# THE QUALITY OF SLEEP IN HIGH SCHOOL URBAN STUDENTS 

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## 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 $6.5 \pm 0.9$ 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 $7.2 \pm 0.5$, and the prevalence of "poor" sleepers (PSQI score $>5$ ) was $69.5 \%$ (82/118). The mean ESS was $6.9 \pm 0.6$, but in $84.7 \%(100 / 118)$ of participants was registered higher normal daytime sleepiness (610 points).


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

Table 1. High school students' characteristics

\begin{tabular}{|l|l|}
\hline \begin{tabular}{l} 
Responders` \\
characteristics
\end{tabular} \& Mean values \\
\hline Responders` mean age \& \(17.0 \pm 1.1\) years \\
\hline Mean body mass index \& \(19.6 \pm 2.1\) \\
\hline \begin{tabular}{l} 
Mean Pittsburgh Sleep \\
Quality Index score
\end{tabular} \& \(7.2 \pm 0.5\) \\
\hline \begin{tabular}{l} 
Mean Epworth \\
Sleepiness Scale
\end{tabular} \& \(6.9 \pm 0.6\) \\
\hline Mean time of actual sleep \& \(6.5 \pm 0.9\) hours \\
\hline
\end{tabular}

## 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.

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