

**PHYSIOLOGICAL FEATURES OF CHANGES IN THE FUNCTIONAL
CONDITION OF THE ORGANISM OF WORKING SOME VEHICLE FACTORIES
OF ASSEMBLY PRODUCTION**

Tuhtasinova O. (Republic of Uzbekistan)

**ФИЗИОЛОГИЧЕСКИЕ ОСОБЕННОСТИ ИЗМЕНЕНИЙ В
ФУНКЦИОНАЛЬНОМ СОСТОЯНИИ ОРГАНИЗМА РАБОЧИХ НЕКОТОРЫХ
ЦЕХОВ МАШИНОСБОРОЧНОГО ПРОИЗВОДСТВА**

Тухтасинова О. А. (Республика Узбекистан)

Тухтасинова Одина Алишер кизи / Tuhtasinova Odina – член студенческого научного общества «Молодой гигиенист»,

студент,

*кафедра коммунальной гигиены и гигиены труда, медико-профилактический факультет,
Ташкентская медицинская академия, г. Ташкент, Республика Узбекистан*

Abstract: *in the article, it is specified that combined effect of factors of production medium causes a strain cardiovascular and central nervous systems, leading to development of a production fatigue and depression of working capacity. For prophylaxis of a production fatigue the whole complex of actions should be recommended which, on the one hand, have to reduce as much as possible an adverse effect of production factors and on the other hand - to raise a role of the actions referred on the organization of rest working, especially in the course of work.*

Аннотация: *в статье указано, что комплексное воздействие факторов производственной среды вызывает напряжение сердечно-сосудистой и центральной нервной систем, приводящее к развитию производственного утомления и снижению работоспособности. Для профилактики производственного утомления должен быть рекомендован целый комплекс мероприятий, который, с одной стороны, должен максимально снизить неблагоприятное воздействие производственных факторов, а с другой стороны - повысить роль мероприятий, направленных на организацию отдыха работающих, особенно в процессе трудовой деятельности.*

Keywords: *occupational health and physiology of work, cars of assembly production, workers, production environment, working conditions, functional condition of an organism, cardiovascular system, central nervous system, production fatigue.*

Ключевые слова: *гигиена и физиология труда, машиносборочное производство, рабочие, производственная среда, условия труда, функциональное состояние организма, сердечно-сосудистая система, центральная нервная система, производственное утомление.*

Acceleration of social and economic development on the basis of scientific and technical progress, restructuring of economy, the effective forms of government, the organization and work incentives is based on scientific approach of the solution of questions of studying of influence on an organism of the working various factors of production medium and labor process [1, p. 31].

On modern the car assembly productions of the new equipment and technology leads introduction to augmentation of labor productivity, its tension and some depression of gravity of labor process [2, p. 103; 3, p. 81]. In these conditions the production factors which are a little studied are formed and impact on an organism of workers of all complex of adverse working conditions amplifies. Therefore studying of physiological changes in an organism of workers in dynamics of the working day will allow to develop a complex of the preventive actions referred on prophylaxis of a production fatigue and conservation of health [4, p. 15; 5, p. 16].

The functional condition of cardiovascular system (pulse rate, arterial and pulse pressure, percussion and minute output of a blood) was studied. Studying of the condition of the central nervous system was carried out by definition of the latent period of visual motor reaction and acoustical motor reaction by a chronorefleximetric method.

Technological process the vehicle of assembly production consists of mechanical assembly, cold stamping, a heat treatment, drawing electrodeposits, welding and painting works. It is established that in the course of work, the studied working factories had changes in the functional condition of cardiovascular system during the working day which were characterized by an acceleration of pulse to $82,6 \pm 1,5$ beats per minute, augmentation pulse (on average $48 \pm 1,35$ mm of a mercurial column and the maximum pressure, depression of the minimum arterial pressure throughout the working day. The percussion and minute output of a blood after four business hours on average raised at workers to 63 ml and, respectively, to 5388,5 l a minute, but to the extremity of a shift came back to initial indicators.

Even more essential shifts are noted in a functional condition of the central nervous system. Rate of visual motor reaction to the extremity of work was enlarged by 19% that is bound to development of a production fatigue. Rate of acoustical motor reaction to the extremity of the working day it was also enlarged on average by 18-21% that once more speaks about action of adverse working conditions on a functional condition of an organism and development of a production fatigue.

It was established that combined effect of factors of production medium causes changes of a functional condition of an organism working in 3 hours after the beginning of work and by amplifying the work extremely.

Thus, combined effect of factors of production medium causes a strain cardiovascular and central nervous systems, leading to development of a production fatigue and depression of working capacity. For prophylaxis of a production fatigue the whole complex of actions should be recommended which, on the one hand, have to reduce as much as possible an adverse effect of production factors has to be recommended, and on the other hand - to raise a role of the actions referred on the organization of rest working, especially in the course of work. Improvement of working conditions has to be solved by complex of actions which include: rational planning, improvement of processing equipment and its rational placement, complex and partial mechanization of productions, automation of separate production operations and processes.

References

1. *Ereniev S. I.* Risk factors of development of cardiovascular diseases in workers of the main professions of machine-building enterprise // *Clinical medicine*. M., 2006. No. 8. P. 31-34.
2. *Tomashevskaya L. I.* About physiological criteria of a fatigue during the monotonous local muscular work and some preventive actions for its depression // *Labor protection when performing monotonous work*. M., 1975. P. 102-103.
3. *Ubbiniyazova A. M.* Characteristic of a functional condition of an organism of workers of the Tashkent tractor plant // *Medical magazine of Uzbekistan*. T., 2012. № 2. P. 80-82.
4. *Physiological norms of a strain of an organism at physical work* // *Methodical references*. M., 1980. 39 p.
5. *Shardakova E. F., Matyuhin V. V., Tarasova L. A., Yampolskaya E. G.* Physiological clinical disturbances during the muscular work depending on factors of labor process // *Medicine of work and an industrial bionomics*, 1998. № 3. P. 15-19.