Sleep Behaviors and Sleep Problems in School-Aged Children in Thailand

Tawima Sirirassamee MD*,
Weerasak Chonchaiya MD**, Chandhita Pruksananonda MD**

** Faculty of Medicine, Srinakharinwirot University, Bangkok, Thailand*
*** Faculty of Medicine, Chulalongkorn University, Bangkok, Thailand*

Background: *Sleep problems can have a significant effect on children behaviors, emotional and cognitive developments. However, limited information is available regarding the sleep behaviors and sleep problems of school-aged children in Thailand. The purposes of this study were to examine the prevalence of sleep problems and to describe sleep/wake pattern of Thai children.*

Material and Method: *The school-based, cross-sectional study was conducted in 5 primary public schools selected from Bangkok and three regions of Thailand. The samples were selected from the first and fourth grades of each school. The Children's Sleep Habits Questionnaire (CSHQ) was used to evaluate sleep behaviors and sleep problems.*

Results: *Grade 1 children went to bed earlier and had longer weekday sleep duration comparing with grade 4 children. Sleep duration was significantly shorter in children living in Bangkok, comparing with those living in rural areas. Mean total CSHQ score was significant higher in grade 1 children, when comparing with grade 4 children (51.30 vs. 50.18; p = 0.026). Grade 1 children scored significantly higher on bedtime resistance (10.96 vs. 10.39; p = 0.004) and sleep anxiety subscale (6.68 vs. 6.41; p = 0.022), while grade 4 children scored significantly higher on sleep-onset delay subscale (1.41 vs. 1.23; p<0.001). Prevalence of sleep problems was highest in the category of "falling asleep while riding in car or bus" (69.5%), followed by "awakening by others in the morning" (68.5%).*

Conclusion: *Sleep problems were common in Thai school-aged children. The most common sleep problems were in the domains of daytime sleepiness and bedtime resistance and anxiety.*

Keywords: *Sleep, Sleep problem, Sleep behavior, Children's sleep habits questionnaire, Children*

J Med Assoc Thai 2015; 98 (Suppl. 9): S71-S77
Full text. e-Journal: *http://www.jmatonline.com*

Sleep problems are now very frequently recognized to occur in children. There are clear evidences from both experimental laboratory based studies and clinical observations supporting that insufficient sleep duration and poor quality sleeping contribute to daytime drowsiness and behavioral dysregulation. Sleep deprivation may also result in recognizable neurocognitive performance deficits, including decreased cognitive flexibility and verbal creativity, poor abstract reasoning, impaired motor skills, decreased attention and vigilance, and memory impairments[1,2]. Moreover, associations between reduced sleep duration and cognitive deficits or mood disturbances have been found in adults, and evidences of similar effects in children were reported to be increasing[3,4]. Results from recent studies also indicated that shorter sleep durations are primarily associated with early onset obesity[5,6]. Sleep problems can adversely affect cultural, social, and family conditions, and vise versa[7,8]. Previous studies in Western countries reported the prevalence of parent-reported sleep problems of approximately 20% to 30%. The reported prevalence of sleep problems among Asian countries was higher than the Western countries[1,9-11]. Lui X et al reported the incidence of 20-58% of sleeping problems among school-aged Chinese children[10]. There are limited data available in Thailand, including the studies from Bunjoungmanee P et al about the infant sleep problems and their caretakers' responses[12]; other, fewer studies evaluated sleep problems in adult[13,14]. To the best of our knowledge, there is no study available regarding sleep behaviors and sleep problems among Thai school-aged children. The purposes of this study were to examine the

Correspondence to:
Sirirassamee T, Department of Pediatrics, Faculty of Medicine, Srinakharinwirot University, Sukhumvit 23, Bangkok 10110, Thailand.
Phone: +66-84-1043310
E mail: tawima_s@yahoo.com

prevalence of sleep problems, describe sleep/wake patterns, and compare sleep problems among school-aged children in Thailand.

Material and Method

Subjects and procedures

The school-based, cross-sectional study was conducted in 5 primary public schools in Thailand in February and March 2012. One school was selected from each region (North, Northeast and South), and two schools were selected from Bangkok. Two classes were selected from each of the first and fourth grade from each school. All students in these classes were included in our study. Participant's parents were provided with and signed the informed consent form instead of the pupils to permit them to participate in the survey. The Children's Sleep Habits Questionnaire (CSHQ) was distributed by the teachers to parents. A total of 879 sets of questionnaires were distributed, 700 sets were returned for data analysis (response rate = 79.6%). Ethical approval for this study was granted by Srinakharinwirot University (SWUEC/E-092/2557).

Measures

The Children's Sleep Habits Questionnaire (CSHQ) is a retrospective, parental reported questionnaire that has been used worldwide to examine sleep behavior and sleep problems in children aged 4 to 10 years[9-11]. The CSHQ was translated into Thai language by the developmental-behavioral pediatricians at Chulalongkorn University. Pilot testing was done to evaluate the accuracy and appropriateness of the form. The CSHQ includes items relating to a number of key sleep domains that encompass the major presenting clinical sleep complaints in this age group which are: bedtime behavior and sleep onset; sleep duration; anxiety around sleep; behavior occurring during sleeping and night awakening; sleep-disordered breathing; parasomnias; and morning waking/daytime sleepiness. Parents were requested to recall sleep behaviors during a recent typical week. Items were rated on a three-point scale as followed: "usually" if the sleep behavior occurred 5 to 7 times a week; "sometimes" for 2 to 4 times a week; and "rarely" for 0 to 1 times a week. Prevalence of problems are defined as sleep problems, which occurred 2 or more times a week (sometimes or usually)[15].

Statistical analysis

The Statistical Program for Social Sciences (SPSS) for Windows, version 11.5 was used for all data analyses. Descriptive data were analyzed using means and standard deviations (SD). Mann-Whitney U tests were used to assess between group differences on total and subscale scores. Statistical significance was set at $p<0.05$.

Results

Demographic characteristics (Table 1)

Grade 1 children

Of the 434 questionnaires distributed, 301 questionnaires were returned (response rate = 69.4%). The mean age of samples was 7.21 years (SD = 0.37), 56.8% were boys, 94.6% were Buddhist, and 48.8% lived in Bangkok. A large proportion of the parents had a college degree, 80.6% of the father and 81.9% of the mother. Seventy-two percent of the participant families had incomes of more than 781 US dollars per month.

Grade 4 children

Of the 445 questionnaires distributed, 399

Table 1. Demographic characteristics

Demographic characteristics	Grade 1 n (%)	Grade 4 n (%)
Mean age (SD)	7.21 (0.37)	9.64 (0.49)
Gender		
Boys	171 (56.8)	189 (47.4)
Girls	130 (43.2)	210 (52.6)
Region		
Bangkok	147 (48.8)	167 (41.9)
Rural	154 (51.2)	232 (58.1)
Religion		
Buddhism	283 (94.6)	385 (96.5)
Muslim	12 (4.0)	12 (3.0)
Christianity	4 (1.4)	2 (0.5)
Father education		
Primary school or lower	9 (3.5)	17 (4.9)
Secondary school	41 (15.9)	83 (24.2)
College	208 (80.6)	244 (70.9)
Mother education		
Primary school or lower	13 (4.7)	20 (5.4)
Secondary school	37 (13.4)	88 (23.7)
College	226 (81.9)	263 (70.9)
Family Income per month (US dollar*)		
312 or less	28 (9.6)	59 (15.2)
313-780	54 (18.5)	86 (22.2)
781-1,562	84 (28.8)	103 (26.6)
1,563-3,152	76 (26.0)	92 (23.8)
More than 3,152	50 (17.1)	47 (12.2)

*1 US dollar = 33 Baht

questionnaires were returned (response rate = 89.7%). The mean age of sample was 9.64 years (SD = 0.49), 47.4% were boys, 96.5% were Buddhist and 41.9% lived in Bangkok. Sixty-three percent of the participant families had incomes of more than 781 US dollars per month.

Sleep/wake patterns (Table 2)

Grade 1 children

On weekdays, mean bedtime was 9:00 PM (SD = 0.58), mean morning wakeup time was 6:00 AM (SD = 0.62) and mean sleep duration was 8:55 hour (SD = 1.17). During the weekend, mean bedtime was 9:30 PM (SD = 0.77), mean morning wakeup time was 7:40 AM (SD = 0.96) and mean sleep duration was 9:10 hours (SD = 1.24).

Grade 4 children

On weekdays, mean bedtime was 9:20 PM (SD = 3.47), mean morning wakeup time was 6:35 AM (SD = 0.60) and mean sleep duration was 8:36 hour (SD = 1.41). During the weekend, mean bedtime was 10:00 PM (SD = 1.35), mean morning wakeup time was 8:30 AM (SD = 4.10) and mean sleep duration was 8:59 hours (SD = 1.39).

Comparison of sleep/wake patterns between subgroups

Grade 1 children went to bed significantly earlier than grade 4 children did, both on weekdays and weekend. Sleep duration among students who lived in rural areas was significantly longer than students who lived in Bangkok. There was no significant difference in sleep pattern between genders except for weekend wakeup time.

Prevalence of sleep problems (Table 3)

Prevalence of sleep problems was very common in the domains of daytime sleepiness and bedtime resistance and anxiety. The prevalence of sleep problems was highest in "falling asleep while riding in car or bus" (69.5%), followed by "awakening by others in the morning" (68.5%), "falling asleep in other's bed" (66.6%), "needing parents in the room to sleep" (63.8%), and "hard time getting out of bed" (59.4%). Rare sleep problems (occurred less than 5% of the sample) were "awaken screaming, sweating" (2.4%) and "holding breath or stopping breathing" (3.5%). Most common sleep problem among grade 1 children was "needing parents in the room to sleep" (72.6%), while grade 4 children was "falling asleep while riding in car or bus"

Table 2. Sleep/wake patterns by gender, education, and region

Sleep patterns	Education			Region			Gender		
	Grade 1 mean (SD)	Grade 4 mean (SD)	*p*-value	Bangkok mean (SD)	Rural area mean (SD)	*p*-value	Boys mean (SD)	Girls mean (SD)	*p*-value
Weekday bedtime, PM	9.00 (0.58)	9.20 (3.47)	0.014*	9.10 (0.94)	8.20 (3.57)	0.481	9.00 (1.09)	9.05 (3.68)	0.269
Weekend bedtime, PM	9.30 (0.77)	10.00 (1.35)	0.003**	9.54 (1.26)	9.45 (1.04)	0.251	9.39 (1.39)	10.00 (0.81)	0.683
Weekday wakeup time, AM	6.00 (0.62)	6.35 (0.60)	0.295	6.00 (0.55)	6.20 (0.59)	<0.001***	6.30 (0.64)	6.05 (0.59)	0.407
Weekend wakeup time, AM	7.40 (0.96)	8.30 (4.10)	0.260	7.55 (1.10)	8.20 (3.91)	0.316	7.30 (1.11)	8.00 (3.94)	0.035*
Weekday sleep duration, hour	8.55 (1.17)	8.36 (1.41)	0.014*	8.29 (0.56)	8.58 (1.52)	<0.001***	8.46 (1.29)	8.40 (1.35)	0.604
Weekend sleep duration, hour	9.10 (1.24)	8.59 (1.39)	0.545	8.59 (1.08)	9.00 (1.50)	0.008**	9.00 (1.29)	9.05 (1.38)	0.567

* $p<0.05$, ** $p<0.01$, *** $p<0.001$

Table 3. Prevalence of sleep problems by education

Sleep problems	Prevalence of problem* (%)		
	Grade 1	Grade 4	Overall
Bedtime resistance and anxiety			
Going to bed at different time	18.4	29.7	24.9
Difficulty falling asleep in 20 minute	21.3	33.2	28.1
Falling asleep in other's bed	65.0	67.7	66.6
Needing parents in room to sleep	72.6	57.5	63.8
Struggling at bedtime	7.8	5.5	6.4
Afraid of sleeping in the dark	40.1	38.5	39.2
Afraid of sleeping alone	64.9	54.3	58.8
Trouble sleeping away	13.8	22.7	18.9
Night waking and sleep duration			
Moving to other's bed in night	19.2	17.9	18.5
Awaking once during night	36.1	35.6	35.8
Awaking more than once	7.3	8.8	8.2
Sleeping too little	38.5	42.6	40.9
Not sleeping same amount each day	23.9	28.5	26.6
Sleep-disordered breathing			
Snoring loudly	39.7	37.3	38.3
Holding breath or stopping breathing	1.8	4.8	3.5
Snoring and gasping	9.0	8.4	8.8
Parasomnia			
Wetting the bed at night	13.6	10.2	11.7
Talking during sleep	31.9	36.4	34.5
Restless, moving a lot	55.2	53.4	54.1
Sleep walking	3.5	6.1	5.0
Grinding teeth during sleep	37.3	20.1	27.5
Awaken screaming, sweating	1.5	3.2	2.4
Alarmed by scary dream	7.1	15.5	11.8
Daytime sleepiness			
Awakening by others in the morning	70.5	66.9	68.5
Waking up in a bad mood	46.9	38.8	42.2
Hard time getting out of bed	62.2	57.3	59.4
Taking a long time to be alert	53.7	56.4	55.2
Seeming tired during the day	39.4	39.5	39.5
Falling asleep while watching television	19.8	24.7	22.6
Falling asleep while riding in car or bus	71.9	67.8	69.5

* Prevalence of problem = usually or sometimes

(67.8%).

The children's sleep habits questionnaires scale scores (Table 4)

The mean total CSHQ score was 50.64 (SD = 6.79). Mean total CSHQ score was significantly higher among children in grade 1, compared with children in grade 4 (51.30, 50.18; $p = 0.026$). Grade 1 children scored significantly higher on bedtime resistance (10.96, 10.39; $p = 0.004$) and sleep anxiety subscale (6.68, 6.41; $p = 0.022$), while grade 4 children scored significantly higher on sleep-onset delay subscale (1.41, 1.23; $p<0.001$).

Discussion

To the best of our knowledge, this is the first study to evaluate sleep behaviors and sleep problems among healthy Thai school-age children. The main findings can be summarized as followed: 1) Sleep duration was shorter among grade 1 students and children who lived in urban area, 2) Sleep problems

Table 4. The children's sleep habits scale scores by education

CSHQ score	Grade 1 mean (SD)	Grade 4 mean (SD)	*p*-value	Overall mean (SD)
Bedtime resistance	10.96 (2.30)	10.39 (2.51)	0.004[b]	10.63 (2.44)
Sleep-onset delay	1.23 (0.47)	1.41 (0.63)	<0.001[c]	1.33 (0.57)
Sleep duration	4.06 (1.32)	4.10 (1.30)	0.549	4.08 (1.31)
Sleep anxiety	6.68 (1.77)	6.41 (2.01)	0.022[a]	6.52 (1.92)
Night waking	3.82 (1.05)	3.76 (0.99)	0.609	3.79 (1.02)
Parasomnias	8.74 (1.45)	8.67 (1.55)	0.389	8.70 (1.51)
Sleep-disordered breathing	3.55 (0.80)	3.56 (0.82)	0.774	3.55 (0.81)
Daytime sleepiness	12.07 (2.27)	11.99 (2.39)	0.709	12.03 (2.34)
Total scores	51.30 (6.64)	50.18 (6.87)	0.026[a]	50.64 (6.79)

[a]$p<0.05$; [b]$p<0.01$; [c]$p<0.001$

were common especially in the domains of daytime sleepiness and bedtime resistance and anxiety, 3) The total CSHQ scores in Thai children were higher than the previous studies in China and Western countries. Results from previous studies indicated that average total sleep duration in healthy children aged 6-12 years-old was 9-11 hours[16,17]. Our data show that mean weekday sleep duration was 8.55 hours among grade 1 children and 8.36 hours among grade 4 children, which was slightly less than the typical sleep requirement. Sleep duration did not vary between genders but differed among places where children lived. Children who lived in Bangkok waked up earlier and had less sleep duration than children who lived in rural area. The reasons for this are the increasing time required for large quantity of homework, extra tutorial classes, and traffic problems. National US surveys have shown a reduction of 1.5 to 2 hours in self-reported sleep duration over the last 50 years[5]. Hense S et al found that regional affiliation, including cultural and environmental characteristics, seemed to overlay individual determinants of sleep duration. Such cultural diversity needs to be kept in consideration when recommendations or reference values of normal sleep duration in children are being developed[18].

Data from our study demonstrated that sleep problems were common in Thai children. The common domains of sleep problems were daytime sleepiness and bedtime resistance and anxiety. Approximately 60% of parents reported that their children needed parents in their bedrooms to be able to sleep and that they were afraid of sleeping alone. Pattern of child rearing have a strong influence on sleep habits. Thai school-age children depend on their caretakers in everyday living, including sleeping and eating. In order to correct sleep problems, parents should be educated about normal sleep development at different ages, good sleep hygiene, and basic behavioral principles. Parents also needed to be trained to help children to establish consistent bedtime routines and to use positive reinforcement for appropriate sleep behaviors. However, cultural differences in sleep practices have profound effects on how parents define a sleep problem and on the relative acceptability of various treatment strategies. Bed sharing is an apparent example of the cultural difference. Co-sleeping is an accepted practice in many Asian countries including Thailand. In contrast, people in Western countries generally believe that a child should sleep separately from his or her parents as soon as possible to foster the development of autonomy and independence[19]. Our recent study found that 66.6% of parents reported their children to be positive for "falling asleep in other bed" and 58.8% for "afraid of sleeping alone". Aishworiya R et al reported that 80.9% of Singapore preschool children sleep in the same room or same bed as someone else[11]. Liu X et al found that 18.2% of Chinese school-age children have regular bed sharing. Younger children, crowded housing, and poor physical health of children were important predisposing factors for children to share bed with their parents[20].

We compare our results with previous studies using the CHSQ as a sleep problems screening tool. Lui X et al reported sleep patterns and sleep problems in the Chinese and USA children[10], and van Litsenberg RR et al reported those among Dutch children[9]. Thai sample scored highest in total CSHQ score compared with Chinese, Dutch and US samples. Compared with

the Chinese samples, Thai samples scored higher in bedtime resistance, sleep-onset delay, sleep anxiety, parasomnias, sleep-disordered breathing and daytime sleepiness subscales, but lower in sleep duration and night waking subscales. Thai samples also scored higher in all subscales when compared with the Dutch and American samples. Multiple factors might explain these results. First, Thai children had shorter sleep duration which could lead to insufficient sleep and cause other sleep problems. Calhoun SL et al reported that the presence of excessive daytime sleepiness is strongly associated with trouble falling asleep[21]. Second, the parent's lack of knowledge and poor parenting skills could results in inappropriate sleep hygiene. The last reason is the differences in definition of sleep problems. Asian and Western culture have differences in routine sleeping practices. Families also have great variations in their tolerance of children's sleep habits; where one family finds something to be problematic, another family may take it as normal. Although most of the CHSQ scores vary among countries with different cultural background, there are similar scores in the domains of sleep-disordered breathing, night walking, and parasomnias. Previous studies reported that cross-cultural difference in the epidemiology of obstructive sleep apnea and parasomnias remained unclear[22-24].

The main limitation of this study is that children sleep problems measurement was only assessed by parental reports rather than by objective instruments. The difference in sleep behavior and prevalence sleep problems can be caused from biased reporting.

Conclusion

Sleep problems were common in Thai school-aged children. The most common sleep problems were in the domains of daytime sleepiness and bedtime resistance and anxiety.

What is already known on this topic ?

Sleep behavior and prevalence of sleep problem in other countries such as USA, UK etc.

What this study adds ?

Sleep behavior and prevalence of sleep problems in healthy Thai school-aged children.

Acknowledgement

This study was supported by Srinakharinwirot University.

Potential conflicts of interest

None.

References

1. Owens JA. Sleep and sleep disorders in children. In: Carey WB, Crocker AC, Coleman WL, editors. Developmental-behavioral pediatrics. 4th ed. Philadelphia: Saunders Elsevier; 2009: 619-27.
2. Fallone G, Owens JA, Deane J. Sleepiness in children and adolescents: clinical implications. Sleep Med Rev 2002; 6: 287-306.
3. Nixon GM, Thompson JM, Han DY, Becroft DM, Clark PM, Robinson E, et al. Short sleep duration in middle childhood: risk factors and consequences. Sleep 2008; 31: 71-8.
4. Ortega FB, Ruiz JR, Castillo R, Chillon P, Labayen I, Martinez-Gomez D, et al. Sleep duration and cognitive performance in adolescence. The AVENA study. Acta Paediatr 2010; 99: 454-6.
5. Cappuccio FP, Taggart FM, Kandala NB, Currie A, Peile E, Stranges S, et al. Meta-analysis of short sleep duration and obesity in children and adults. Sleep 2008; 31: 619-26.
6. Magee CA, Caputi P, Iverson DC. The longitudinal relationship between sleep duration and body mass index in children: a growth mixture modeling approach. J Dev Behav Pediatr 2013; 34: 165-73.
7. Stores G. Children's sleep disorders: modern approaches, developmental effects, and children at special risk. Dev Med Child Neurol 1999; 41: 568-73.
8. Rona RJ, Li L, Gulliford MC, Chinn S. Disturbed sleep: effects of sociocultural factors and illness. Arch Dis Child 1998; 78: 20-5.
9. van Litsenburg RR, Waumans RC, van den BG, Gemke RJ. Sleep habits and sleep disturbances in Dutch children: a population-based study. Eur J Pediatr 2010; 169: 1009-15.
10. Liu X, Liu L, Owens JA, Kaplan DL. Sleep patterns and sleep problems among schoolchildren in the United States and China. Pediatrics 2005; 115: 241-9.
11. Aishworiya R, Chan P, Kiing J, Chong SC, Laino AG, Tay SK. Sleep behaviour in a sample of preschool children in Singapore. Ann Acad Med Singapore 2012; 41: 99-104.
12. Bunjoungmanee P, Hansakunachai T. Infant sleep problems and caretakers' responses at Thammasat Chalerm Prakiat Hospital. Thai J Pediatr 2008; 47: 240-6.
13. Tubtimtes S, Sukying C, Prueksaritanond S. Sleep

problems in out-patient of primary care unit. J Med Assoc Thai 2009; 92: 273-8.
14. Sukying C, Bhokakul V, Udomsubpayakul U. An epidemiological study on insomnia in an elderly Thai population. J Med Assoc Thai 2003; 86: 316-24.
15. Owens JA, Spirito A, McGuinn M. The Children's Sleep Habits Questionnaire (CSHQ): psychometric properties of a survey instrument for school-aged children. Sleep 2000; 23: 1043-51.
16. Owens JA. Sleep medicine. In: Kliegman RM, Stanton BF, Geme JW, editors. Nelson textbook of pediatrics. 19th ed. Philadelphia: Elsevier; 2011: 46-55.
17. Blair PS, Humphreys JS, Gringras P, Taheri S, Scott N, Emond A, et al. Childhood sleep duration and associated demographic characteristics in an English cohort. Sleep 2012; 35: 353-60.
18. Hense S, Barba G, Pohlabeln H, De Henauw S, Marild S, Molnar D, et al. Factors that influence weekday sleep duration in European children. Sleep 2011; 34: 633-9.
19. Hanks CC, Rebelsky FG. Mommy and the midnight visitor: a study of occasional co-sleeping. Psychiatry 1977; 40: 277-80.
20. Liu X, Liu L, Wang R. Bed sharing, sleep habits, and sleep problems among Chinese school-aged children. Sleep 2003; 26: 839-44.
21. Calhoun SL, Vgontzas AN, Fernandez-Mendoza J, Mayes SD, Tsaoussoglou M, Basta M, et al. Prevalence and risk factors of excessive daytime sleepiness in a community sample of young children: the role of obesity, asthma, anxiety/depression, and sleep. Sleep 2011; 34: 503-7.
22. Guilleminault C, Palombini L, Pelayo R, Chervin RD. Sleepwalking and sleep terrors in prepubertal children: what triggers them? Pediatrics 2003; 111: e17-e25.
23. Agargun MY, Cilli AS, Sener S, Bilici M, Ozer OA, Selvi Y, et al. The prevalence of parasomnias in preadolescent school-aged children: a Turkish sample. Sleep 2004; 27: 701-5.
24. Lumeng JC, Chervin RD. Epidemiology of pediatric obstructive sleep apnea. Proc Am Thorac Soc 2008; 5: 242-52.

พฤติกรรมการนอนและปัญหาการนอนในเด็กวัยเรียนของไทย

ทวิมา ศิริรัศมี, วีระศักดิ์ ชลไชยะ, จันท์ฑิตา พฤกษานานนท์

ภูมิหลัง: *ปัญหาการนอนมีอิทธิพลอย่างยิ่งต่อพฤติกรรม อารมณ์และพัฒนาการของเด็กแต่ในปัจจุบันข้อมูลด้านพฤติกรรมการนอน และปัญหาการนอนในเด็กวัยเรียนของไทยยังมีการศึกษาไม่มากนัก*

วัตถุประสงค์: *เพื่อศึกษาอุบัติการณ์ของปัญหาการนอนและพฤติกรรมการนอนในเด็กวัยเรียน*

วัสดุและวิธีการ: *ทำการศึกษาพฤติกรรมและปัญหาการนอนของนักเรียนชั้นประถมศึกษาปีที่ 1 และประถมศึกษาปีที่ 4 ที่กำลังศึกษาอยู่ในโรงเรียนของภาครัฐ ในเขตกรุงเทพฯ ภาคเหนือ ภาคใต้ และภาคตะวันออกเฉียงเหนือ โดยใช้แบบสอบถาม Children's sleep habits questionnaire (CSHQ)*

ผลการศึกษา: *นักเรียนชั้นประถมศึกษาปีที่ 1 เข้านอนเร็วกว่าและมีชั่วโมงการนอนที่มากกว่านักเรียนชั้นประถมศึกษาปีที่ 4 เมื่อเปรียบเทียบคะแนนเฉลี่ย CSHQ ระหว่างนักเรียนที่ศึกษาในระดับชั้นเรียนที่ต่างกันพบว่าในภาพรวมคะแนนเฉลี่ย CSHQ ของนักเรียนชั้นประถมศึกษาปีที่ 1 สูงกว่านักเรียนชั้นประถมศึกษาปีที่ 4 (51.30 vs. 50.18; p = 0.026) นักเรียนชั้นประถมศึกษาปีที่ 1 มีคะแนนเฉลี่ยสูงกว่าในประเด็นการต่อต้านไม่ยอมเข้านอน (10.96 vs. 10.39; p = 0.004) และประเด็นความกังวลต่อการนอน (6.68 vs. 6.41; p = 0.022) ขณะที่นักเรียนชั้นประถมศึกษาปีที่ 4 มีคะแนนเฉลี่ยสูงกว่าในประเด็นการเข้านอนล่าช้า (1.41 vs. 1.23; p<0.001) อุบัติการณ์ของปัญหาการนอนสูงสุดในประเด็นการนอนหลับขณะนั่งรถ (69.5%) รองลงมาคือ การต้องถูกปลุกโดยผู้อื่นในตอนเช้า (68.5%)*

สรุป: *ปัญหาการนอนในเด็กวัยเรียนพบได้บ่อย โดยเฉพาะปัญหาการง่วงนอนตอนกลางวันและการต่อต้านไม่ยอมเข้านอน*