

A Study to Assess the Knowledge and Attitude Among Adolescents Regarding Sleep Hygiene in Selected School at Ariyankuppam, Puducherry.

¹Keertkika.B, ²Keerthi sri. K, ³kaviya.P, ⁴kirushna priya.k, ⁵keerthana.k,
⁶Mrs.Vijayamalini.K, ⁷Dr. Edna Sweenie.J,

^{1,2,3,4,5} B.Sc(N)- IVth year, Vinayaka Missions College of Nursing, Puducherry.

⁶Assistant Professor, Department of Community Health Nursing, Vinayaka Missions College of Nursing, Puducherry.

⁷Principal Cum Professor, Vinayaka Missions College of Nursing, Puducherry.

HOW TO CITE:

Keertkika.B, Keerthi sri. K, kaviya.P, kirushna priya.k, keerthana.k, Vijayamalini.K, Edna Sweenie.J, (2026). A Study to Assess the Knowledge and Attitude Among Adolescents Regarding Sleep Hygiene in Selected School at Ariyankuppam, Puducherry.. International Journal of Special Education, 41(19s),660 - 665

ABSTRACT

Background : Sleep Hygiene is essential for the physical, mental, and academic well- being of Adolescents. Adequate knowledge and positive attitude that promotes the healthy sleep practices. This study was conducted to assess the knowledge and attitude among Adolescents Regarding sleep Hygiene in selected school at Ariyankuppam, Puducherry.

Methods: A descriptive research design was used. A total 120 numbers of Adolescents were selected and using convenience sampling. Descriptive research design was used. Data were collected using a self- structured knowledge questionnaire and an attitude questionnaire and analyzed using descriptive and inferential statistics.

Results: The study revealed that 50.8% of Adolescents had moderately Adequate knowledge, and 25.0% had Adequate knowledge, and 24.2% had inadequate knowledge. Regarding attitude 60.0 % showed a moderately favourable attitude. A moderate positive correlation($r=0.472$, $p<0.01$) was found between knowledge and attitude.

Conclusion: The study concluded that the adolescents had moderate knowledge and attitude regarding sleep hygiene. Educational interventions are needed to improve awareness and promote healthy sleep practices.

Keywords: Adolescents, sleep hygiene, knowledge, Attitude, Correlation.

COPYRIGHT STATEMENT:

Copyright: © 2026 Authors.
Open access publication under the terms and conditions of the Creative Commons Attribution (CC BY) license (<http://creativecommons.org/licenses/by/4.0/>).

Introduction

Sleep is a fundamental biological process that plays a vital role in maintaining physical, mental and

emotional health. Adequate sleep is essential for proper brain functioning, memory consolidation, immune regulation and overall well-being. Lack of sufficient sleep can lead to fatigue, reduce cognitive

performance, mood disturbances, and increased risk of chronic diseases. Sleep quality is determined not only by the duration of sleep but also by factors such as continuity, depth, and regularity of sleep pattern. In modern society, lifestyle changes, stress, and excessive use of electronic devices have significantly affected sleep patterns. Poor sleep quality has become a common health concern affecting individuals across different age groups. Therefore, understanding the importance of sleep is crucial for promoting health and preventing sleep related disorders.

Sleep Hygiene refers to a set of behavioral and environmental practices that are designed to promote healthy and restorative sleep. These practices include maintaining a regular sleep schedule, creating a comfortable sleep environment, avoiding stimulants before bedtime, and practicing relaxation techniques. Good sleep Hygiene is considered an essential component in the prevention and management of sleep disorders such as insomnia. Research studies indicate that individuals with better sleep Hygiene practice often experience improved sleep quality and better daytime functioning. Sleep Hygiene education is widely used in healthcare settings as a non-pharmacological approach to improve sleep patterns and overall health outcomes. Enhancing awareness about sleep hygiene can significantly contribute to better sleep habits and improve quality of life.

Materials And Methods

The study adopted a descriptive research design to assess the knowledge and attitude regarding sleep Hygiene among Adolescents. A total of 120 participants were selected using a convenience sampling technique, ensuring easy accessibility and feasibility for data collection. Prior to the study written informed consent was obtained from all participants to maintain ethical standards. The / collection tool was structured into three sections: Section A included demographic variables such as age ,gender, and educational background; Section B

focused on assessing knowledge related to sleep hygiene; and Section C evaluate the participants attitude towards sleep hygiene practices. To collect the data, a self- structured knowledge questionnaire and an attitude questionnaire were developed and administered to the participants. The collected data were systematically coded and analyzed using SPSS version 25 software. Both descriptive and inferential statistics l methods were employed for analysis. Descriptive statistics, including frequency, percentage, mean, and standard deviation, were used to summarize the data, while inferential statistics such as the chi-square test and Pearson correlation were applied to determine association between variables and to assess the relationship between knowledge and attitude regarding sleep hygiene among Adolescents

Results

The collected data were computerized and analyzed using SPSS version 25. The data were analyzed using descriptive statistics (distribution, mean, Standard deviation) and inferential statistics (chi-square value test, correlation Pearson r test). The result have been organized and present as given below:

SECTION A: Description of the socio-demographic variables among Adolescents.

Table 01: Frequency and Percentage distribution of Demographic Variables Among Adolescents (N=120)

S. N O	Demographic variables	Category	Frequency(n)	Percentage (%)
1	Age	15 -16 years	77	64.2%
		17-18 years	43	35.8%
2	Gender	Male	48	40.0%
		Female	72	60.0%

3	Class of study	11th or 12th	120	100%
4	Residence	Urban area	24	20.0%
		Rural area	96	80.0%
5	Living with	Parents	106	88.4%
		Relatives	7	5.8%
		Hostel	7	5.8%
6	Father's occupation	Government job	31	25.8%
		Private job	32	26.7%
		Self-employed	23	19.2%
		Unemployed	34	28.3%
7	Mother's occupation	Homemaker	30	25.3%
		Government job	22	18.3%
		Private job	34	28.3%
		Self-employed	34	28.3%
8	Family type	Nuclear family	58	48.3%
		Joint family	62	51.7%
9	Sleep duration	Less than 5 hours	13	10.8%
		6-8 hours	58	48.8%
		More than 8 hours	49	40.8%
10	Mobile use before sleep	Yes	82	63.8%
		No	38	31.7%

shows the frequency and percentage of distribution of demographic variables among Adolescents (N=120), the majority were aged 15 to 16 years (64.2%), female (60.0%), and all were studying in 11th or 12th standard. Most participants were from rural areas (80.0%) and lived with their parents (88.3%). Regarding parents' occupation, fathers were predominantly unemployed (28.3%), while mothers were mainly employed in private jobs or self-employed (28.3% each). Slightly more than half (51.7%) belongs to joint families. Nearly half of the participants (48.3%) reported sleeping 6 to 8 hours per night, followed by (40.8%) sleeping more than 8 hours. Additionally, the majority (68.3%) reported using mobile phones before sleep.

SECTION B: Assessment of the level of knowledge and attitude among Adolescents regarding sleep hygiene.

Table 02 : Frequency and percentage distribution of level of knowledge among Adolescents regarding sleep hygiene. (N=120)

S. No	Level of knowledge	Frequency(n)	Percentage (%)
01.	Inadequate Knowledge	29	24.29
02.	Moderately inadequate Knowledge	61	50.89
03.	Adequate Knowledge	30	25.09
	Total	120	100

Shows depicts the frequency and percentage distribution of the level of knowledge among Adolescents regarding sleep hygiene (N=120). It is

evident that the majority of the participants 61 (50.8%) had moderately Adequate knowledge. About 30 (25.0%) of Adolescents possessed Adequate knowledge.

SECTION C: Association between Adolescents knowledge and attitude regarding sleep hygiene and selected demographic variables

Table 03 : Frequency and percentage distribution of level of attitude among Adolescents regarding sleep hygiene (N=120)

S.NO	Level of Attitude	Frequency (n)	Percentage %
1	Unfavourable Attitude	36	30.0%
2	Moderately favourable Attitude	72	60.0%
3	Favourable Attitude	12	10.0%
	Total	120	100%

Shows the association between Adolescents knowledge regarding sleep hygiene and selected socio-demographic variables. The analysis revealed the gender ($\chi^2= 8.260$, $p= 0.016$), father's occupation ($\chi^2= 17.623$, $p=0.007$), and family type ($\chi^2=13.291$, $p=0.001$) had a statistically significant association with the level of knowledge at $p < 0.05$. This indicates that these variables significantly influence adolescents' knowledge regarding sleep hygiene. However, variables such as age ($p=0.725$), place of residence ($p=0.274$), living status ($p=0.789$), mother's occupation ($p=0.105$), sleep duration ($p=0.809$), and mobile phone usage before

sleep ($p=0.331$) did not show any significant association with knowledge level.

SECTION D: Correlation between the knowledge and attitude regarding sleep hygiene among Adolescents.

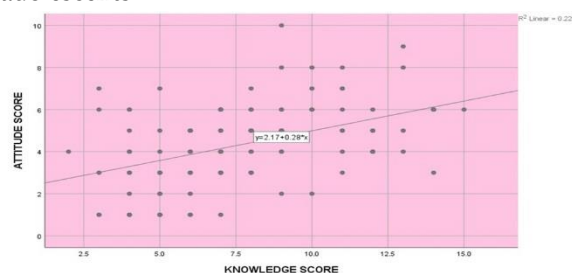
Table 04: Mean and Standard deviation of level of knowledge and Attitude Among Adolescents regarding sleep hygiene (N=120)

Variables	Mean	Standard deviation	r-Value	p-Value
Knowledge Score	8.08	3.219	0.472	0.001
Attitude Score	4.45	1.927		

S = Significant at $p < 0.01$ level**

Shows the correlation between knowledge and attitude regarding sleep hygiene among Adolescents. The mean knowledge score was 8.08 with a standard deviation of 3.219, while the mean attitude score was 4.45 with a standard deviation of 1.927. The Pearson correlation coefficient ($r=0.472$) indicates a positive relationship between knowledge and attitude. The obtained p-value ($p=0.001$) is statistically significant at the 0.01 level.

Figure no: 03 correlation between the knowledge and attitude regarding sleep hygiene among adolescents



Discussion

The present study was conducted to assess the knowledge and attitude regarding sleep hygiene

among Adolescents in selected school at Ariyankuppam, Puducherry.

The findings revealed that the majority of Adolescents 61 (50.8%) had moderately Adequate knowledge regarding sleep hygiene. While 30 (25.0%) had Adequate knowledge and 29(24.2%) had inadequate knowledge . This indicates that although a considerable proportion of Adolescents possess moderate knowledge, there is still a need for improvement.

Regarding attitude, the study showed that most of the participants 72 (60.0%) had a moderately favourable attitude towards sleep hygiene. However, 36(30.0%) exhibited an unfavourable attitude and only 12(10.0%) had a favourable attitude, highlighting the need to enhance positive attitude among Adolescents.

Further, the study identified a positive correlation ($r=0.472$) between knowledge and attitude, which was statistically significant at the 0.01 level ($p<0.01$). This indicates that Adolescents with higher knowledge levels tend to have a more favourable attitude towards sleep hygiene. This findings is supported by previous literature.

Conclusion

The study demonstrate that Adolescents had predominantly moderate levels of knowledge and moderately favourable attitudes towards sleep hygiene, indicating the presence of important knowledge gaps and opportunities for improvement. The observed positive association between knowledge and attitude suggests that enhanced awareness of healthy sleep practices may contribute to the development of more favourable attitudes towards sleep hygiene. Considering the critical role of Adequate sleep in Adolescents physical growth, cognitive functioning, emotional regulation, and academic performance, strengthening sleep hygiene awareness should be recognized as an important component of Adolescents health promotion.

The findings highlight the need for evidence-based, school - based educational interventions to improve Adolescents knowledge and promote positive attitudes towards sleep hygiene. Integrating structured sleep hygiene education into school health programs. Further multicenter studies with larger and more diverse populations are warranted to confirm these findings and evaluate the long-term effectiveness of such interventions.

References

- Singh R, Roy MM, Alvi A, Chouhan S, Goyal A, Rai NK. Sleep hygiene practices and its impact on sleep quality and mood. *J Family Med Prim Care*. 2025;14(7):2966–2973.
- Zhong W, Ding J, Cai X, Yan J, Zhu F. Knowledge, attitude, and practice towards sleep disorders among high school students: a cross-sectional study. *BMC Pediatr*. 2025;25:106.
- Lavanya C, Geetha G. The effect of sleep hygiene education on sleep deprivation and sleep habits among adolescents in Visakhapatnam. *Vasc Endovasc Rev*. 2025;8(20s):38–46.
- Lakshmi R. Association between knowledge and attitude regarding sleep hygiene among adolescents in a selected higher secondary school at Chennai. *Indian J Community Health Nurs*. 2025;12(1):45–49.
- Wang J, et al. Association of substance use with stress-related sleep disturbance among adolescents in 76 countries: a population-based study. *J Glob Health*. 2025;15:04195. Available from: <https://jogh.org/2025/jogh-15-04195/>
- Meenakshi S. Knowledge and attitude on sleep hygiene among school adolescents and its association with demographic variables in Madurai. *Int J Nurs Educ*. 2024;16(2):60–64.

-
- De Pasquale C, El Kazzi M, Sutherland K, Shriane AE, Vincent GE, Cistulli PA, et al. Sleep hygiene—what do we mean? A bibliographic review. *Sleep Med Rev.* 2024;75:101930. Available from: <https://pubmed.ncbi.nlm.nih.gov/38761649>
- Anitha K. Assessment of knowledge and attitude regarding sleep hygiene among adolescents in selected schools of Bengaluru. *J Nurs Res Pract.* 2023;9(3):88–92.
- Patil S, Kulkarni V, Patil P. Assessment of sleep hygiene knowledge and attitude among adolescents in Maharashtra. *Int J Community Med Public Health.* 2022. Available from: <https://www.ijcmph.com>
- Kaur G, Kaur H. Knowledge and practices of sleep hygiene among adolescents in Punjab. *Indian J Public Health Res Dev.* 2021. Available from: <https://medicopublication.com>
- Reddy P, Rao P. Sleep hygiene awareness among high school students in Hyderabad. *J Family Med Prim Care.* 2020. Available from: <https://www.jfmprc.com>
- George S, et al. Sleep patterns, hygiene and daytime sleepiness among adolescent school-goers in Tamil Nadu. *Indian J Community Med.* 2019. Available from: <https://pubmed.ncbi.nlm.nih.gov/31134922/>