. I. C., Kamarudin, N. A., & Halim, M. H. A. (2025). Effect of Sleep Deprivation on Academic Performance Among Wellness Students at Universiti Malaysia Kelantan. *Journal of Hospitality, Tourism and Wellness Studies (JHTW)*, *2*(1), 91–103.

Seoane, H. A., Moschetto, L., Orliacq, F., Orliacq, J., Serrano, E., Cazenave, M. I., Vigo, D. E., & Perez-Lloret, S. (2020). Sleep disruption in medicine students and its relationship with impaired academic performance: A systematic review and meta-analysis. *Sleep medicine reviews*, *53*, 101333.

Seyednazari, M. A., Amini, K., Ramezani-Badr, F., & Markani, A. K. (2025). Effect of a structured Orem's self-care model nursing intervention on sleep quality and academic self-efficacy in nursing students. *BMC nursing*, *24*(1), 248.

Tanveer, H., Munir, I., Osama, M., Zia, M. R., Chattha, I. R., & Zaffar, S. (2023). Impact of sleep deprivation on academic performance of nursing students at CMH, Lahore. *Pakistan Journal of Medical and Health Sciences*, *17*(1), 289–291.

Yazid, J., Sahri, N. A., Rozi, F. S. M., Ramli, N. S., Bakar, N. A. F. A., & Mokhtar, S. N. F. a. S. (2025). Between Sleep and Scores: Examining the Relationship Between Sleep Duration, Academic Performance, and Clinical Stress among Nursing Students. *International Journal of Research and Innovation in Applied Science*, *10*(4), 327–334.

RJNMSR Review Journal of Neurological & Medical Sciences Review