

THE QUALITY OF SLEEP IN HIGH SCHOOL URBAN STUDENTS

Author(s), affiliation

Dumitraș Mariana, Lupușor Adrian, Vovc Victor

"Nicolae Testemițanu" State University of Medicine and Pharmacy, Chair of Human Physiology and Biophysics, Chisinau, Republic of Moldova

Introduction

A good sleep quality in high school students is crucial, because this represents the basis of mental and physical health and the premise of good school performance. Difficulties in falling asleep and maintaining sleep are reported with a relatively high frequency in epidemiological studies, estimated to affect 15-35% of the adult population [1,2]. Adolescence sleeping problems are thought to be due to late melatonin secretion and bad sleep habits, especially in the urban population [3].

Keywords

sleep quality, high school students.

Purpose

To assess the sleep habits and the activities before sleep, as well as the sleep quality of high school urban students.

Material and methods

An anonymous online questioning during January-March 2020 of 118 high school students (grades 10-12), male to female ratio 1:2.6, from 7 lyceums of Chisinau and Balti, included: questions regarding sleep habits and the activities before sleep, the Pittsburgh Sleep Quality Index (PSQI) and the Epworth Sleepiness Scale (ESS) [4,5].

Results

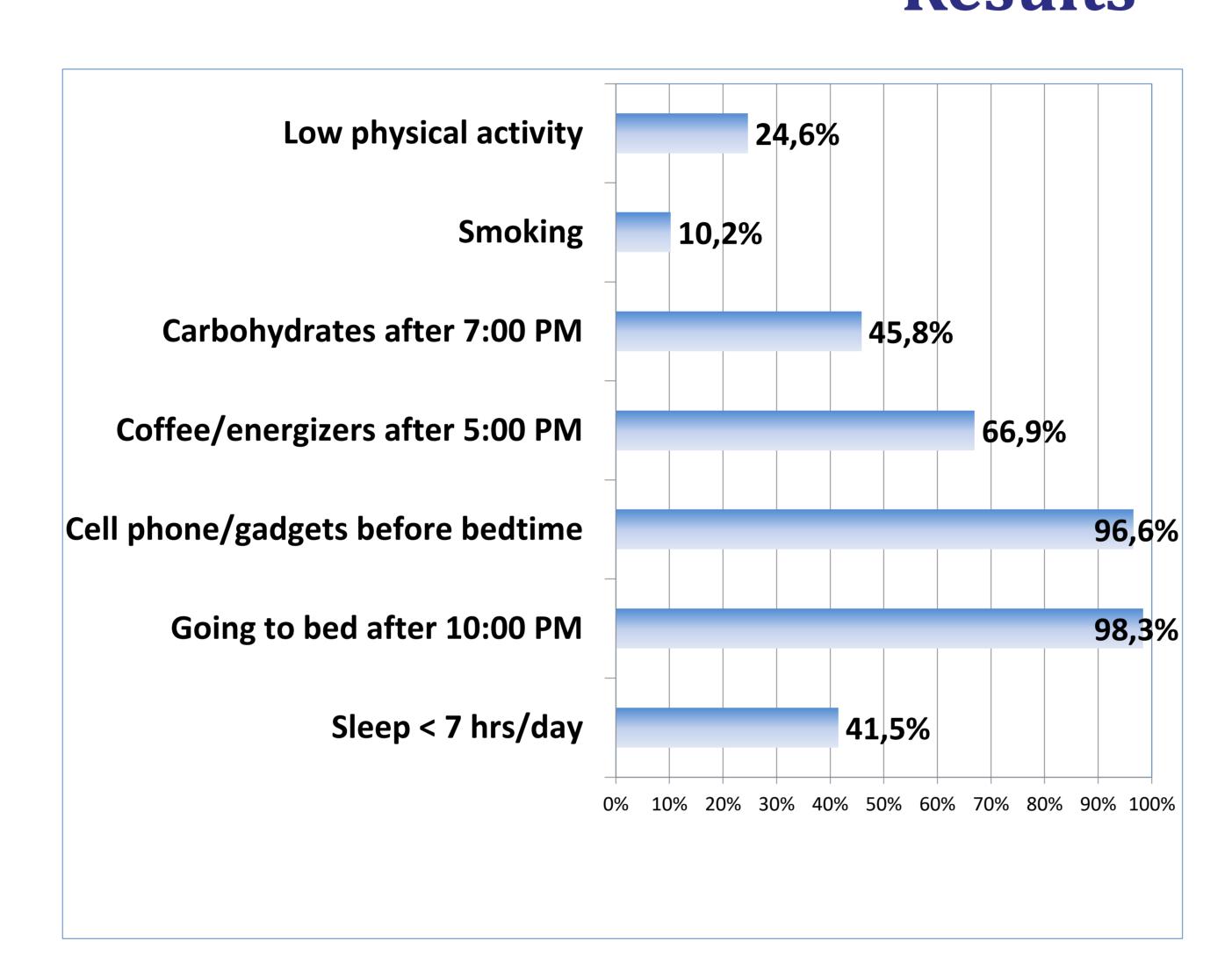


Figure 1. Sleep habits in high school students

The mean time of actual sleep was 6.5 ± 0.9 hours, 41.5% slept less than 7 hours per day, and 98.3% went to bed after 10.00 PM (*Figure 1*). Sleep quality during the past month (*Figure 2*) was assessed by the responders as ""fairly bad" in 38.1% (45/118), and "very bad" in 5.9%. The mean PSQI score (*Table 1*) was 7.2 ± 0.5 , and the prevalence of "poor" sleepers (PSQI score >5) was 69.5% (82/118). The mean ESS was 6.9 ± 0.6 , but in 84.7% (100/118) of participants was registered higher normal daytime sleepiness (6-10 points).

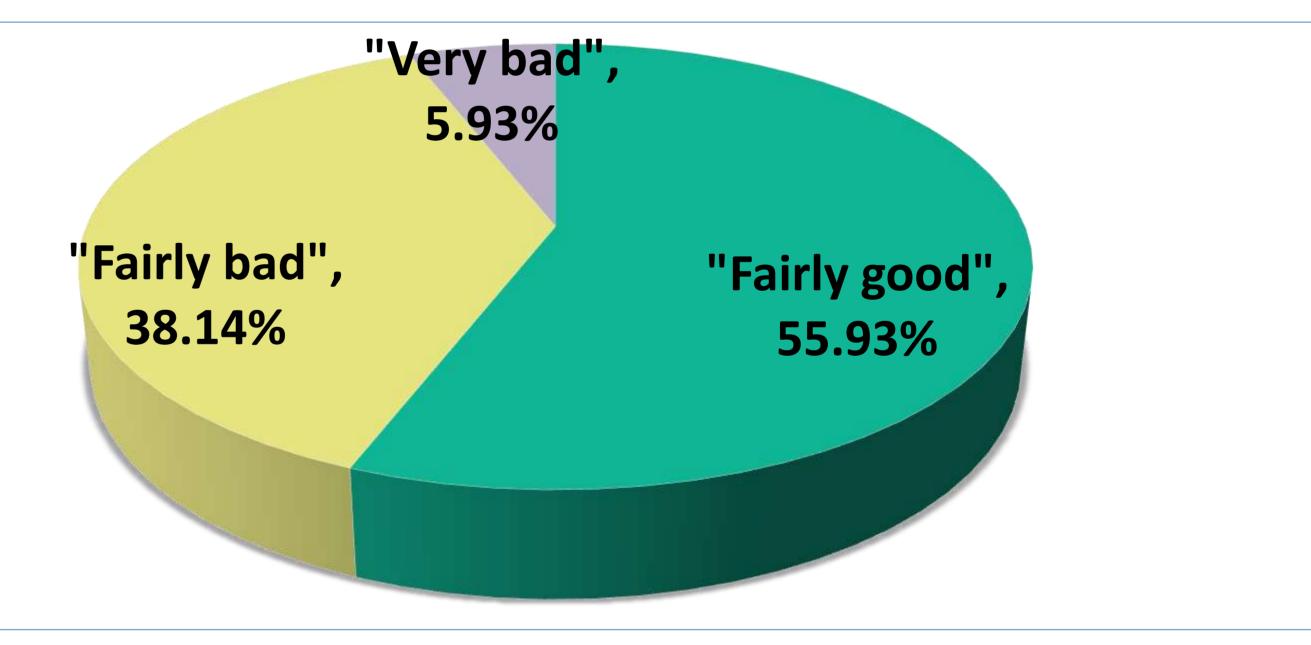


Table 1. High school students' characteristics

Responders` characteristics	Mean values
Responders` mean age	17.0±1.1 years
Mean body mass index	19.6±2.1
Mean Pittsburgh Sleep Quality Index score	7.2±0.5
Mean Epworth Sleepiness Scale	6.9±0.6
Mean time of actual sleep	6.5±0.9 hours

Figure 2. Sleep quality of high school students during the past month

Conclusions

More than a third of urban high school students slept less than 7 hours a day and every second had some evening habits and activities that negatively influenced the quality and quantity of sleep.

Bibliography

- 1. Popa A. D., Botnariu G. E., Antohe I., Asocierea dintre activitatea fizică, calitatea
- 2. somnului și statusul ponderal. Practica medicală, 2014,Vol. IX, NR. 4(37), p.257-263.
- 3. Shittu R.O., Issa B.A., Olanrewaju G.T. etc. Association between Subjective Sleep Quality, Hypertension, Depression and Body Mass Index in a Nigerian Family Practice Setting. J Sleep Disorders Ther 2014; 3: 157.
- 4. Buysse D.J., Reynolds III C.F., Monk. The Pittsburgh Sleep Quality Index: A new instrument for psychiatric practice and research. Journal of Psychiatric Research, 28(2), 193-213.
- 5. Johns M.W. A new method for measuring daytime sleepiness: The Epworth Sleepiness Scale. Sleep 1991; 14(6): 540-5.