# SLEEP QUALITY AND ANXIETY LEVEL IN STUDENTS WITH HIGH ARTERIAL BLOOD PRESSURE 

P. Tabas, S. Vadzuk<br>Ternopil State Medical University, Ternopil, Ukraine, tabas.petro@gmail.com

Key words: adaptation, functional reserves, sleep quality, anxiety

Introduction. It is known that the process of adaptation of students to new learning conditions is a long-term and complicated process that is demanding for the plasticity of the psyche and the functional reserves of the body of young people (Agadjanyan N.A., 2006 p.). The initial sign of the violation of adaptation is the development of a «burnout syndrome» (Oliynyk O.V., 2013p.). Further development of psychosomatic disorders are a markers of functional disorders of the cardiovascular system, because these changes could further lead to persistent disorder of the body (Monakhova L.Y., 2002 p).

Materials and methods: To determine the quality of sleep, was used the Ukrainian version of Pittsburgh sleep quality index (Buysse, Daniel J., et al, 1989). We interviewed 228 people (students of TSMU), of which 85 males and 143 females, aged 18 to 20 years. Among the questioned students, a group of 40 students of 2 years aged 18-20 years who had a low level of sleep quality was selected. In this group of students, anxiety levels were determined using the SpielbergerHanin questionnaire (Spielberger, Ch.D., and Y.L.Khanin, 2000). Blood pressure was measured using the Korotkov method. Statistical processing of the results was carried out using nonparametric methods (Man-Whitney U-criterion).

Results: A large number of respondents ( $25.88 \%$ ) had various sleep problems three or more times a week. In $41.23 \%$ of the polled, such problems occurred once or twice a week. More than 7 hours slept during the month only $29.82 \%$ of people, less than 7 hours - 67.17\%. Subjectively, their own quality of sleep was estimated as satisfactory by $68.86 \%$ of students, as low as $31.14 \%$. An increase in the level of situational anxiety was found in 14 ( $35 \%$ ) of the examined students. An increase in personal anxiety was found in 18 (45\%) of the surveyed. The average BP of students with normal level of satisfactory quality of sleep and situational anxiety was $125 / 80 \mathrm{~mm} \mathrm{Hg}$. The average level of blood pressure in students with low quality of sleep
and high situational anxiety was $140 / 90 \mathrm{~mm}$ Hg . A significant difference ( $\mathrm{p}<0.05$ ) was found between the level of BP in students with normal and high situational anxiety.

Conclusions: Subjectively, the majority (68.86\%) rate the quality of their sleep quality, $31.14 \%$ consider it low. 67,11\% of the students, there were problems with sleep at least once a week, which causes them the risks of further complications in the process of sleep and disorders of the functioning of the nervous system and other systems of the body. $67,17 \%$ of students sleep less than physiological norm in 7-8 hours. Blood pressure increased in students with poor sleep quality and increased situational anxiety.

