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Assess The Knowledge, Attitude & Practice On Sleep Hygiene Among Nursing Students

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ABSTRACT

Introduction:

Sleep hygiene encompasses a variety of behavioural and environmental recommendations intended to promote healthy and restful sleep. Despite its importance, many individuals lack adequate knowledge or engage in poor sleep-related practices, leading to widespread sleep disturbances. Assessing the Knowledge, Attitude, and Practice (KAP) regarding sleep hygiene is essential to identify gaps, raise awareness, and promote behavioural change. This study aims to evaluate the KAP of individuals concerning sleep hygiene and its potential influence on sleep quality and overall wellbeing.

Statement of the Problem:

A study to assess the knowledge, attitude & practice on sleep hygiene among nursing students in selected colleges of Rohtas.

Objectives:

To assess the level of knowledge regarding sleep hygiene among nursing students measured by structure-based questionnaire. To assess the attitude of nursing students towards sleep hygiene measures by structure-based questionnaire. To examine the sleep hygiene practices adopted by nursing students measured by structure-based questionnaire. To determine the relationship between knowledge, attitude and practice of sleep hygiene measure by structure-based questionnaire.

Methodology:

A descriptive study was conducted among the conveniently selected 60 Nursing Students in Narayan Nursing College, Jamuhar, Sasaram. After obtaining the informed consent from the research participant KAPquestionnaire on Sleep hygiene was administered.

Result:

On assessing the knowledge of the sample on Sleep Hygiene the researcher understood that 5% (3) of the samples had poor knowledge, 56.6% (34) had moderate knowledge, 38.3% (23) had good knowledge. On assessing the Attitude of the sample on Sleep Hygiene the researcher understood that 13.3% (8) of the samples had Positive Attitude, 83.3% (50) had Neutral Attitude, 3.3% (2) had Negative Attitude. On assessing the Practice of the sample on Sleep Hygiene the researcher understood that 38.3% (23) of the samples had Good Sleep, 36.6% (22) had Moderate Sleep, 25% (15) had Poor Sleep.

Conclusion:

The study revealed that majority of nursing students in Narayan Nursing College, Jamuhar, Rhotas, Bihar, had moderate knowledge, neutral attitude and good sleep on Sleep Hygiene. Despite the importance of these Sleep Hygiene for improving sleep quality, enhancing physical and mental health, and maintaining overall daily performance. Furthermore, the study found no significant relationship between demographic variables and KAP level on nursing students. These findings highlight the x need for enhanced educational programs and awareness initiatives to improve understanding on Sleep hygiene among Nursing students.

Keywords:

Sleep Hygiene, Nursing Students, Knowledge, Attitude, Practice

INTRODUCTION

Sleep play a vital role in maintaining the equilibrium of human psychological behavior. Sleep deprivation result in psychosocial stress, psychiatric disorder, decreased work effectiveness and learning these abilities.[1]

Sleep is a relaxed state that is necessary to all humans. It is universal and natural process. It is state of composure that restore cerebral function.

Sleep Hour Requirement

The amount of sleep that is needed also varies among the age groups. Below are some guidelines that you can use to determine whether or not a client is getting enough sleep and rest for physiological and psychological health.[2]

- ✓ Neonates through 3 months of age typically sleep 14 to 17 hours a day.
- ✓ Infants from 4 months of age to 11 months of age should normally sleep about 12 to 15 hours a day.
- ✓ Older infants and toddlers up to 3 years of age should sleep 11 to 14 hours a day.
- ✓ Preschooler children from 3 to 5 years of age should sleep 10 to 13 years of age
- ✓ School age children from 6 to 12 years of age need 9 to 11 hours of sleep each day
- ✓ Adolescents from 13 to 17 years of age should sleep about 8 to 10 hours of sleep
- ✓ Young adults and middle-aged adults need about 7 to 9 hours of sleep
- ✓ Older adults over 65 years of age tend to require slightly less sleep than the middle age adults and only 7 to 8 hours of sleep per night.

Sleep hygiene “a set of rules on how to get better sleep”

- ✓ The purpose of the present study was to identify the sleep pattern, quality of sleep, sleep disturbances, day time sleepiness and its influence on academics, and routine activities of daily life in nursing students.
- ✓ Sleep hygiene refers to behavior and environmental factors that promote healthy, restorative sleep.
- ✓ Nursing students often face academic, clinical, and personal stressors that can disrupt sleep patterns, potentially impacting their academic performance and well-being.

Sleep has been defined as an essential brain state for maintaining energy and restoring bodily function. Sleep is a fundamental biological need that significantly impacts both physical and mental health. A proper sleep routine is crucial for cognitive performance, emotional stability, and overall health. Sleep hygiene, a set of practices and habits that contribute to an individual's ability to achieve optimal sleep, plays an essential role in ensuring good sleep quality.[3]

Sleep is one of the basic physiological need of every human being, through the circadian rhythm of the sleep is being controlled by the pacemaker in brain lots of other external factors which are modifiable, are considered to be the major influencing parameter. Adequate sleep is important to carry out even the routine activity in a most efficient way, children and adolescents requires at least eight to nine hours of sleep per

night. In spite of the fact there is a high prevalence of insomnia which is associated with significantly morbidity, it remains unrecognized and untreated, partly due to several barriers to assessment.[4]

Sleep hygiene refers to a set of practices, habits, and environmental factors that are conducive to promoting consistent, high-quality sleep. It involves behaviors and routines that help maintain good sleep and wakefulness patterns, ensuring that individuals get restorative rest. Practicing good sleep hygiene can improve the duration, quality, and regularity of sleep, contributing to overall well-being and health.[5]

Sleep hygiene encompasses various factors such as sleep environment, sleep routine, dietary habits, and lifestyle choices, all of which collectively influence the quality and duration of sleep.[6]

For nursing students, sleep hygiene becomes even more critical. Nursing education is known for being highly demanding, with long study hours, clinical practice shifts, and emotional stress, all of which can lead to irregular sleep patterns and poor sleep quality. Sleep deprivation, which is common among nursing students, can have detrimental effects on their academic performance, mental health, and physical well-being. Furthermore, inadequate sleep can lead to decreased attention, memory problems, emotional instability, and increased vulnerability to stress and burnout. Given these potential consequences, it is vital to assess the knowledge, attitudes, and practices related to sleep hygiene among nursing students.[7]

In today's fast-paced world, particularly in the context of nursing students, maintaining good sleep hygiene has become increasingly difficult. Nursing students are often subjected to long and irregular academic schedules, clinical hours, and high levels of stress. These demands make them susceptible to sleep deprivation, which can negatively affect their academic performance, physical health, and mental well-being. The effects of poor sleep hygiene on nursing students are particularly concerning, as it can impair their ability to focus, retain information, and handle the emotional challenges of nursing education. Furthermore, inadequate sleep can exacerbate stress, leading to burnout, fatigue, and emotional exhaustion.[8]

Nursing students face specific challenges that contribute to poor sleep hygiene, including the need for late-night studying, irregular sleep patterns due to clinical shifts, and high academic pressure. These factors often lead to a cycle of poor sleep, which can affect both their studies and their health. Research has shown that students in various professional courses, including nursing, report lower quality sleep due to the academic and clinical pressures they experience. Despite the importance of sleep for nursing students' cognitive and physical health, there has been limited research exploring their knowledge, attitudes, and practices concerning sleep hygiene, particularly in regions like Rohtas, Bihar, India.[9]

Given these concerns, it is crucial to assess the knowledge, attitude, and practices of nursing students regarding sleep hygiene. Identifying the gaps in their understanding of sleep hygiene and their sleep-related behaviors will allow educators, healthcare professionals, and administrators to design targeted interventions that improve students' overall health, well-being, and academic performance. This study aims to address this gap by evaluating sleep hygiene practices among nursing students in a selected college in Rohtas, Bihar.[10]

Sleep is an essential component of health and well-being, influencing physical, cognitive, and emotional functioning. Sleep hygiene refers to practices and habits that promote good quality sleep and daytime alertness. Adhering to effective sleep hygiene is particularly important for nursing students, who often face demanding academic schedules, clinical responsibilities, and shift rotations that may disrupt their sleep patterns.[11]

Nursing students represent a critical population for studying sleep hygiene due to their dual responsibility of maintaining personal health and ensuring optimal care delivery. Poor sleep hygiene can lead to reduced academic performance, increased stress, impaired clinical decision-making, and heightened risks of burnout. Thus, assessing the knowledge, attitude, and practice (KAP) of sleep hygiene among nursing students is essential to develop targeted interventions that enhance their overall well-being and professional competence.[12]

Almost 1/3 of the nursing student were identified as having bad sleep habits, and these students were characterized by an evening chronotype and a short sleep pattern. A short sleep pattern, bad habits, and age < 25 years were independently associated with a higher risk of poor academic performance.[13]

PROBLEM STATEMENT

A study to assess the knowledge, attitude & practice on sleep hygiene among nursing students in selected colleges of Rohtas.

OBJECTIVE OF THE STUDY

1. To assess the level of knowledge regarding sleep hygiene among nursing students measured by a structure-based questionnaire.
2. To assess the attitude of nursing students towards sleep hygiene measures by a structure-based questionnaire.
3. To examine the sleep hygiene practices adopted by nursing students, measured by a structure-based questionnaire.

4. To determine the relationship between knowledge, attitude and practice of sleep hygiene measures by structure-based questionnaire.

MATERIALS AND METHODS

RESEARCH APPROACH:

- The research approach used in the study is qualitative research approach.

RESEARCH DESIGN:

- The research design used in the study is a Descriptive research design.

STUDY SETTING:

- The research study is conducted in Narayan Nursing College, Jamuhar, Sasaram, Rohtas.

POPULATION OF STUDY:

- The population comprises of all the nursing students in Rohtas.

TARGET POPULATION:

- B. Sc Nursing II Semester of Narayan Nursing College, Jamuhar, Sasaram, Rohtas.

SAMPLE SIZE:

- Number of sample size is 60

SAMPLING CRITERIA:

Inclusion Criteria

- Students who agree to participate in the research voluntarily.
- Students studying in the nursing department.

Exclusions Criteria

- Nursing students who were not present at the time of data collection
- Students from the other department

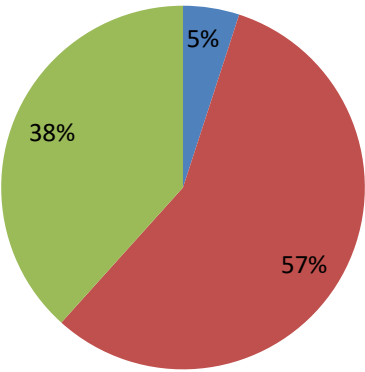
MAJOR FINDINGS OF THE STUDY

DISTRIBUTION OF KNOWLEDGE, ATTITUDE & PRACTICE ON SLEEP HYGIENE

						N=60	
Sl. No	Demographic Variable	Options	Good Sleep	Moderate Sleep	Poor Sleep	χ^2 value	Result
1	Age	18-21 years	3	6	4	$X^2=1.7165$ $P=0.7877$	Not significant
		22-25 years	5	13	9		
		26-29 years	7	8	5		
2	Gender	Male	12	15	9	$X^2=0.5555$ $P=0.7574$	Not significant
		Female	6	12	6		
3	Religion	Hindu	7	21	14	<i>*Chi square not calculable if one of the table values is "zero"</i>	
		Muslim	3	6	3		
		Christian	1	4	1		
		Other	0	0	0		
4	Family Income	Below 10k/month	0	0	0	<i>*Chi square not calculable if one of the table values is "zero"</i>	
		Between 11k-20k/month	0	0	0		
		Between 21k-30k/month	6	12	8		
		Above 31k/month	9	12	13		
5	Marital status	Married	2	4	2	<i>*Chi square not calculable if one of the table values is "zero"</i>	
		Unmarried	15	18	19		
		Divorse	0	0	0		
6	Education	Undergraduate	15	18	25	$X^2=2.5287$ $P=0.2824$	Not significant
		Post-graduate	0	0	2		
7	Dietary pattern	Vegetarian	2	8	6	$X^2=1.0227$ $P=0.5996$	Not significant
		Non-Vegetarian	10	22	12		

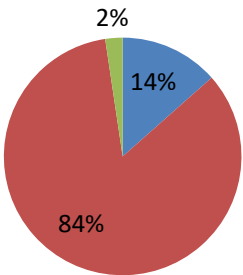
KNOWLEDGE DISTRIBUTION ON SLEEP HYGIENE

■ Poor knowledge ■ Moderate knowledge ■ Good knowledge



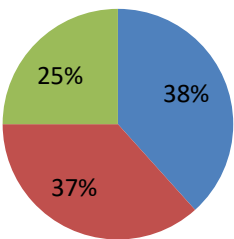
ATTITUDE DISTRIBUTION ON SLEEP HYGIENE

■ Positive Attitude ■ Neutral Attitude ■ Negative Attitude



PRACTICE DISTRIBUTION ON SLEEP HYGIENE

■ Good Sleep ■ Moderate Sleep ■ Poor Sleep



CONCLUSION

The study revealed that the majority of nursing students in Narayan Nursing College, Jamuhar, Rhotas, Bihar, had moderate knowledge, neutral attitude, and good sleep on Sleep Hygiene. Despite the importance of Sleep Hygiene for improving sleep quality, enhancing physical and mental health, and maintaining overall daily performance. Furthermore, the study found no significant relationship between demographic variables and KAP level among nursing students. These findings highlight the need for enhanced educational programs and awareness initiatives to improve understanding of Sleep hygiene among Nursing students.

REFERENCES

1. Amaral, K. V., Galdino, M. J. Q., & Martins, J. T. (2021). Burnout, daytime sleepiness and sleep quality among technical-level nursing students. *Revista Latino-Americana de Enfermagem*, 29, Article eXXX.
2. Bisht, N., Shaiju, B., Khan, F., & Kumar, K. (2021). Assessment of sleep hygiene practices and sleep quality among nursing officers of selected hospital in Delhi. *International Journal of Nursing & Midwifery Research*, 8(1), 9–13.
3. Buket, B. M., & Ücel, B. (2024). Sleep hygiene education of senior undergraduate nursing students: A quasi-experimental study. *Journal of Turkish Sleep Medicine*, XX(X), xx–xx.
4. Chaudhry, H., Patel, H., Avadhootha, S. T., et al. (2024). The relationship between smartphone usage and sleep quality amongst university students. *arXiv*.
5. Darakai, T., Noonil, N., & Aekwarangkoon, S. (2024). Factors related to sleep quality among nursing students in southern nursing college network. *Nursing Research and Innovation Journal*, 30(1), 1–12.
6. Dokuka, S., & Smirnov, I. (2020). High academic performance is associated with shorter sleep and later bedtimes for young adults. *arXiv*.
7. Ekşi, G. T., & Özdemir, H. (2020). Factors affecting sleep hygiene training of nursing students. *Journal of Turkish Sleep Medicine*, 8(2), 105–111.
8. Fudolig, M. I., Bloomfield, L. S. P., Price, M., et al. (2024). Collective sleep and activity patterns of college students from wearable devices. *arXiv*.
9. George, B., et al. (2024). Sleep quality, daytime sleepiness and sleep hygiene among youth in rural South India. *Nursing & Midwifery Research*, XX(X), xx–xx.

10. **Gipson, C. S., Chilton, J. M., Dickerson, S. S., Alfred, D., & Haas, B. K. (2019).** Effects of a sleep hygiene text message intervention on sleep in college students. *Journal of American College Health*, 67(1), 32–41.
11. **Hershner, S., & O'Brien, L. M. (2018).** The impact of a randomized sleep education intervention for college students. *Journal of Clinical Sleep Medicine*, 14(3), 337–347.
12. **Hershner, S., & O'Brien, L. M. (2014).** Causes and consequences of sleepiness among college students. *Nature and Science of Sleep*, 6, 73–84.
13. **Hauri, P. (2011).** Sleep/wake lifestyle modifications: Sleep hygiene. In T. R. Barkoukis, J. K. Matheson, & J. K. Ferber (Eds.), *Therapy in Sleep Medicine* (pp. 151–160). Elsevier.
14. **Hayli, Ç. M., Aydin, A., et al. (2023).** Effect of sleep hygiene education on sleep quality of children with intellectual disabilities and their mothers. *Journal of Child*, 23(3), 99–107.
15. **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 the United Arab Emirates. *SAGE Open Nursing*, XX(X), 1–12.
16. **İsmailoğlu, E. G., & Özdemir, H. (2020).** Evaluation of sleep hygiene training effectiveness in nursing students. *Journal of Turkish Sleep Medicine*, 8(2), 105–111.
17. **Jirapramukpitak, T., & Tanchaiswad, W. (1997).** Thai version of the Pittsburgh Sleep Quality Index reliability study. *Thai Nursing Journal*, 44(2), 32–38.
18. **Kabrita, C. S., Hajjar-Muca, T. A., & Duffy, J. F. (2014).** Predictors of poor sleep quality among Lebanese university students. *Nature and Science of Sleep*, 6, 11–18.
19. **Kaur, J., Kaur, H., Kaur, G., et al. (2024).** Effect of sleep hygiene program on sleep quality and psychological well-being among undergraduate nursing students. *African Journal of Biomedical Research*, 27(4S), 47–55.
20. **Kesgin, M. T., & Çağlar, S. (2020).** Evaluation of sleep quality and perceived stress of nursing students engaged in clinical practice. *Journal of Turkish Sleep Medicine*, 8(2), 105–111.
21. **Kline, C. E., & Gunn, H. E. (2014).** The role of sleep hygiene in promoting public health: A review of empirical evidence. *Sleep Medicine Reviews*, 18(6), 321–329.
22. **LaMar, R., Thomas, C. M., & McIntosh, C. E. (2016).** The impact of nursing students' sleep hygiene practices on patient safety. *Journal of Nursing Education and Practice*, 12(10), 16–23.

23. **Luyster, F. S., Strollo, P. J., Zee, P. C., & Walsh, J. K. (2012).** Sleep: A health imperative. *Sleep*, 35(6), 727–734.
24. **Mangekar, R. B., et al. (2022).** Quality of sleep among nursing students. *Journal of Nursing Studies India*, XX(X)
25. **Molu, B., Keskin, A. Y., & Baş, M. T. (2021).** Investigation of sleep hygiene according to nursing students' chronotype. *Turkish Journal of Sleep Medicine*, 8(2), 105–111.
26. **North-West University. (2024).** Impact of sleep hygiene education on sleep quality in college students. *Global Perspectives in Health, Medicine, and Nursing*, 2(1), 40–50.
27. **O'Brien, E. M., & Mindell, J. A. (2005).** Sleep and risk-taking behavior in adolescents. *Behavioral Sleep Medicine*, 3(3), 113–133.
28. **Owens, J. A., Dearth-Wesley, T., Gioia, G., & Whitaker, R. C. (2016).** Self-regulation and sleep duration in adolescents. *Pediatrics*, 137(6), e20152723.
29. **Piro, F. N., et al. (2018).** Sleep disorders in college students: Prevalence and academic impact. *Journal of Sleep Research*, 27(1), 23–30.
30. **Revathi, R., Manjula, A., & Sujitha, E. (2016).** Correlation between knowledge and practice on sleep hygiene and sleep quality among nursing students. *Manipal Journal of Nursing and Health Sciences*, 2(2), 46–49.
31. **Ruzafa-Martínez, M., Gómez-García, T., Madrid, J. A., et al. (2016).** Nurses' sleep quality, work environment and quality of care in the Spanish National Health System. *BMJ Open*, 6(8), e012073.
32. **Sarı, Ö. Y., Üner, S., Büyükakkuş, B., et al. (2015).** Sleep quality and factors affecting sleep quality in students living in residence halls. *TAF Preventive Medicine Bulletin*, 14(2), 93–100.