EXPERIMENTAL SUBSTANTIATION OF MOTOR ACTIVITY OF STUDENT YOUTH IN CONDITIONS OF HYPERThERMIA

A. Abdullaev
Fergana State University, Associate Professor

ABSTRACT

The article describes the results of the experiment on the motor activity of student youth in conditions of high external ambient temperature. The optimal criteria of the motor regime for 6-10 hours per week for young students were determined in order to reduce the influence of the hypodynamia factor.

Keywords: Locomotors activity, physical inactivity, monitoring, motor readiness, actometry, training effect, regional factor, correlation.

INTRODUCTION, LITERATURE REVIEW AND DISCUSSION

In recent years, much attention has been paid to the study of the motor activity of the younger generation, due to the observed deficiency of DA, which has become the main negative factor, which is associated with the deterioration of health, physical development and motor fitness.

Hygienists distinguish three types of physical activity: 1. Pampering. 2. Exhausting. 3. Stimulating, or training - hardening.

The optimal one is a stimulating mode, in which the body is exposed to various effects, gradually and consistently increasing in intensity physical activity, which leads to a continuous gradual functional adaptation of the body's systems, which contributes to the development of adaptive mechanisms, increased efficiency and health.

Locomotor activity is a variable function due to numerous social, natural and biological factors, which include climatic seasonal, "meteorological conditions", health status, age-sex differences, movement regime, requirements of physical education programs, parental attitudes towards physical education, housing conditions and many other factors.

Numerous experimental studies have shown that the phenomenon of hypodynamia is characteristic of young students of educational institutions. The existing level of motor activity and the motor mode of training sessions does not sufficiently provide the necessary motor activity, without which it is impossible to have full physical fitness and the level of health of this category of students.

When studying the motor activity of student youth, it is most often determined by the number of steps (pedometer method) performed per day. It was shown that in children and adults there is a tendency to compensatory leveling of activity and its preservation at a more or less constant level. As for young students, many researchers believe that the measure of optimal physical activity is the indicators of natural physical activity in the summer vacation time. According to A.I. Yarotsky, the revealed tendency to the constancy of motor activity is due to the need for movement, which is similar to other biological needs of the body.
In the process of experimental research, the accumulated information bank of data on the motor activity of young students provides a basis for a comparative analysis of the motor activity of the studied contingent by age, gender and region of residence.

Of particular scientific interest are experimental studies that studied the motor activity of students living in the climatic conditions of our region. The obtained experimental data allow us to conclude that large-scale scientific research on this problem will allow to develop a set of measures to determine the specificity of the motor activity of students living in hyperthermia.

To this day, there is no consensus on the optimal norms of physical activity and is debatable. Monitoring of the results of experimental studies of DA among student youth, an insufficient average daily volume of the main locomotions was revealed. In the studies conducted on the contingent of female students, the volume of physical activity was only 6 thousand steps per day, where, according to many scientists, the above data are considered insufficient. It was revealed that 8 hours of the daily time of the student youth is in a state of relative immobility and the increase in the average daily number of steps falls on Sundays only (3).

A change in the volume of physical activity of students was established not only during the week, but also during the annual training cycle. Only in April-May the physical activity reached the highest value and, on average, was 10.6 thousand. The least physical activity was observed during the winter (6.2 thousand steps) and summer (7.1 thousand steps) examination sessions. A sharp increase in motor activity is noted during the vacation time up to 16.9 thousand steps per day.

It was experimentally revealed that the highest indicators of physical activity on school days were recorded in April (16.6 3.5 thousand steps), October (16.9 3.9 thousand steps) and November (16.7 3.8 thousand steps), and the lowest rates were recorded in June (7.8-2.1 thousand steps) during the examination session, in July (8.9-4.2 thousand steps) and in August (9.85.3 thousand steps). It was revealed that the months of July and August fall on vacation time, when physical activity is significantly lower than in a favorable season.

The authors came to the conclusion that motor activity in a qualitative sense is characterized by a sharp predominance of independent (spontaneous) motor activity over organized motor activity in the process of physical education classes. It was found that the measure of optimal physical activity should be considered the mode of natural physical activity in the summer vacation time.

When assessing physical activity by time indicators, some authors recommend a different number of hours allocated for physical activity per week. It is believed that the optimal physical activity for students is physical activity in the amount of 6-10 hours per week.

In principle, it can be considered that the minimum limit of motor activity should be considered the volume of movements that is necessary to maintain the normal level of the functional state of the body and high performance. The maximum limit of physical activity should warn the body against excessively high volume of physical activity, taking into account the influence of regional factors.

The highest indicators of physical activity on school days were recorded in April (16.6 3.5 thousand steps), October (16.9 3.9 thousand steps) and November (16.7 3.8 thousand steps),
and the lowest rates were recorded in June (7.8-2.1 thousand steps) during the examination session, in July (8.9-4.2 thousand steps) and in August (9.85.3 thousand steps). It was revealed that July and August fall on vacation time, when physical activity is significantly low, possibly the effect of high external temperature in this period of the year than in the most favorable season.

The highest indicators of physical activity on weekends were recorded in April (18.9 4.2 thousand steps), May (9.3 4.3 thousand steps), October and November (18.0 4.1 thousand steps) ... It follows from this that the most active students in terms of movement are the autumn and spring months, where usually this region is characterized by good weather, moderate air temperature, and no rain.

In regions with a high external ambient temperature, physical activity is largely determined by weather conditions, which gives rise to the calculation of the correlation coefficients for the indicators of physical activity and air temperature recorded on different days of the summer months. The air temperature varied from +33 to 43 °C, the correlation coefficient was $r = 0.67$, calculated from 54 separate observations and is statistically significant at $p <0.01$.

The revealed correlations indicate a high dependence between the indicators of the motor activity of young students and are statistically significant.

The given data give grounds to conclude that the motor activity of student youth is determined by a combination of several factors, which should include:
- individual characteristics;
- social and educational factors;
- regional characteristics.

**LITERATURE**

1. Кочарян Ю.Я. Разработка и применение должных норм физической подготовленности учащихся 15-18 лет. Автореф. дисс. канд. наук М. 1990 – 19 с.
2. Ханкельдиев Ш.Х. Педагогические особенности физического воспитания учащейся молодежи в регионах с жарким климатом. Автореф. дис..докт..пед. наук. М. 1991 – 43 с.
3. Ханкельдиев Ш.Х. Физический статус учащейся молодежи (Монография) Ташкент 2018 – 412 с.