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## Exhaustion as factor of reduction of working capacity of employees

The article provides theoretical and practical analysis of the peculiarities of the emergence of exhaustion of the employees in different conditions of activity; Identified factors that produce chronic tiredness of the working population in different countries. The necessity of conducting medical and psychological examinations and implementation of programs aimed at strengthening the physical and mental health of all workers is emphasized: it is necessary to improve the psychological working conditions and to pay attention to proper rest and vacation as the main steps to create a comfortable working environment for the efficient work of a specialist.

The intensive development of information and production environments prompts people to quickly rebuild and adjust to new technologies, which often leads to various psychosomatic disorders. To date, the employee must either accelerate, or increase working time, in order to keep up with the speed of events and changes in technology. Both accelerating and increasing working hours can lead to fatigue and exhaustion and have irreversible consequences. As known, a sense of chronic exhaustion includes a number of symptoms that a person should pay attention to before the development of this destruction. First of all: symptoms of physiological discomfort; reduction of general state of health; cognitive discomfort; decrease of motivation; changes in social communication sphere.

As well as the level of personal anxiety, the degree of development of chronic fatigue is an important factor that determines the peculiarities of the actual state of the human functional system. The general state of the organism is associated with the depletion of adaptive resources, which significantly limits the ability of a person to adequately respond to professional work loads. It also leads to the need to update the backup resources in the activity, which increases the effects of over-tension and exhaustion.

Usually, the issue of rest and its impact on the working capacity and the proper mental state of the person was given very little attention. More important it seemed that the more the person spends time in the workplace, the better will be the results of work, and therefore - the higher will be economic indicators. However, instead of the expected «economic miracle», the exhaustion of workers has led to a deterioration in the psychological state of societies, a variety of negative social phenomena - and, as a result, in fact only harmed the economy.

For example, the National Security Council believes that every day, millions of Americans are passing the work because of the stress. The losses from this phenomenon make up 150 billion dollars annually. In 2013in the UK, stress from the work was the most common cause of the absence of employees at the workplace. In addition, the other psychological problem in Britain is the so-called «vacationism» –

the fear of vacation. For example, from the 5,000 British who took part in a recent poll, 60% admitted that they will not be taking all of their vacation this year. Americans on the average ignore the fifth part of the vacation. Psychologists explain such a phenomenon with a fear of losing job or not gaining promotion at work [3, P.13]. Interestingly, the smallest time at work is devoted by the inhabitants of Western Europe: the Netherlands, Norway, Germany and France. In particular, the Dutch spend almost twice less time on workplaces than Koreans - 1391 hours per year. If we divide this indicator by the number of days in a year, it turns out that the Dutch work on average only 3.8 hours a day. Even more significant is the fact that in 2015, the Netherlands was among the ten happiest states, ranking 7<sup>th</sup> place in the World Happiness Report (Sustainable Development Solutions Network (SDSN) [6].

However, one of the worst examples of misconceptions about rest and leisure can be considered Japan. At the moment, there is an intensified struggle with "workaholics". At present, in Japan, each employee has an average of 18.5 days off vacation. But in fact, less than half is actually used. In 2013, every sixth working Japanese did not take a vacation at all. This is partly due to the fact that many employees do not want to offend colleagues who will have to work instead of them while they are resting. At the same time, some Japanese are overworking daily, staying at their offices till late, because they feel they have no right to go home before their chiefs. Exhaustion from overloading work in recent years has been the cause of a number of deaths. In Japanese, even the special term "karoshi" has appeared, which denoted death due to exhaustion at work. The main causes of karoshi are myocardial infarction or brain hemorrhage. According to the Government of Japan, there are up to 200 such cases annually. And this is not counting suicides due to exhaustion at work, for which there is also a separate term -Karojisatsu (see Fig. 1).

In addition to affecting the health of the Japanese, overworking negatively affects the demography of the country. For many people, the only place where they can find their couple is the office. And even if someone is able to meet their partner at work and get married, many young couples are in no hurry to make children due to high employment rates. This leads to a decline in birth rate, which in turn undermines the Japanese economy, which today is the third largest in the world. According to statistics, about 22% of Japanese work more than 49 hours a week. In the United States, this figure is 16%, in France and Germany - 11%. In order to change the situation, the Japanese authorities intend to take measures, in particular, to pass a law obliging employees to take vacation. In general, there is still not enough evidence that exhaustion is the cause of sudden death. Further studies are needed to reveal the causal relationship. To prevent a «karoshi» it is necessary to shorten working hours.

The given analysis of labor over the norm in foreign countries shows the urgent need for conducting necessary research in Ukraine as well. As known, with the reorientation of the domestic economy to Western, modern employers have adopted not only the best forms of organization of work, but also the conditions of «gettingout» from the worker everything that is possible. This way, the international company DHL-expressible carries out the international transportation believes that it puts a lot of efforts and money in the development (professional, intellectual, sports, etc.) of its employees. Employees continuously improve their qualifications by attending English courses, studying on "dangerous goods" trainings, specializing in communication with clients, engaging in tennis sports, going to soccer tournaments, etc. However, all events take place after work hours and on weekends. As a result, workers do not have time to rest for the restoration of work capacity, children do not see their parents, and wives-their husbands, which leads to tension in the personal family space, to irritation and exhaustion.



Fig. 1. Dynamics of suicide cases due to exhaustion at work.

At first glance - the company's concern about the high professionalism of its employees, after which, above all, is the desire for a high ranking among the world's companies and neglect of the individual and personal needs of employees.

The symptomatics of flight fatigue do not differ in essence from the symptomatics of fatigue in representatives of another profession, although, of course, it reflects the features of flight work. Thus, in researches of scientists it is reported about deterioration of techniques of piloting, in particular on landing; registered violations of the perception of the on-board devices, due to the collapse of the integrity of perception, narrowing the field of vision, reducing control with respect to peripheral devices; discovered increased sensitivity of the vestibular apparatus. There were reported cases of pilots' weight loss after several flights, which reached 1200 g. Long-range aviation pilots observed various neurological symptoms after difficult and prolonged flights: reducing accuracy in coronary trials, reducing or refreshing tendon reflexes, etc. Many of them in 12 hours after landing complainedon fatigue, fragmentation, heaviness in the head, sometimes headache.

A permanent symptom of exhaustion is a variety of sleep disorders: severe falling asleep, superficial, sensitive sleep, absence of feeling of vivacity after sleep, dreams of a negative character. Exhaustion, as a rule, is accompanied by a decrease in flight performance, the deterioration of piloting technology, the rapid appearance of flying illusions, tension, indifference to flights, and then a negative attitude towards them. The mood is usually low, irritability becomes a regular form of emotional reactions, even for weak and insignificant stimulus. Appetite decreases, weight loss becomes stable. Appears sweating, motor disturbances, dizziness, tremor, mental processes, memory and attention are disturbed. For a state of exhaustion, there is also a period when there is almost complete inability to undertake the work relatively light with the ability to perform difficult work.

If you do not correct the exhaustion in time, it gradually grows into a neurosis. The overgrowth of exhaustion into neurosis usually occurs relatively slowly (for 1-2 or more months) and can be regarded as some sequence of triad events: fatigue - exhaustion - neurosis.

In 2009, the International Civil Aviation Organization (ICAO) had input the 33rd amendment, but in the legislation of different countries, it has not yet been reflected, despite its lobbying by airline workers' unions. One of the important requirements of ICAO is that any changes related to the work of the flight crew should only be based on a scientific basis, and not simply upon the employer's request (for example, today it is possible to fly 900 hours a year, and if people are lacking, it is possible to start flying 1,5 thousand). There are many factors influencing the conditions of flight work. For example, changing of time zones, night flights, constant stress, etc. To assess the cause-effect relationship, the impact of these harmful factors that determine the working conditions of pilots on the human organism takes a lot of time. In the Soviet Union, 25 years were spent on such research, as a result of which the sanitary and hygienic characteristics of the working conditions of the flight composition by types of aircraft appeared. But for some reason now they are being reviewed, despite the fact that the air environment itself has not changed, and has become even worse.

Finally, it's time to mention one of the scientific principles of the psychology of labor - the humanization of labor, which states that under any conditions in production in the first place must be a person. It is necessary to improve psychological working conditions as a step to creation of a comfortable working environment. It is needed to encourage the conduction of medical and psychological examinations and the implementation of programs aimed at strengthening the physical and mental health of all workers. These actions will help to prevent the "karoshi" and reduce the nervous tension, to strengthen relations in the families of workers.

## References

1. Абрамов В.М., Данюк В.М. Нормування праці: Підручник / за ред. Данюка В.М. – К.: Віпол, 1999. – 204 с.

2. Душков А.Б., Королев А.В., Смирнов Б.А. Энциклопедический словарь: Психология труда, управления, инженерная психология и

эргономика. – М.: «Академический проект, Деловая книга», 2005. – т.26, №2. – С.69-79.

Карл Оноре. Без суеты: Как перестать спешить и начать жить [текст].
Альпина Паблишер, 2014. – 264 с.

4. Коршунов Ю.Н. Время труда и время отдыха. / Под ред. Шеломова Б. А. – М.: Юрист, 2002. – 120 с.

5. Снигирева И.О. Рабочее время и время отдыха. Учебно-практическое пособие. – М.: «Проспект», 2000. – 86 с.

6. Takashi Haratani "Кароши": смерть от переутомления [Електронний<br/>pecypc].—Режим<br/>доступу:<br/>http://base.safework.ru/iloenc?navigator&spack=100LogLength%3D0%26LogN<br/>umDoc%3D857400017%26listid%3D010000000100%26listpos%3D7%26lsz%3<br/>D8%26nd%3D857400017%26nh%3D1%26