



**A STUDY TO ASSESS THE SLEEP PATTERN ASSOCIATED  
PROBLEMS AMONG TODDLERS AT SELECTED ANGANWADI  
OF JAMUHAR ROHTAS**

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## **ABSTRACT**

### **Background:**

Sleep is essential for the growth and development of toddlers. Proper sleep patterns support physical growth, brain development, and emotional well-being. However, many toddlers experience sleep disturbances such as irregular sleep schedules, frequent night awakenings, and insufficient sleep duration. Factors such as environmental conditions, parental practices, and lifestyle habits may influence sleep patterns. Lack of proper knowledge among parents regarding healthy sleep habits can negatively affect the child's overall development.

### **Objectives:**

To assess the sleep pattern among toddlers,

To find out the association between sleep pattern and selected demographic variables.

### **Methodology:**

The research approach used for the study was a quantitative approach and the research design



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was descriptive research design. The study was conducted among parents of toddlers in a selected community/hospital area. Random sampling technique was adopted. The sample size consisted of 60 toddlers. Data collection was done using a self-structured questionnaire and demographic proforma. The data were analyzed using descriptive statistics such as frequency and percentage and inferential statistics such as chi-square test.

## **Result:**

The results of the study showed that out of 60 samples, majority of toddlers had moderate sleep disturbances, some had poor sleep patterns, and few had good sleep patterns. Statistically, there was a significant association between sleep pattern and selected demographic variables such as age of child, parental practices, and environmental factors ( $p < 0.05$ ).

## **Recommendation:**

The findings of the study can be used as a guide for future research. Educational and interventional studies can be conducted to improve sleep patterns among toddlers. Health education programs should be provided to parents regarding proper sleep hygiene. Further studies can be conducted with larger sample size and in different settings.

## **Conclusion:**

The present study concluded that many toddlers have disturbed sleep patterns influenced by various factors. Improving parental awareness and establishing proper sleep routines can enhance the sleep quality and overall development of toddlers

## **INTRODUCTION**

sleep is a basic physiological need and an essential component of healthy growth and development in children. Adequate sleep is necessary for physical growth, brain development, emotional regulation, and immune system functioning. In early childhood, sleep supports memory consolidation, learning ability, and behavioral development. Disturbances in sleep during early years may negatively affect overall health and development of the child. Toddlerhood, which includes children aged 1–3 years, is a



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critical developmental period characterized by rapid physical, cognitive, and emotional changes

sleep disturbances in toddlers are increasingly recognized as a public health concern. Studies conducted in countries such as the United States, Australia, and European regions have reported high prevalence of sleep-related problems among young children, ranging from 20% to 50%. These disturbances include difficulty initiating sleep, frequent night waking, nightmares, restless sleep, and reduced sleep duration. International research also suggests that toddlers with poor sleep patterns are more prone to daytime irritability, poor attention span, behavioral issues, academic difficulties in later years, and increased parental stress

In the Indian context, sleep health among toddlers has received limited attention in community settings compared to nutrition and developmental milestones. Indian studies indicate that sleep disturbances among children often remain underreported and untreated due to lack of parental awareness and cultural beliefs that children will “outgrow” sleep problems. In addition, socio-economic and environmental determinants such as overcrowded households, lack of separate sleeping space, noise pollution, caregiver workload, and irregular meals contribute to altered sleep patterns among toddlers. With rapid digitalization in India

## PROBLEM STATEMENT

A study to assess the sleep pattern and associated, problems among toddlers at selected Anganwadi of jamuhar, Rohtas..

## OBJECTIVES

- To assess the level of sleep disturbance among toddlers.
- To identify the common sleep-related problems among toddlers.
- To assess the factors associated with sleep problems among toddlers.
- To find the association between sleep pattern and selected demographic variables of toddlers and their caregiver

## HYPOTHESIS



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- **H1** There is a significant association between selected demographic variables and sleep pattern among toddlers attending Anganwadi

## OPERATIONAL DEFINITION

- **Sleep Pattern:**

In this study, sleep pattern refers to the routine and behaviors of sleep among toddlers including time of sleep initiation, sleep duration (night sleep + daytime naps), frequency of night awakenings, and continuity of sleep as reported by parents/caregivers of toddlers attending Anganwadi.

- **Associated Problems:**

Associated problems refer to the difficulties related to sleep observed among toddlers such as difficulty falling asleep, frequent night awakening, nightmares, bedwetting, daytime sleepiness, irritability, behavioral issues, and attention problems as identified through a structured questionnaire.

- **Toddlers:**

Toddlers refer to children between the age of 1 to 3 years enrolled at selected Anganwadi centers for early childhood services.

- **Students at Anganwadi:**

Students at Anganwadi refer to toddlers registered and regularly attending Anganwadi centres under ICDS for preschool activities, supplementary nutrition, and health monitoring.

- **Sleep Duration:**

Sleep duration refers to the total number of hours the toddler sleeps within 24 hours including both nighttime sleep and daytime naps.

## MATERIALS AND METHODS

### Material and Methods:

### Research approach: -



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Quantitative research approach was adopted for this study

## **Research design: -**

Descriptive research study was used for this study.

## **Sample technique**

Randomized Sample technique

## **Setting of the study:**

Anganwadi, Jamuhar Rohtas.

## **Variables of the study**

Demographic variables:

Age, Gender/Sex Marital status, Religion, Education level Occupation /Socioeconomic status, Health status

## **Sample size-**

Number of sample size is 60.

## **Inclusion Criteria**

Toddlers aged 1–3 years enrolled in selected Anganwadi centers. Toddlers who are regularly attending Anganwadi during data collection period.

Toddlers whose parents/guardians are available and willing to provide information

Toddlers who are permanently residing in the selected community

## **Exclusion criteria-**

Study will exclude:

Toddlers with diagnosed neurological or developmental disorders (e.g. Autism, ADHD, epilepsy) affecting sleep pattern

Toddlers with acute illness during data collection period (fever, respiratory infection, etc.).

Toddlers who were absent during the period of data collection.

## **MAJOR FINDINGS OF THE STUDY**

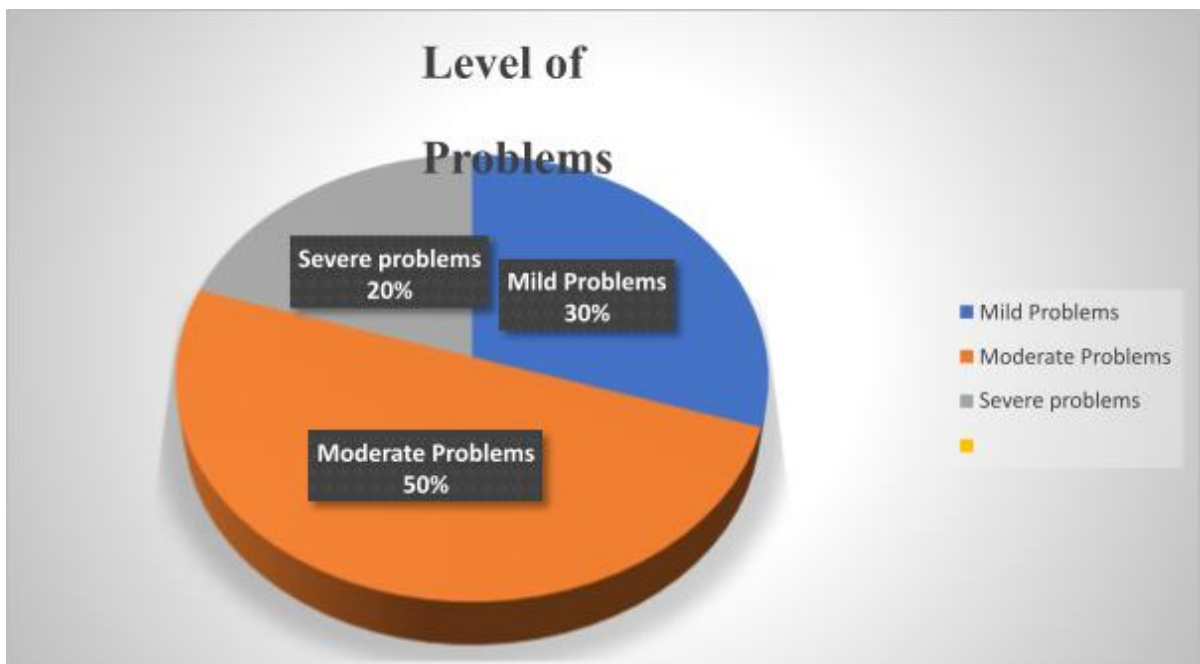
The, chi-square analysis showed no significant association ( $\chi^2 = 0.09$ ,  $p > 0.05$ ). In relation to family type, the calculated value also indicated no significant association



between sleep pattern and type of family.

the level of problem in which 30% children having Mild problems, 50% Children having Moderate problem and 20% Children having Severe problems

### **Level of problems**



### **IMPLICATION FOR PRACTICE**

#### **Nursing Practice**

The study emphasizes the need for nurses to include sleep assessment as a routine component of child health care. Nurses working in pediatric and community settings should assess sleep patterns among toddlers and identify any sleep-related problems at an early stage. They should provide appropriate guidance and counseling to parents and caregivers regarding sleep hygiene practices, including maintaining regular sleep schedules, minimizing screen exposure, and creating a comfortable and quiet sleeping environment. Nurses also play a vital role in educating caregivers about the importance of sleep-in child development and in promoting healthy sleep habits.

#### **Nursing Education**



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The findings suggest that nursing education should include comprehensive content related to sleep health and its importance in early childhood development. Nursing students should be trained to assess sleep patterns, identify sleep disturbances, and provide effective health education to caregivers. Educational programs, workshops, and seminars can be conducted to enhance the knowledge and skills of nursing students in the area of pediatric sleep health.

## **Nursing Administration**

Nursing administrators should take necessary steps to incorporate sleep assessment into routine child health services, particularly at the community level. Policies and guidelines should be developed to promote sleep health among children attending Anganwadi centers. Training programs should be organized for Anganwadi workers and community health nurses to improve their knowledge and skills in identifying and managing sleep-related problems. Adequate resources should be allocated to implement sleep health promotion activities effectively.

## **Nursing Research**

The study provides a foundation for further research in the area of sleep health among toddlers. Future studies can be conducted on a larger sample size and in different settings to enhance the generalizability of the findings. Experimental studies can be undertaken to evaluate the effectiveness of various interventions such as sleep hygiene education programs. Research can also focus on identifying additional factors influencing sleep patterns,

## **CONCLUSION**

Based on the findings of the present study, it can be concluded that sleep-related problems are highly prevalent among toddlers attending Anganwadi centers. The majority of toddlers were found to experience moderate level of sleep disturbances, indicating that sleep problems are common and require attention from caregivers and health professionals. Sleep disturbances such as difficulty in initiating sleep, frequent night awakenings, irritability, nightmares, and daytime sleepiness were observed among many children, which may negatively impact their physical, cognitive, and emotional development if not addressed in a



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timely manner. The study also revealed that there is no statistically significant association between sleep pattern and selected demographic variables such as age, gender, birth order, family type, and residence. This indicates that sleep-related problems are universally present among toddlers and are not confined to any particular group. The absence of significant association suggests that sleep disturbances are more closely related to modifiable factors such as caregiver practices, environmental conditions, and lifestyle behaviors rather than fixed demographic variables.

Therefore, it is essential to create awareness among parents and caregivers regarding the importance of maintaining proper sleep hygiene practices, establishing regular bedtime routines, and providing a conducive sleep environment for children. Early identification and timely intervention can help in preventing long-term developmental and behavioral problems associated with poor sleep. Community-based programs and health education initiatives should be strengthened to promote healthy sleep practices among toddlers.

## REFERENCES

1. American Academy of Sleep Medicine. (2016). Recommended amount of sleep for paediatric populations. *Journal of Clinical Sleep Medicine*, 12(6), 785–786
2. Mindell, J. A., & Owens, J. A. (2015). *A clinical guide to paediatric sleep: Diagnosis and management of sleep problems*. Philadelphia: Wolters Kluwer.
3. Hockenberry, M. J., & Wilson, D. (2021). *Wong's Nursing Care of Infants and Children* (11th ed.). Elsevier.
4. Ministry of Women and Child Development. (2019). *Integrated Child Development Services (ICDS) Scheme*. Government of India.
5. Gupta, R., & Suri, J. C. (2019). Sleep disorders in children: Indian perspective. *Indian Journal of Paediatrics*, 86(7), 609–617.



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6. Bathory, E., & Tomopoulos, S. (2017). Sleep regulation, sleep health, and early childhood mental health. *Child and Adolescent Psychiatric Clinics of North America*, 26(3), 467–478.
7. Galland, B., Spruyt, K., Dawes, P., McDowall, P. S., Elder, D., & Schaughency, E. (2012). Sleep duration and sleep quality in children aged 0–12 years: A systematic review. *Sleep Medicine Reviews*, 16(3), 213–222.
8. Patel, P., Jain, S., & Mehta, N. (2019). Sleep pattern and associated behavioral problems among preschool children in Indian urban settings. *Indian Journal of Pediatrics*, 86(4), 345–350.
9. Owens, J., & Mindell, J. (2011). Pediatric sleep disorders: Diagnosis and treatment. *Current Problems in Pediatric and Adolescent Health Care*, 41(1), 2–28.
10. Sinha, R., & Kumar, A. (2021). Parental factors influencing sleep disturbance among toddlers: A community-based study. *Journal of Community Health Nursing*, 38(2), 102–109.
11. Anders, T. F., & Sadeh, A. (2012). Infant sleep: An overview of developmental changes in sleep patterns. *Sleep Medicine Clinics*, 7(3), 451–459.
12. Blunden, S., & Galland, B. (2014). The complexities of defining optimal sleep: Empirical and theoretical considerations with a special emphasis on children. *Sleep Medicine Reviews*, 18(5), 371–378.
13. Iglowstein, I., Jenni, O. G., Molinari, L., & Largo, R. H. (2003). Sleep duration from infancy to adolescence: Reference values and generational trends. *Pediatrics*, 111(2), 302–307.
14. Jenni, O. G., & Carskadon, M. A. (2007). Sleep behavior and sleep regulation from infancy through adolescence: Normative aspects. *Sleep Medicine Clinics*, 2(3), 321–329.
15. Sadeh, A., Tikotzky, L., & Scher, A. (2010). Parenting and infant sleep. *Sleep Medicine Reviews*, 14(2), 89–96.
16. Meltzer, L. J., & Mindell, J. A. (2014). Systematic review and meta-analysis of behavioral interventions for pediatric insomnia. *Journal of Pediatric Psychology*, 39(8), 932–948.
17. Owens, J. A. (2014). Insufficient sleep in adolescents: Causes and consequences. *Minerva Pediatrica*, 66(1), 63–71.
18. Tikotzky, L. (2017). Parenting and sleep in early childhood. *Current Opinion in Psychology*,



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ISSN 2249-3352 (P) 2278-0505 (E)

Cosmos Impact Factor-**5.86**

15, 118–124.

19. Hale, L., & Guan, S. (2015). Screen time and sleep among school-aged children and adolescents: A systematic literature review. *Sleep Medicine Reviews*, 21, 50–58.
20. Magee, C. A., Gordon, R., & Caputi, P. (2014). Distinct developmental trends in sleep duration during early childhood. *Pediatrics*, 133(6), e1561–e1567.