

SLEEP HYGIENE AS AN IMPORTANT FACTOR IN MAINTAINING STUDENTS' HEALTH AND PERFORMANCE

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Abstract

A survey was conducted to examine the relationship between sleep quality and student academic performance, which will allow for the development of recommendations for improving sleep and learning. In this article, we used The Pittsburgh Sleep Quality Index is a widely used instrument for quantifying sleep. In this study, sleep was assessed among 100 students using a digital version of the PSQI questionnaire. The main causes of sleep disturbances in students were identified.

Keywords: Sleep, sleep hygiene, Pittsburgh Sleep Quality Index (PSQI).

Introduction

Sleep, its quality and duration, are important for students' lives and can have a significant impact on their academic success. Sleep is a necessary and most complete form of daily rest for students, an effective way to relieve mental and physical stress accumulated during the academic process. Quality sleep is key to improving mental abilities, especially memory. Lack of sleep can negatively impact students' learning, affecting their academic performance. Sleep is a process that has a profound effect on influences all aspects of our daily lives. It plays a key role in our health, state of mind, behavior, emotional background and professional activity. During sleep, our The body restores the energy expended during the day and also processes information, storing important information in memory. Recently, there has been a increasing interest in sleep problems among young people. Research shows that college students experience lower sleep quality than the general population. Symptoms of stress, such as fatigue, insomnia, excessive daytime drowsiness, anxiety, irritability and depression are common among students. Studying at the university requires significant effort and is associated with many stress factors, which can contribute to the development of sleep disorders. Often students don't realize the seriousness of these problems, which can lead to negative consequences for their health and academic success. A student's academic performance is influenced not only by his or her interest in subject, mental abilities, desire and character, but also physical condition and emotional mood, which largely depend on the level of his sleep [1,2,3].

Sleep is a key state of brain activity that plays a critical role in maintaining physical and mental well-being. In our time, many people, including students, view sleep as an unnecessary luxury, believing that the benefits of sleep deprivation or its reductions exceed the possible negative consequences. This is the opinion is wrong. The optimal amount of sleep each person needs to a person, varies depending on individual needs. In general, for adults, the norm is considered to be 7-8 hours of nighttime rest. For children aged 5 to 7 years, the recommended sleep about 10 hours, and for children



from 8 to 10 years old — at least 9 hours. Student life, as a unique social group, has important in determining the health of young people. Following the principles of a healthy lifestyle is positive affects the physical condition of young people, their personal qualities, and academic success. The connection between health and academic productivity is clear: the better the student's health, the more productive they are, it turns out to be a learning process.[4,5]

The lifestyle of students as a separate social group is the main factor that determines their health. A healthy lifestyle has positive impact on the body of a young person, his personality traits and academic performance, since the productivity of learning and the health of the student are interdependent – The stronger the health, the more effective the learning process is [5].

Students' adaptation to the educational process affects their mental and physical health. This is especially true for junior students in higher education institutions, as they find themselves in unfamiliar circumstances as they transition from school life to a new stage of education. These adaptation processes impact all the vital mechanisms of future specialists' development. The particular influence of sleep and wakefulness on these processes cannot be overemphasized. After all, it is during sleep that the body's restoration processes and replenishment of its energy reserves occur. After an active day, not only muscles but also many vital organs become tired. The brain is especially in need of rest [7].

Frequent sleep deprivation leads to a cumulative sleep deficit, i.e., over time the neurobiological cost of missing hours spent in the phase increases sleep. It is also worth noting that cognitive function is significantly reduced with sleep deprivation, which often remains unnoticed by a person, but is strongly reflected in his physiological and mental states [6].

According to Ozhegov, sleep is a physiological state of rest and relaxation occurring at regular intervals, during which consciousness ceases almost completely and reactions to external stimuli are reduced. Sleep is a necessary state for the human body [8].

Lack of sleep leads to a number of serious health problems. In the short term, lack of sleep causes fatigue, impaired learning and memory, and can also make a person more irritable. Adequate rest is essential for maintaining a healthy immune system. Chronic sleep deprivation can weaken the immune system, increasing the risk of infections such as the flu. Chronic sleep deprivation can impact the mental health of students. Increased stress and anxiety among future doctors can lead to burnout and even depression. This, in turn, compromises not only their academic performance but also their overall life satisfaction, which has long-term consequences for their professional practice. Inadequate sleep can lead to errors in clinical practice, which can ultimately affect the quality of medical care [9,10].

The aim of the study was to determine the relationship between the quality of sleep hygiene and the level of performance in students.

Materials and methods of research.

The study used a combination of methods to comprehensively examine the topic in contemporary society. This article utilized the Pittsburgh The PSQI is a widely used sleep quality index (SQI) tool for quantitative sleep assessment. In this study, 100 students aged 19-22 were assessed using a digital version of the PSQI questionnaire.





Research results

The results showed that most respondents exhibited irregular sleep patterns. When asked, "What time did you usually go to bed over the past month?", the majority of students (49%) tended to answer 12:00 AM or later. Of all respondents, 29% fell asleep at 11:00 PM, and the remaining 22% went to bed before 11:00 PM.

When asked "How long did it usually take you to fall asleep?" the answer was that more than half of the students needed no more than 15 minutes (52%) to fall asleep, 32% needed 16-30 minutes, 10% needed 31-60 minutes, and only 6% of students needed more than an hour to fall asleep (Fig. 1).

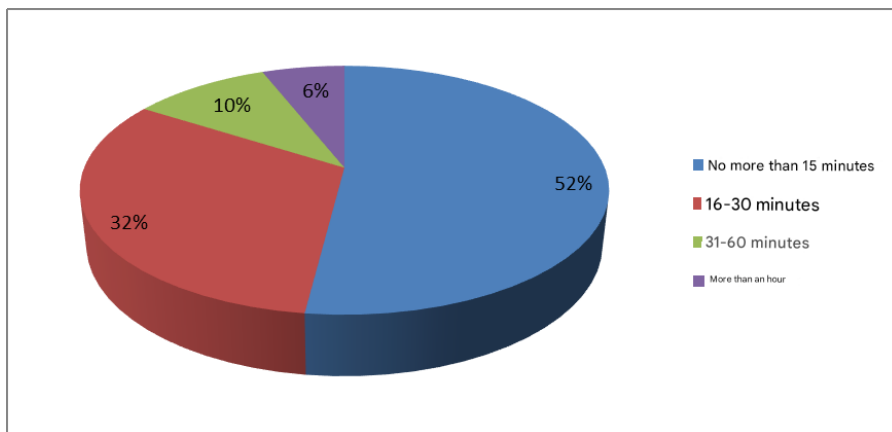


Figure 1. Time necessary for students to fall asleep .

In response to the question "What time did you usually wake up during the last month?", 41% of students woke up at 06:00, 21% woke up at 07:00, 15% woke up at 05:00, 5% of students woke up at 08:00 and 10:00, 4% of students woke up at 04:00 and after 10:00, 3% woke up at 09:00, and 2% woke up at 03:00.

To the question "How many hours on average did you sleep per night over the last month?", 25% of students answered 6 hours, 23% of students - 5 hours, 21% of students - 7 hours, 11% of students - 8 hours, 5% of students 9, 10 and 4 hours, 3% of students 11 hours or more, 2% of students 3 hours (Fig. 2).

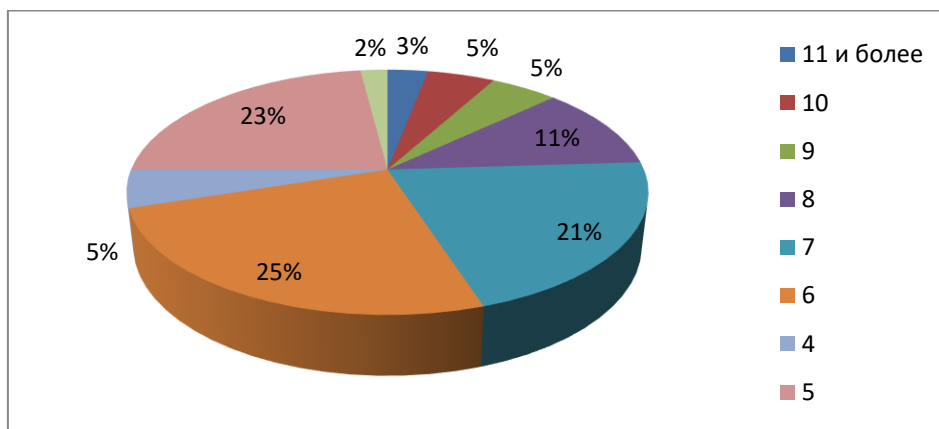


Figure 2. Duration of students' sleep.

Assessment of subjective sleep quality shows that most students describe their sleep as “fairly good”, but a significant proportion of participants report “rather poor” or “very poor” sleep quality, reflecting the presence of chronic or intermittent sleep disturbances.

A trend that deserves additional attention is the following: some respondents reported significant daytime fatigue, episodes of drowsiness after meals or during academic and social activities, which are key indicators of sleep disturbances. Furthermore, some students reported using sleep medications, which may indicate developing sleep disorders.

Conclusion

An analysis of data obtained from the Pittsburgh Sleep Quality Inventory (PSQI) revealed that satisfactory or moderately poor sleep quality was the predominant sleep quality among the students surveyed, but significant individual variability was observed. Most participants reported normal sleep duration (6–8 hours) and a relatively quick transition to sleep (up to 30 minutes). However, a significant number of respondents reported specific disturbances, such as occasional difficulty falling asleep, nighttime awakenings, snoring, nightmares, and sensations of heat or cold, which indirectly indicate insufficient nighttime rest.

Overall, the results indicate that, despite the relative prevalence of satisfactory sleep quality, a significant proportion of students experience sleep disturbances that can impair performance, concentration, and overall adaptation to academic workload. These findings support the importance of preventative measures aimed at promoting sleep hygiene, reducing stress, and adjusting students' daily routines.

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