

## A Qualitative Study on Adequate Sleep in Preschool Children – Can We Sleep on it?

Seema Lasi<sup>\*1</sup>  
Noreen Afzal<sup>\*\*2</sup>  
Somal Kayani<sup>\*\*\*</sup>

### Abstract

Sleep is a significant marker of physical and psychological health. The present research was undertaken to explore perceptions of parents, teachers and pediatricians about preschool children's sleep patterns, habits, and problems from urban Karachi, Pakistan. A qualitative research approach was employed; data collection methods were Focus Group Discussion (FGDs) and Key Informant Interviews (KIIs). The themes identified were children's sleep patterns, sleep environment, sleep rituals, distractions, sleep problems, the impact of inadequate sleep, and recommendations to improve. Emergent themes were inconsistency of rules from parents, lack of opportunities for outdoor physical activity, different kinds of stresses, social and cultural events happening late at night, having TV/technology in the bedroom, and effects of inadequate sleep on parents' lives. The findings provided compelling indications to educate parents on the importance of sleep and its effects on health, development, school performance, behavior, and similar needs. Participants recommended that this could be effectively done with support from schools and healthcare facilities. Screen time was found to have a huge negative impact on children's sleep. An important finding was that socialization is important, but it should not forsake children's bedtime. It is crucial for parents as well as every member of the society to be cognizant of children's bedtime schedules while planning and organizing gatherings and events.

**Keywords:** sleep problems, sleep habits, qualitative research, preschool children, Pakistan

---

\* Aga Khan University, Human Development Programme, Pakistan.

E-mail: seema.laasi@aku.edu

\*\* Aga Khan University, Medical College, Pakistan.

\*\*\* Bahria University, Pakistan.

## Introduction

Sleep affects executive functioning (Bernier et al., 2013), academic performance (Fallone, 2005), peer acceptance, and social skills among preschool children (Vaughn et al., 2015). Children with late and irregular sleep patterns tend to have more behavioral issues as compared to their normal counterparts (Yokomaku et al., 2008). Children's mental and physical functioning is optimum in a predictable environment (Sytsma et al., 2001). A Consistent routine regarding sleep is necessary. Parents play an instrumental role in setting up and maintaining a consistent daily routine for their children. Parental regularity regarding bedtimes has been shown to increase compliance and increase nighttime sleep duration (Short et al., 2011). A systematic review reported inadequate knowledge of preschool parents on sleep matters (McDowall et al., 2016).

The tasks undertaken before sleep ensure sleep quantity and quality. Sleep routines comprising of bedtime stories (Brown et al., 2016) and praying (Hale et al., 2011) contribute to more restful and longer sleep durations. The bedtime routines act as a cue helping children to calm down and reduce bedtime refusals (Adams & Rickert, 1989). Active involvement of caregivers in soothing children to sleep or being with children until they have fallen asleep increases nighttime awakening and limit children's ability to develop and exercise self-soothing strategies (Johnson & McMahon, 2008; Morrell & Steele, 2003).

The use of technology at night leads to bedtime resistance (Li et al., 2007). Increased episodes of sleep terrors, nightmares, and sleep talking have been reported among children having a TV in their bedrooms (Brockmann et al., 2016). Likewise, environmental factors such as noise, temperature, amount of light in the bedroom, sleeping arrangement (Wilson et al., 2014), and exposure to marital conflicts (El- Sheikh et al., 2006) also impact children's sleep.

Vast literature from developed countries have contributed to existing knowledge and best practices regarding sleep, however, qualitative studies on this topic are scant (Martinez & Thompson - Lastad, 2015) more particularly to our knowledge no research study was found on sleep in preschool children in Pakistan. Based on the above gaps, this study was planned to explore parents, teachers and pediatricians' views about preschool children's practices regarding sleep patterns, habits, and problems in urban areas of Karachi, Pakistan. The results of this study are expected to develop a deeper understanding of the topic and to tap into the knowledge of concerned stakeholders regarding sleep in children

and address gaps that might exist, lending itself to the design and implementation of relevant interventions.

## **Methods**

### **Study Setting and Design**

The study was undertaken in the southern part of Pakistan, in two urban areas of Karachi city. A qualitative exploratory research design was employed to capture perceptions of teachers, parents, and pediatricians to understand their perspectives regarding sleep patterns, routines, and problems in preschool children. The study setting was a reputable private school system, operating 3 campuses in the city, providing education services to middle- and working-class families.

### **Sample**

Two schools were involved in data collection; the 3<sup>rd</sup> school could not be reached due to logistic reasons. The data was collected by conducting Focus Group Discussions (4 FGDs) with teachers and parents, and key informant interviews (2 KIIs) with pediatricians. Two FGDs were conducted (8-10 participants for each FGD) with parents' group, one from each school, and two FGDs with teachers' group again one from each school. Each FGD lasted for about 40 to 60 minutes. Semi-structured FGD and KII guidelines were developed and piloted before their actual use. Researchers themselves were involved in conducting FGDs and KIIs. Data collection for FGDs and KIIs was done during Aug 2017 and July 2018.

On the day of the parent-teacher meeting (PTM), parents were invited to attend a session in the school premises, during the session these caregivers were oriented about the study objectives, procedure, and utilization of research findings. Caregivers providing consent were invited to participate in FGDs. A similar process was performed in both the schools. FGDs were conducted in school premises for the convenience and availability of primary caregivers and teachers. Both mothers and fathers participated. Two KIIs were conducted at the pediatrician's office at their time of convenience. Before conducting each interview, written informed consent was taken from each research participant. The data was recorded on digital voice recorders with permission from research participants. Field notes were taken at the end of each interview to recollect and record significant behavioral and contextual aspects of the interviews. Data collection and transcription

was undertaken consecutively on standard formats with specific identifiers. Based on lessons learned from each interview the next interview guideline was modified.

### **Data Management**

FGDs and KIIs were recorded on a voice recorder. All the data including audio recordings and field notes were kept in lock and key. The transcription was done on MS word, these files were also password protected, backup of these files was also maintained on a port drive.

### **Data Analysis**

Focus group discussions and individual interview transcripts were analyzed manually. Analysis followed the “data analysis spiral” as advised by Creswell (2007). Transcripts were read and reread progressively exploring the data, comparing different parts to evolve a more sophisticated understanding by taking memos at the margins of the transcripts. As more data was gathered and reviewed iteratively to identify major organizing ideas and patterns. The second and third authors generated codes on separate transcripts based on predetermined and emerging themes. This analysis was reviewed by the first author to see similarities and differences, further discussions were held between all the authors to get to the point of finalization of codes and subcategories. Some codes were dropped or merged in order to get a clear picture. The final list of codes was refined further as themes and subthemes were generated. All relevant quotes were identified according to the themes from each of the transcripts. These quotes were further reviewed, and the finalized list of quotes was translated into English language.

### **Ethical Considerations**

The overarching principles of academic integrity, honesty, and respect for people were the guiding principles of ethical considerations for this research. A transparent procedure for informed consent was employed. Participants were informed of their right to withdraw from the study without any harm. Participants’ decision to refrain from answering question/s was respected. Confidentiality of the collected information was ensured at all levels. The study ensured minimizing risks and harms involved during data collection. Confidentiality and anonymity of study

participants was ensured. Research findings and interpretations were shared with key stakeholders. Findings will be shared with schools through seminars with parents and teachers. Ethical approval was sought from Aga Khan University –Ethical Review Committee (AKU-ERC).

## **Results**

### **Participants' Characteristics**

Parents' FGDs were attended by 14 mothers and 11 fathers, most of these parents were in the age range of 30 to 39 years (40%). Many parents were being married for more than 6 years and the majority were educated and professionals. A total of 16 teachers took part in the FGDs from both the schools. These were all female teachers with professional qualifications and a minimum of 3.5 to 17 years of experience in preschool teaching. Both the pediatricians (1 male and 1 female) were affiliated with a reputable private university hospital in Pakistan.

## **Research Themes**

### **Sleep Amount, Timing, and Consistency**

Concerning the amount of sleep required by the preschoolers, most parents agreed that a preschooler should sleep for 8-10 hours every night with a bedtime beginning around 9 to 10 pm. The pediatricians shared that there are no standard guidelines available exclusively for children in Pakistan and advised to follow sleep guidelines provided by the American Academy of Pediatrics (AAP). According to AAP, preschoolers should get around 10 to 13 hours of sleep during 24 hrs. Pediatricians further advised parents to figure out how well their child functions on a certain sleeping schedule and then adjust it accordingly. The idea of naps for preschoolers was found consistent among all teachers, however, teachers also considered the duration of naps equally important, as according to them, the naptime should not interfere with the nighttime sleep routine. Regarding the duration of naps, most mothers believed that preschoolers must get a nap of 2 hours during the daytime; however, teachers had a different opinion.

“A nap of more than 1 hour will delay child's bedtime at night.”

(A Teacher)

According to the pediatrician, there are no guidelines on naps, and it is completely subjective to every family in terms of what parents think is

right for their children and whether it is possible to adjust the nap according to children's daily routine. They further added that total sleep duration at night determines whether the child needs a nap.

Regarding consistency, teachers believed that parents were predominantly responsible for their children's sleeping habits especially the habit of bedtime. Teachers suggested that if parents want their children to go to bed early, they need to start practicing the same. The FGDs also revealed that several parents strictly follow bedtime routines and their children had consistency in sleeping patterns even during weekends, however, some children were found to stay up late at night. The pediatricians strongly reiterated the significance of consistent sleeping patterns during weekdays, weekends, and school breaks they further added that consistency in childrearing plays a huge role in inculcating discipline among children.

“A healthy sleeping pattern is one in which sleep timings are relatively fixed. Early and consistent sleep habits lead to a better quality of life.”  
(Pediatrician)

The pediatricians stressed that parents should be consistent regarding what they believed is the appropriate bedtime for their children. They should not let their moods affect their decision about letting the child stay up late one night and not on other nights because the child will then get confused and frustrated as to what exactly is expected of him. Regarding sleep rules and limits, pediatricians stated that children test parents as to how much they can get away with them by throwing a tantrum. However, if the child is aware of a fixed limit, then he will not throw tantrums and follow through with the parents' commands. Consistent application of rules leads to discipline in children, which then also results in parents being happy and relaxed.

“A consistent routine is important for the child's overall and mental wellbeing. Rules or limits do not bother children; it's the inconsistency of application of those rules that makes children frustrated. If the child is sleepy and the parents have not taken him to bed yet, the child will get irritable.” (Pediatrician)

Regarding sleep routine on weekends and weekdays, parents and pediatricians both agreed that sleeping patterns should stay similar to maintain consistency throughout the week. Similar patterns also mean that the child will not have to adjust from one routine to another, which

can be difficult for most children. Sleep routines during vacations were reported to cause problems for teachers. Teachers reported that a disrupted routine because of weekends and vacations is hard to smoothen out and sometimes leads to aggressive behavior among children.

### **Bedtime Rituals**

Teachers and parents shared similar bedtime rituals for children, which included, reading stories, reciting *duas* (prayers), brushing teeth, and changing into nightclothes. Bedtime rituals were shared as an important part of ensuring better sleep in children. One teacher opined that reading stories before going to bed enhances children's imagination, which ultimately helps them perform better at school. Reciting *duas* (prayers), was agreed upon as a way of relaxing children's minds which is essential for putting them to bed. Parents agreed that consistent ritual before going to bed eventually lead to children being able to go to sleep by themselves. According to the pediatricians, bedtime rituals make children feel confident about themselves by following a routine and managing to sleep on their own, and parents can also lead better and hassle-free lives.

### **Sleep Environment**

#### **Room Sharing and Bed Sharing**

Parents highlighted that many children sleep with their mothers and refuse to go to bed alone. Especially in joint families, mothers are busy with household chores until late night and because of this child's bedtime gets disrupted. Teachers who had children of preschool age mentioned that bed-sharing with young children is very common in Pakistani culture and parents believed that this gave children a sense of security and attachment. As opposed to this, some teachers opined that in a congested sleeping space co-bedding could negatively affect the sleep of parents and children. Teachers also admitted that sometimes they do not have any choice since living in a joint family system does not allow enough rooms or space.

“You can imagine if parents and two children are sleeping on the same bed. Sometimes parents have to sleep at the edge or vertical side of the bed that disturbs the sleep of parents and children.” (A Teacher)

Pediatricians strongly advised against co-bedding, they stated that parents should avoid co-bedding with children right from the beginning

and instead encourage children to sleep in their cot or designated separate sleeping place. They further added that co-bedding is one habit that starts during early childhood and persists for many years to come and parents do not realize this.

“If parents do not inculcate the habit of sleeping separately from the beginning then they should be mentally prepared for co bedding up until the child is 6/7 years of age. The reason why the child will prefer co bedding up until that age is that it will be difficult for him to change the habit and get used to sleeping alone.” (Pediatrician)

### **Physical Environment**

With regards to environmental factors, parents identified loud noise (both inside and outside the house) as the most common factor disturbing children’s sleep. Noises from TV, laptop, and cell phone or loud conversations were shared as factors affecting children’s sleep. Noises in the external environment, including honking of cars and late-night social events were also viewed as factors affecting children’s sleep. Parents’ and family members’ / visitors’ late bedtimes were also found to affect children’s bedtime routines.

“Sleeping over at a relative’s place or having guests over disturb children’s sleep.” (A Father)

A teacher highlighted that power outages during nighttime also have a disturbing effect on children’s sleep. This is especially true for families who cannot afford an alternate power source. Hence, their children are sleep deprived and drowsy in school during those days. Teachers also endorsed the importance of fresh air for a better sleeping environment. Moreover, they discussed that the sleeping place should be comfortable, and the children should be clean before going to bed.

### **Emotional Environment**

An important factor highlighted in this research is the sleep disturbances caused due to conflicts happening in the immediate social environment especially in the household. Teachers were concerned that parents do not realize that children gets stressed out because of spousal conflicts. Teachers also shared that some parents fight in front of their children, at other times children notice changes in their mother’s



behaviors or facial expressions and sense there is something wrong between parents. Some of the participants underscored that children pick up these emotions which affects their sleep.

Parents also discussed that bedtime fears also affect the quality of sleep of pre-school children. The types of fears mentioned were, pressure of hectic routine, bullying in school, darkness, sleeping alone, death of someone close, and watching horror shows at night. Moreover, parents also shared that children these days have too much school pressure, in terms of incomplete homework, an upcoming test, being fearful of the teachers or peers, which added to the bedtime fears and affect their sleep. One of the parents also mentioned that teacher's behavior affects children emotionally which ends up disturbing their sleep.

“Teacher’s scolding affect children’s sleep.” (A Mother)

“Children are addicted to television and watching horror programs before going to bed affects their sleep.” (A Father)

“Children have pressures from school, tuition and religious instructor (*Qaari*).” (A Father)

“Children are afraid of the darkness; they constantly check if their parents are with them, otherwise they start screaming.” (A Mother)

Pediatricians underscored their concerns regarding practices in Pakistani culture related to late-night social events especially weddings. They further added that no matter how consistent a child's sleeping routine throughout the week is, attending these late-night events always disturbs children's sleep. Late sittings of fathers at work and children's long commute to schools were also cited as concerns by parents and teachers.

“Some children have their schools at long distances; hence these children have to get up early and do not get time to sleep during the day.”  
(A Mother)

## **Technology**

Parents and pediatricians both had same views regarding technology and its effects on children's sleep. The pediatricians strongly discouraged the use of cell phones and television before bedtime. They further recommended having a fixed allotted time for children to use

technological gadgets and advised parents to keep screen time in check with AAP screen guidelines. They also advised using gadgets for leisure only and recommended not to allow children to use these gadgets as an incentive for them to go to sleep, since it may become a problematic habit. Parents shared that children alone were not responsible for increased cell phone usage. The use of phones by parents causes a stimulus for children to do the same and disturbs children's sleep.

“Use of a screen to make a child go to sleep is not good.” (Pediatrician)

Parents also believed that to ensure early bedtime for children, all members should avoid late-night TV watching.. Teachers commented that children these days have become more habitual of using technology for entertainment and hence this eventually disturbs their sleep as well. This is because they insist on using gadgets even when it is their bedtime.

“Watching cartoons on TV and playing games on mobile causes delay in children's sleep time at night.” (A Teacher)

The participants also highlighted the negative effects of television, mobile phones, tablets, and other similar gadgets on pre-school children's quality of sleep. They also shared that some children were found sleep-talking about the content that they watched on television before going to sleep.

### **Exercise and Diet**

Teachers commented that staying up late on the weekends or during vacations disrupts children's eating habits as well. As a result children wake up late (around noon) they skip their breakfast and subsequent mealtimes also get affected which in turn impact their growth.

“They feel dull the whole day and do not eat food properly. Adequate sleep is important for proper growth of children.” (A Mother)

Most mothers believed that diet has an important role in the children's sleep and that certain kinds of foods lead to hyperactivity, which hampers their sleep.

“Chocolate makes children alert hence should not be given before bedtime.” (A Mother)

Another major concern among parents was the lack of outdoor physical activities because of the unsafe environment. Hence, children stay at home and end up using technology to keep them busy.

“Improper digestion because of a lack of physical activity also have a disturbing effect on children’s sleep. If the child is not drained physically, he will not be able to go to bed.” (A Mother)

Parents felt that the schools should focus on giving more time to physical activities and sports, so children’s energy is channeled appropriately.

### **Impact of Inadequate Sleep**

Parents also believed that inadequate sleep leads to delayed physical and mental health in children. It causes children to be lethargic throughout the day and affect their attention and learning. Emotionally, children became more aggressive and irritable and learning at school suffers.

“If the child is not having adequate sleep then he will throw tantrums, keep crying, misbehaves, and remain sleepy in school.” (Mother)

Discussion with the pediatricians helped shed light on the importance of sleep for the human body. Since preschool children are in the phase of rapid physical, cognitive, and emotional development, adequate sleep is very important to ensure optimal growth and development.

“Sleep is important for brain development as well as overall development.” (Pediatrician)

Pediatricians also pointed out other aspects of children’s lives that get affected due to inadequate sleep, such as, school performance and behavior.

“School performance is better in children who have adequate sleep. Sleep problems eventually lead to behavioral problems.” (Pediatrician)

### **Academic Performance**

There was consensus among teachers that sleep relaxes the mind and body and a relaxed mind allows children to fully participate in mental

and physical activities. Inadequate sleep also causes children to sleep in class and it hampers their attention and concentration as well.

“Inadequate sleep makes the child lazy. When the child has not slept enough, he is not active and does not fully participate in school activities.” (A Teacher)

According to the Pediatricians adequate sleep leads to optimal brain development, the child will thus better be able to make use of his/her mental abilities at school. Poor performance at school just because of poor sleep may make children feel inferior about their abilities; this will further deteriorate academic performance.

“Poor performance at school because of inadequate sleep will make the children hesitant about their abilities.” (Pediatrician)

### **Behavioral Problems**

Pediatricians reported that complaints regarding behavioral problems are rising among children, and in most cases, the antecedents of the latter reside in sleep.

“Inadequate sleep eventually leads to behavioral problems.” (Pediatrician)

Pediatricians added that these problems largely arise because of parents not being responsible enough. They further stressed the consistency of rules and the resulting limit testing by the children.

### **Impact on Parents' Lives**

Parents identified aspects of their daily lives that got affected because of their children's sleep routine and problems. Inadequate sleep led to decreased compliance with parent's requests at the child's end. Child's sleep was found to effect parents' responsibilities at the workplace and household chores.

“Children's naptime helps mothers to focus on getting chores done and be less stressed out. If the child does not sleep, the mother also gets irritable and the quality of the mother-child communication deteriorates”.  
(A Mother)

“Parent’s attention and concentration at work gets disturbed because of children’s sleep issues”. (A Father)

Having said that, these problems can very much be fixed and avoided by making sure that children get enough sleep.

#### *How to improve sleep - Recommendations by Research Participants*

### **Role of Schools**

Teachers discussed that there are ways to motivate children to sleep early, some teachers also shared their experiences. Moreover, they mentioned some practices that proved to be helpful; one is to get information from parents on the daily routine of newly enrolled children on prescribed forms. If the teacher finds a problem, they address it with the parents and make them understand the importance of sleep. Apart from this, if they find any other disruptions, they call parents or directly ask children the reason for it. The teachers also highlighted their efforts in addressing excessive usage of technological gadgets, which is a significant factor for affecting sleep. According to the pediatricians, schools should introduce afternoon napping for children on campus, but the responsibility of getting adequate sleep for children was largely seen as parents’ responsibility by all stakeholders.

### **Role of Parents**

It was also highlighted that some mothers lacked awareness regarding appropriate sleep duration for children. Teachers opined that the only thing that concerned mothers regarding their children was either sending them to school on time or making them do their schoolwork, other than that mothers are not much concerned about their sleeping or eating habits. Even with regards to working mothers and how it affected their children’s sleep routine, sleep patterns were found independent of the working status of mothers. Concerned parents who were aware of the importance of children’s sleeping routines made sure that their daily or weekend activities did not affect children’s sleep.

“Some families do not attend late-night weddings on Sundays or weekdays so that their child’s sleep does not get disturbed.”  
(A Teacher)

Teachers discussed the important role parents could play in developing good sleeping habits. Teachers further added that this can be achieved by maintaining strict routines and creating an environment where children can sleep peacefully.

Father's non-availability due to long working hours was a very common issue faced by most households. Mothers reported that children refuse to go to sleep unless they meet their fathers. To counter this problem, one of the mothers suggested that fathers should give time to children early in the morning so that children can go to bed on time at night. Another suggestion from the teachers was to get a goodnight call from fathers from work so that children sleep on time.

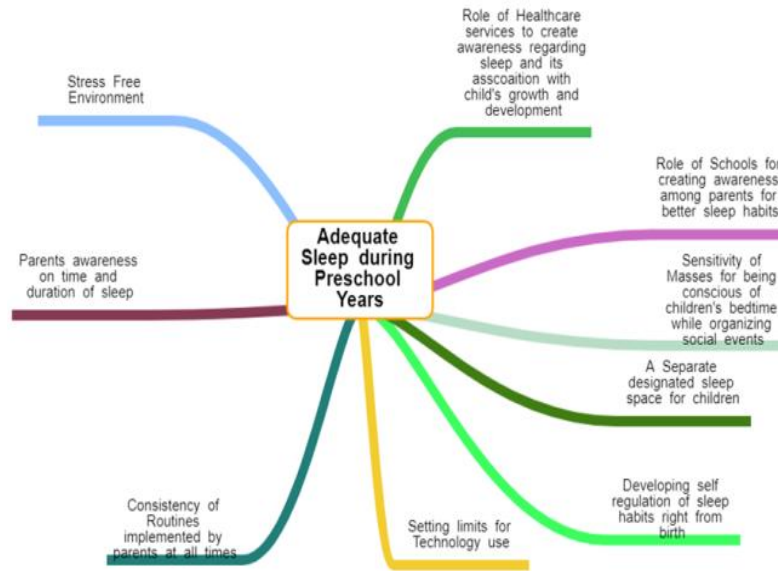
“Fathers should give time to children during morning hours, so the children do not ask for fathers’ attention when it’s time to go to bed.” (A Mother)

With regards to mothers, their engagement in household chores was also found to affect children’s sleep.

“Household chores affect children’s sleep since they need constant attention from their parents. Chores should be postponed for later.” (A Mother)

The pediatrician also recommended parents to make sure right from early years that children learn to regulate sleep with help in the beginning and gradually instill in them a habit to sleep on their own.

“We tell parents to put the baby in the cot the minute they are half asleep and not when the baby has completely slept so that he/she learns to sleep on their own.” (Pediatrician)



*Figure 1:* Perceptions of Parents, Teachers, and Pediatricians to ensure Adequate Sleep in Preschool Children

## Discussion and Recommendations

The findings presented here are from urban Karachi, Pakistan. Discussions with parents, teachers, and pediatricians brought interesting insights on sleep perceptions, practices, and problems among preschool children. Parents had different views regarding the optimal duration of sleep required by preschool children. Most of them reported 8 to 10 hours. There were also diverse views on having naps and the length of naps. Weekends and holidays were found to disrupt sleeping habits among preschoolers.

According to the National Sleep Foundation and the American Academy of Pediatrics, preschool children should get 11 to 13 hours of sleep in 24 hrs. including naps, similar findings were reported by Lamm (2007). Some more estimates on average sleep for 3 to 6 years old recommended 10 to 12 hours every day (Bates et al., 2002; Thiedke, 2001). Inconsistencies were found between parents' view and wider literature, which depicts a lack of knowledge among parents with regards to optimal sleep hours for preschoolers.

Pediatricians stressed the importance of routine and consistency to develop proper sleep habits among preschool children. A consistent sleep

time has been shown to increase compliance and increase nighttime sleep duration by other research studies as well (Short et al, 2011).

Pediatricians completely ruled out children's co-sleeping with parents on the same bed in order to develop proper sleep habits among children. However, the majority of the parents in the study reported co-sleeping with their children. Some believed that co-sleeping gave a sense of security to the child. On the contrary, research demonstrates that co-sleeping as a measure to curb bedtime fears in young children actually has a detrimental effect on sleep quality (Kushnir & Sadeh, 2011). Research that is more indigenous needs to be undertaken to find out the prevalence and effects co-sleeping has on both parents and children.

Consistent with the literature, our findings also showed that marital or family conflicts hampered children's sleep. Marital conflicts were found associated with reduced amount of sleep, poor sleep quality, increased sleep fragmentation, and a higher level of subjective sleepiness (El-Sheikh et al., 2006). Moreover, some parents' were found completely oblivious of the realization that their conflicts had any effect on young children hence they need to be made aware of better ways to deal with their conflicts without affecting their children's sleep.

Technological gadgets, such as TV, cell phones, IPADS, and Laptops were found to be significant sleep distractions. Li and colleagues (2007) also found the presence of technology and television in children's bedroom to be associated with late-night routines, interrupted sleep, shorter sleep duration, and nighttime terrors (Owens et al., 1999; Brockmann et al., 2016). Research participants including pediatricians reiterated the importance of creating a calm and peaceful, internal, and external environment to have sound sleep in order for preschoolers to be mentally and physically active in school. Pediatricians highlighted the need for following American Academy Guidelines for the use of technological gadgets and do not let children use these gadgets before going to bed.

School and peer pressures were also found to disrupt sleep in children. Inappropriate sleep habits in children were found to disrupt parents' lives as well. Meltzer and Mindell (2007) reported fatigue for parents with irregular sleep habits. Inadequate sleep was highly seen as causing behavioral problems among children as well as their low performance in school by all study participants. Similar results were found in literature due to inadequate or poor sleep quality which was found to be associated with several emotional, behavioral, and health problems (Beebe, 2011; Dewald et al., 2010; Gregory & Sadeh, 2012; Millman, 2005).



Sleep problems in children were also found to disturb parents' work and daily routines. Parents, particularly fathers were highlighted for having a key role in promoting better sleep habits among children. Sleep responsibility of children was found with mothers, however, one of the main factors for delayed sleep in children was fathers' absence at home due to late working hours. Several interesting suggestions were reported by teachers in order to overcome this problem, which may be tested and implemented to reduce this problem. A qualitative study by Smith et al. (2019) highlighted the emotional and physical problems faced by mothers but no research was found on fathers' and could be an interesting topic for future research.

An emerging theme found in this study was sleep habits of preschoolers who attended daycare centers after school. This concern was also shared by some teachers as during recent times, this phenomenon is having an increasing trend especially in urban areas. One research study reported sleep habits of children 3 to 5 years old attending full-day child-care centers (Ward et al., 2007). However, this further needs to be explored in settings where children attend schools as well as daycare centers.

Some of the emerging areas, which can be explored with future research questions especially for this population, involve looking at associations between nutrition and sleep practices as there is research evidence available on short sleep duration and obesity (Jiang et al., 2009).

Civic sense and social responsibility demands being cognizant of children's bedtime, and an important concern for socialization etiquettes and cultural events happening in society. The concerns include paying visits or calling people at inappropriate times, organizing events late nights, making loud noises, and clamor during children's bedtime, these are some of the things, which require immediate attention. In crux, all the participants stressed that as a nation there is a dire need to develop, a sense of respect for children's bedtimes as it has a significant contribution towards children's optimal growth and development.

## References

- Adams, L. A., & Rickert, V. I. (1989). Reducing bedtime tantrums: comparison between positive routines and graduated extinction. *Pediatrics*, *84*(5), 756-761.
- Bates, J. E., Viken, R. J., Alexander, D. B., Beyers, J., & Stockton, L. (2002). Sleep and adjustment in preschool children: Sleep diary reports by mothers relate to behavior reports by teachers. *Child development*, *73*(1), 62-75.
- Bernier, A., Beauchamp, M. H., Bouvette-Turcot, A. A., Carlson, S. M., & Carrier, J. (2013). Sleep and cognition in preschool years: Specific links to executive functioning. *Child development*, *84*(5), 1542-1553.
- Brockmann, P. E., Diaz, B., Damiani, F., Villarroel, L., Núñez, F., & Bruni, O. (2016). Impact of television on the quality of sleep in preschool children. *Sleep medicine*, *20*, 140-144.
- Brown, S. J., Rhee, K. E., & Gahagan, S. (2016). Reading at bedtime associated with longer nighttime sleep in Latino preschoolers. *Clinical pediatrics*, *55*(6), 525-531.
- Dewald, J. F., Meijer, A. M., Oort, F. J., Kerkhof, G. A., & Bögels, S. M. (2010). The influence of sleep quality, sleep duration and sleepiness on school performance in children and adolescents: A meta-analytic review. *Sleep medicine reviews*, *14*(3), 179-189. <https://doi.org/10.1016/j.smr.2009.10.004>
- El-Sheikh, M., Buckhalt, J. A., Mize, J., & Acebo, C. (2006). Marital conflict and disruption of children's sleep. *Child development*, *77*(1), 31-43.
- Fallone, G., Acebo, C., Seifer, R., & Carskadon, M. A. (2005). Experimental restriction of sleep opportunity in children: effects on teacher ratings. *Sleep*, *28*(12), 1561-1567.
- Hale, L., Berger, L. M., LeBourgeois, M. K., & Brooks-Gunn, J. (2011). A longitudinal study of preschoolers' language-based bedtime routines, sleep duration, and well-being. *Journal of Family Psychology*, *25*(3), 423.

- Jiang, F., Zhu, S., Yan, C., Jin, X., Bandla, H., & Shen, X. (2009). Sleep and obesity in preschool children. *The Journal of pediatrics*, *154*(6), 814-818.
- Johnson, N., & McMahon, C. (2008). Preschoolers' sleep behavior: associations with parental hardiness, sleep-related cognitions and bedtime interactions. *Journal of Child Psychology and Psychiatry*, *49*(7), 765-773.
- Kushnir, J., & Sadeh, A. (2011). Sleep of preschool children with nighttime fears. *Sleep medicine*, *12*(9), 870-874.
- Li, S., Jin, X., Wu, S., Jiang, F., Yan, C., & Shen, X. (2007). The impact of media use on sleep patterns and sleep disorders among school-aged children in China. *Sleep*, *30*(3), 361-367.
- Martinez, S. M., & Thompson-Lastad, A. (2015). Latino parents' insight on optimal sleep for their preschool-age child: does context matter? *Academic pediatrics*, *15*(6), 636-643.
- Mindell, J. A., Sadeh, A., Kwon, R., & Goh, D. Y. (2013). Cross-cultural differences in the sleep of preschool children. *Sleep medicine*, *14*(12), 1283-1289.
- Morrell, J., & Steele, H. (2003). The role of attachment security, temperament, maternal perception, and care-giving behavior in persistent infant sleeping problems. *Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health*, *24*(5), 447-468.
- Short, M. A., Gradisar, M., Wright, H., Lack, L. C., Dohnt, H., & Carskadon, M. A. (2011). Time for bed: parent-set bedtimes associated with improved sleep and daytime functioning in adolescents. *Sleep*, *34*(6), 797-800.
- Smith, L., Galland, B., & Lawrence, J. (2019). A qualitative study of how preschoolers' problematic sleep impacts mothers. *Behavioral sleep medicine*, *17*(3), 314-326.
- Sytsma, S. E., Kelley, M. L., & Wymer, J. H. (2001). Development and initial validation of the Child Routines Inventory. *Journal of Psychopathology and Behavioral Assessment*, *23*(4), 241-251.

- Vaughn, B. E., Elmore-Staton, L., Shin, N., & El-Sheikh, M. (2015). Sleep as a support for social competence, peer relations, and cognitive functioning in preschool children. *Behavioral Sleep Medicine, 13*(2), 92-106.
- Ward, T. M., Gay, C., Anders, T. F., Alkon, A., & Lee, K. A. (2007). Sleep and napping patterns in 3-to-5-year old children attending full-day childcare centers. *Journal of Pediatric Psy*
- Wilson, K. E., Miller, A. L., Lumeng, J. C., & Chervin, R. D. (2014). Sleep environments and sleep durations in a sample of low-income preschool children. *Journal of Clinical Sleep Medicine, 10*(03), 299-305.
- Yokomaku, A., Misao, K., Omoto, F., Yamagishi, R., Tanaka, K., Takada, K., & Kohyama, J. (2008). A study of the association between sleep habits and problematic behaviors in preschool children. *Chronobiology international, 25*(4), 549-564.

***Citation of this Article:***

Lasi, S., Afzal, N & Kayani, S. (2020). A qualitative study on adequate sleep in preschool children – Can we sleep on it? *Journal of Early Childhood Care and Education, 4*, 145-164.