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THE USE OF METHODICAL COMPLEX FOR ASSESSMENT OF THE FUNCTIONAL STATE OF A PERSON TAKING INTO ACCOUNT HIS INCLINATION TO POST-TRAUMATIC STRESS DISORDERS

A technology has been developed for assessment of the functional state of a person, based on simple parameters of physical and mental health available to general public, on the basis of which indices and assessments of a person's condition are calculated, by which the state of physiological systems and health in general are defined. A pilot study aimed at identifying PTSD-positive individuals of mental activities on the background of the Covid-19 pandemic and assessment of health status and resources, was conducted.

Keywords: physical and psycho-emotional overloads, post-traumatic stress disorder, Covid-19, Postcovid long-haulers, physical and functional health status, indices and assessments, generalized health assessment.

Introduction

The modern world poses many challenges to humanity. The consequences of physical and psycho-emotional overloading have become more and more evident against the background of global changes, such as epidemics of a planetary scale, climatic deformations, rapid development of digital technologies, and today's military invasion of the Russian aggressor. Therefore, technologies (software and hardware complexes) for assessment of the functional state of a person, which are based on simple, accessible to the general public parameters of physical and mental health, are in demand today. On the basis of these parameters indices and assessments of a person's condition are calculated, by which the state of physiological systems and health in general are defined. These technologies are of a screening nature, which makes them a con-

venient tool for identifying a person's predisposition to certain types of diseases.

Our team of scholars, has developed such a methodological complex to study the functional state of a person, which includes the previously developed comprehensive generalized health assessment (GHA) [1, 2], in combination with the developments of some departments of the International Center for Information Technologies and systems of the National Academy of Sciences of Ukraine (IC) [3, 4−7] and well-known methods of health assessment [8−10].

Occupational security and monitoring of physical and mental health are important for the successful work of any team. Deformation of normal way of life, caused by quarantine restrictions including distancing of work and education, ban on holding any mass events, and contemporary military hostilities, has triggered a whole series of psycho-emotional disorders in the society. The analysis done by the scolars showed that the most common consequences of these events are post-traumatic stress disorders (PTSD) [11], which are the risk factor for psychosomatic and somatopsychic diseases. Therefore, the identification, and correction such PTSD conditions is very important [3].

In general, the post-traumatic stress disorder is "a complex of symptoms of impaired mental activity, which occurred as a result of a one-time or periodic external extremely traumatic effect on the psyche of a person (physical, sexual violence, constant nervous tension associated with fear, humiliation, empathy for the suffering of others, military actions, natural disasters)" [11].

Since the scientists' sphere is associated with certain intellectual and psycho-emotional overloads, which, in combination with hypodynamia and tension of the organs of vision, lead to tension, and sometimes to the breakdown of adaptation mechanisms, which naturally worsens health [4, 5], we believe, that this cohort is a risk factor for PTSD.

The aim is to conduct a pilot study purposed at identifying PTSD-positive individuals of mental activities on the background of the Covid-19 pandemic.

To assess their health status and resources, as well as the peculiarities of the manifestation of physical health disorders and functional status in the group of risk of contracting the coronavirus (elderly persons, patients with diabetes mellitus (DM), hypertension (HD), coronary heart disease (CHD), overweight persons) and persons having contracted the coronavirus.

The Following Tasks Were Set:

▪ to conduct a screening study of scientists of the International Center on the PTSD-positive syndrome;

▪ to conduct a screening study on the distress D-type in the PTSD-positive group;

▪ to conduct a comprehensive study of the physical and functional state of PTSD-positive group of mental activities;

▪ to evaluate the adaptive resources of the human body according to the following indicators: the level of the functional class according to the Baevsky adaptive potential (AP), the degree of tension of the regulatory systems, the level of stress, as well as the tendency to sympathicotonia according to the data of heart rate variability (HV), electrocardiogram (ECG), blood pressure (BP);

▪ to determine the biological age and rate of aging in the PTSD-positive group;

▪ to determine the level of physical condition according to Pirogova's method;

▪ to determine a generalized health assessment based on the obtained indices.

Object and Methodological Basis

To determine the PTSD-positive individuals, the screening questionnaire developed by O.A. Blinov was used [12]. It includes 7 questions to which the respondent should answer "yes" or "no" concerning the degree of avoidance of reminders of the traumatic event, loss of interest in activities, making plans for the future, etc. [13]. Persons with three positive answers were regarded as prone to PTSD, and persons with four or more positive answers were included into the PTSD-positive group [12]. An algorithm for the study of physical and psychoemotional state was formed. It is based on a

developed methodological complex consisting of subjective (questionnaires) and objective (instrumental, anthropometric) parameters for assessing the physical and functional state of a person. The complex includes methods of determining the functional state of the cardiovascular system: electrocardiography (ECG), researching the degree of tension of regulatory systems and the level of stress using the "Fazagraph" hardware and software complex; indicators of the hemodynamic system and the metabolic system, such as blood pressure, heart rate, blood sugar, due to the same their single pathogenetic basis [14].

For analysis the following characteristics of the heart rhythm such as: temporal (heart rate − HR, standard deviation of all NN intervals − SDNN); spectral (high-frequency component (HFn,%), low-frequency (LFn,%), very low-frequency (VLF,%)); balance of sympathetic and parasympathetic systems (ratio of spectral powers − from low-frequency to high-frequency components (LF/HF); Baevsky stress − index (tention index (TI)), HRV research was carried out with "Fazagraph" [7].

To evaluate the functional state of the cardiovascular system, we used the function of integral evaluation based on the phase portrait of the electrocardiogram.

A study of the functional state of the respiratory system was carried out: determination of oxygen saturation using a pulse oximeter, measurement of the duration of breath retention during inhalation for checking the functional capabilities of the lungs with the Shtange test.

A study of the functional state of the musculoskeletal system and coordination of movements was conducted with a loading test "static balancing on the left leg" − Bondarevsky's test. The duration of balancing correlates with the vital capacity of the lungs, the duration of the breath hold, the strength of the hand muscles, anthropometric indicators, etc. Static balancing is also called the Japanese test, because Japanese scientists were the first to open the connection between a person's ability to stand on one leg and the risk of brain diseases and cognitive disorders (stroke, lacunar infarction, dementia).

Belonging of the personality to the distress D-type was determined using the DS 14 questionnaire [8], which contains 2 scales: negative excitability (tendency to feel negative emotions) and social suppression (suppression of emotions and behavioral reactions during social interactions). Type D was established when there were 10 points or more on each of the scales. According to Denollet J. [15], D-type representatives have a fairly stable personality structure and are distinguished by the ability to react to any circumstances in a distress manner. They usually suffer from such diseases as hypertension (HB), ischemic heart disease (IHD), diabetes mellitus (DM), vegetative-vascular dystonia (VVD), etc. [8,15], which are socially significant and have a psycho-emotional nature.

Anthropometric measurements were taken, a mandatory doctor's examination and an expert assessment of the state of health on a 5-point scale were carried out. All obtained primary parameters were further used both for independent analysis and for the calculation of a number of indices and health assessments, in particular, biological age, rate of aging, level of physical condition according to Pirogova [9].

Thus, biological age (BA), which is determined by a set of metabolic, structural, functional, regulatory and adaptive features of the organism, is an indicative integral assessment of individual health. If the BA exceeds the calendar age (CA), this indicates a deterioration in the level of human health. The aging rate (AR) is determined by the difference between BA and CA. If BA-CA>0, this indicates an accelerated AR; if BA-CA<0, this indicates a slowed AR.

And this means that those individuals whose BA significantly exceeds the population standard make one of the most numerous groups at risk of disease, disability and even death. Clinical and physiological indicators used to assess BA are the most informative markers of aging, and the "battery" of aging markers allows not only to calculate BA, but also to predict the possibility and outcome of diseases for certain individual.

To judge the degree of aging of the organism of a person, a comparison of the individual BA value with the appropriate biological age (BA), which characterizes the averaged population standard of " the rate of aging" (AR), was carried out.
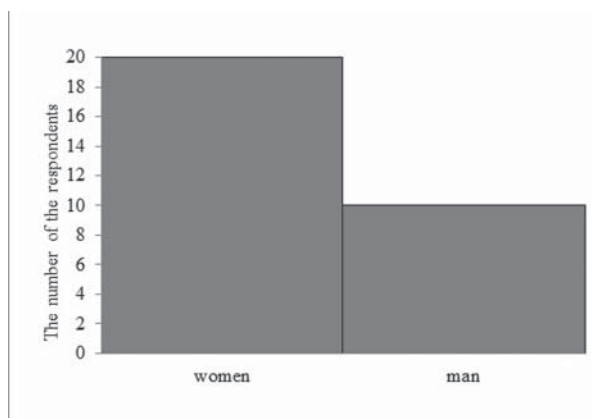
Fig. 1. Distribution of the group of PTSD-positive persons by gender

The entire group was interviewed on the subject of a serious illness, in particular, Covid-19.

In addition, the study included character testing using the «TOHO-20» computer system, self-assessment of health using the "SOS" questionnaire, and express diagnosis of the state of health using the "EDSH" computer system [6].

The following questionnaires were used:

1. Questionnaire for PTSD.

2. Initial questionnaire (questionnaire indicating age, sex, blood group, history of severe diseases).

3. Questionnaire DS 14 – "D personality type".

4. SHA questionnaire (subjective health assessment).

5. Character testing using the «TOHO-20» computer system.

6. Express diagnosis of the state of health using the "EDSH" computer system.

The Results Obtained

The work was carried out in several stages. At the first stage, employees were screened for PTSD; at the second stage a pilot study of the physical and functional state of health of PTSD-positive persons was carried out according to the developed methodological complex.

The results of the research are presented in tables and figures.

A total of 88 scientists of different age and gender were tested, from which a group of 30 PTSD-positive individuals (34%) was selected (Fig. 1). The age distribution of the general group is given in Table 1. The distribution in the gender group is as follows: women – 58%, men – 42% (Fig. 2). The entire group was interviewed on the subject of a serious illness, in particular, Covid-19 (Fig. 3). It should be mentioned that 42% of the total group of respondents (88 people) had fallen ill with Covid-19, and in the group with a positive test for PTSD, 17 people (6 men and 11 women) had had Covid-19, i.e. 56% of the PTSD group .

The WHO classification was used for age distribution into groups.

Based on the array of primary data obtained as a result of the research, a number of indices and assessments were calculated, the formulas for calculating which are given in the table (Table 2).

Vega – Kerdo index was calculated to determine the tone of the centers of the autonomic nervous system (normotonia, vagotonia, sympathotonia), the assessment was carried out on a 5-point scale with the corresponding definition of 5 functional classes (FC).

Ketele's body mass index (BMI) is a value that enables to assess the degree of correspondence between a person's weight and height. Assessment of BMI deviation from the population standard was carried out on a 5-point scale with the corresponding definition of 5 FC, each of which indicates the degree of risk of chronic and infectious diseases.

Biological age (BA) was determined according to V.P. Voytenko's method. [13] (Table 2).

To determine the biological age, testing was carried out for the subjective assessment of the functional state with the help of the SAH questionnaire – the SAH index was determined, for which the number of points on the questionnaire, which includes 29 questions, was calculated.

The expert assessment of the doctor (EAD) was carried out by a qualified cardiologist, who took into account passport data, anamnestic data, the results of physical and instrumental examinations and formulated a diagnostic conclusion about belonging to a certain FC according to a similar 5-point system.
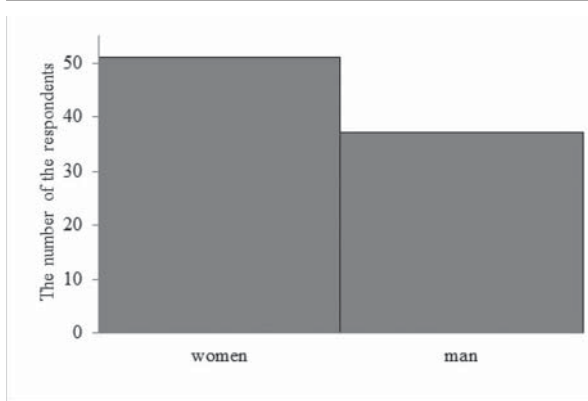
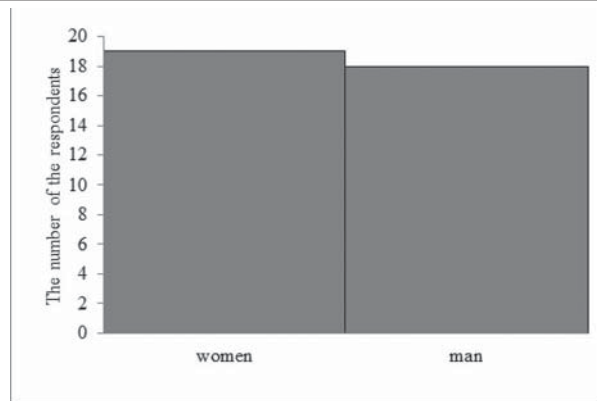*Fig. 2.* Distribution of the general group of interviewees by gender

Fig. 3. Distribution of persons having contracted Covid-19 by gender

Table 1. **General distribution of PTSD-positive persons and those who had contracted Covid-19 by age group**

Number of persons	Age groups			
	25 − 44 aged	45 − 59 aged	60−74 years old	75−90 years old
Total number of persons	20	16	38	14
Number of persons with PTSD	4	5	13	8
The number of people with Covid-19	8	6	16	7

In our work, we used the previously developed assessment system [1, 2], which consists of a set of assessments generalizing the functioning of some physiological systems of the body, normalized according to a 5-point system in accordance with 5 FC. All these assessments and indices are based on natural indicators - data of the objective survey. It is worth to note that their number can be arbitrary depending on the tasks.

The comprehensive generalized health assessment (GHA) looks like this:

$$GHA= (VI + IK + AR + AP + PhL + FL + EAD) / 7,$$

where VI is Kerdo's Vega index;

IK − Ketle Index;

AR − Aging rate;

AP − Adaptation potential of Baevsky;

PhL − Level of physical condition according to the method of O.A. Pirogova;

FL − Functional level of the CVS according to the Phaseography method;

EAD − Expert assessment of a doctor (EAD).

Analysis of the Received Data

Table 3 shows all the data according to levels of physical and functional status (PhFS) in PTSD-positive individuals from the standpoint of generalized health assessment.

The majority of the PTSD positive group were women of 60−75 years age group (Fig. 4), while the PTSD positive group of men is manifested relative uniformity by age categories (Fig. 5). At the same time, the majority of men and women prone to PTSD belong to the 60−75 and 75−90 age groups, which indicates the definition of the risk group of PTSD-prone people in these age groups. 53% of representatives of this group have the D-type of personality, which indicates a tendency to hypertensive and ischemic heart disease [4].

The percentage of the incidence of Covid-19 in the group of prone and PTSD-positive people is 43,3%; in the PTSD-negative group is 42,5%; in the entire studied group is 41,7%. That is, the presence or absence of the incidence of coronavirus does not affect the picture of PTSD.

Table 2. **List and formulas for determining the calculated indicators and indices**

Indicator	Formula for calculation
BPP – pulse BP	BPP = BPS-BPD, BPS – systolic blood pressure, BPD – diastolic blood pressure
BPaver.– average BP	BPaver =BPD+1/3*BPP
AP – adaptation potential of CCC	AP=0,011*HR+0,014* BPS +0,008* BPD+0,014*age+0,009*weight-0,009*height--0,27
PhL – level of physical condition	PhL=(700-3*HR-2,5*BPaver.-2,7*age+0,28*weight)/(350-2,6*age+0,21*height)
IKetle – Ketle index	IKetle=weight/height^2
IKerdo – Kerdo index	IKerdo=(1-BPD/HR)*100
BA – biological age	BA (female)=-1,463+0,415*BPP-0,14*SB+0,248*weight+0,694*SAH; BA (men)=26,985+0,215*BPS -0,149*IBH-0,151*SB+0,723*SAH; SB – static balancing, sec. SAH – subjective assessment of health, questionnaire - points IBH – inspiratory breath hold, sec.
PBA – proper BA	PBA (women)=0,629*CA+18,56 PBA (men)= 0,581*CA+17,24 CA – calendar age
AR – aging rate	AR=BA-PBA

Table 3. **Level of PhFS in PTSD-positive persons**

Persons who have had/not had Covid	Indices and assessment							
	VI	IK	AP	PhL	FL	AR	EAD	GHA
Covid (+)	3	3	3	2	2	5	1	2
Covid (-)	3	3	3	2	3	5	3	3

According to the statistical analysis of some indicators, an increased rate of aging was found in 9 people (about 30%) out of 30 PTSD-positive people, 5 of them suffered from Covid-19. All of them have a tendency to sympathicotonia, arterial hypertension and excess weight of varying degrees according to the Ketle Index.

During the comparative analysis of the level of physical and functional state of person (PhL, FS) based on the calculated indices and scores, no significant differences were found in PTSD-positive persons who suffered from Covid-19 and those who did not suffer from the disease.

Therefore, the hypothesis about the single pathogenetic basis of disorders of the hemodynamic system, metabolic disorders and their interrelationship with the stress-oriented type of reactions of persons who were exposed to the viral aggression of Covid-19, and also had an accelerated pace of aging, was confirmed. In further research, it is planned to apply the proposed complex of functional state research on the entire group, which was screened for PTSD, as well as to expand the field of research to other stress-oriented contingents (militarymen, operators, medical workers, teachers) in order to clarify the mechanisms of somatopsychological manifestations in the pandemic background and war conditions.

Conclusions

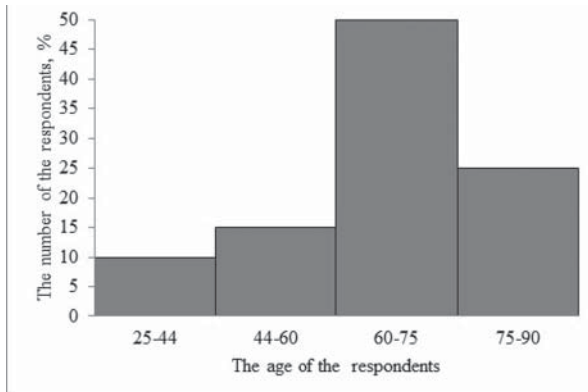Thanks to the well-established procedure and the sequence of conducting studies of the functional

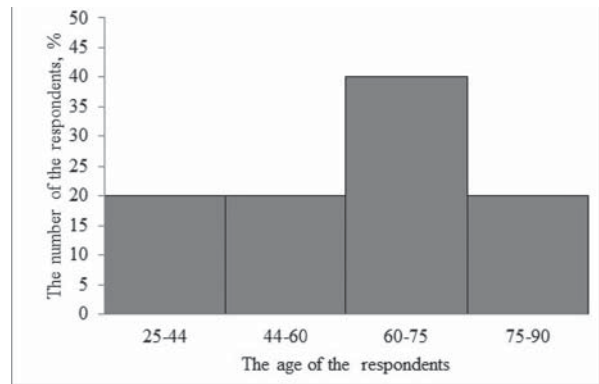**Fig. 4.** Number of surveyed women with positive PTSD by age group

Fig. 5. Number of interviewed men with positive PTSD by age groups

state of a person, the time for conducting research was significantly reduced (compared to the pilot study [2]). Approbation of the developed methodological complex to examine the state of health in the PTSD-positive group of respondents can serve as the first step for further research of human health. At this stage, the preliminary diagnostic criteria for the correspondence of the PTSD syndrome to the psychophysical characteristics of a person have been defined, which can be used as screening for the timely identification of the threat of PTSD and cardiovascular diseases in persons whose work activity is connected with increased mental and psychoemotional stress.

REFERENCES

1. *Kobzar, T.A., Kryachok, T.V., Semykhova, E.S., Vetkina, Z.V.*, 2019. "Vykorystannya metodu uzahal′nenykh otsinok pry otsintsi rivnya indyvidual′noho zdorov'ya". Mater. mizhnar. nauchnoy konf. «Nauka, tekhnika ta innovatsiyni tekhnolohiyi v epokhu mohutnosti i shchastya». Ashhabad, 12–13 June 2019, pp. 409–411 (In Russian).
2. *Kobzar, T.A., Hontar, T.M., Kryachok, T.V., Semykhova, E.S., Vetkina*, Z.V., 2020. "Samootsinka zdorov'ya z vykorystannyam metodu uzahal′nenykh otsinok". Ukrayins′kyy zhurnal medytsyny, biolohiyi ta sportu. T. 5, 1 (23), pp. 256–262 (In Russian).
3. *Belov, V.M., Hontar, T.M. Kobzar, T.A. Kozlovska, V.O.*, 2020. "Informatsiyna tekhnolohiya samootsinyuvannya zdorov'ya dlya reabilitatsiyi posttravmatychnoho stresovoho rozladu". Cybernetics and computer engineering. 2 (200), pp. 76–94 (In Ukrainian).
4. *Kobza, T.A., Hontar, T.M., Kryachok, T.V., Semykhova, E.S., Vetkina, Z.V.*, 2020. "Samootsinka zdorov'ya z vykorystannyam metodu uzahal′nenykh otsinok". Ukrayins′kyy zhurnal medytsyny, biolohiyi ta sportu, T. 5, 1 (23), pp. 256–262 (In Russian).
5. *Evtushenko, A.S., Kozak, L.M., Kochyna, M.L., Yavorskyy, A.V.*, 2015. "Rezul′taty otsinky funktsional′noho stanu lyudyny pry zrytel′nom trude". Svit medytsyny ta biolohiyi. 2, pp. 39–44 (In Russian).
6. *Belov, V.M., Kotova, A.B., Dubovenko, M.N., Kiforenko, S.I.,* 2011. "Komp′yuterna prohrama «Systema ekspres-diahnostyky stanu zdorov′ya»: svidotstvo pro reyestratsiyu avtors′koho prava na tvir № 37242, Ukrayina. 04.03.2011 (In Ukrainian).
7. *Grytsenko, V.I., Fainzilberg, L.S.*, 2019. Yntellektual′nye ynformatsyonnye tekhnolohyy v tsyfrovoy medytsyne na prymere fazohrafyy. Kyiv: Naukova dumka, 423 p. (In Russian).
8. *Denollet, J.*, 2005. "DS 14: standartna otsinka nehatyvnoi emotsiynosti, sotsial′noho hal′muvannya ta osobystosti typu D". Psykhosomatychna medytsyna, 67(1), pp. 89–97. PMID: 15673629.
9. *Pyrohova, E.A.*, 1989. Sovershenstvovanye fyzycheskoho sostoyannya cheloveka. Kyiv, Zdorov'ya, 168 p. (In Russian).
10. *Voytenko, V.P., Tokar, A.V., Polyukhov, A.M.*, 1984. "Metodyka vyznachennya biolohichnoho vozrosta". Herontolohiya i heriatriya. K., In–t herontolohiyi, pp. 133–137 (In Russian).
11. Vinnyts′kyy rehional′nyy tsentr z podolannya naslidkiv posttravmatychnoho stresovoho rozladu. [online]. Available at: <http://ptsr.org.ua/what_is_ptsr.php> [Accessed 8 Sept. 2022] (In Ukrainian).

12. Blinov, O.A., 2018. "Opytuvach skryninhu posttravmatychnoho stresovoho rozladu (OS PT·SR)". Psykholohichnyy chasopys: zbirnyk naukovykh prats´. Za red. S.D. Maksymenka. 1 (11), 11, Kyiv: Instytut psykholohiyi imeni H.S. Kostyuka Natsional´noyi akademiyi pedahohichnykh nauk Ukrayiny, pp. 26−37 (In Ukrainian).

13. *Blinov, O.A.*, 2017. "Opytuvach boyovoho stresu Blinova O.A." Psykholohichnyy chasopys: zbirnyk naukovykh prats´. Za red. S.D. Maksymenka. 5 (9), Kyiv: Instytut psykholohiyi imeni H.S. Kostyuka Natsional´noyi akademiyi pedahohich-nykh nauk Ukrayiny, pp. 32−43 (In Ukrainian).

14. *Mytchenko, E.Y.*, 2007. "Novyy pohlyad na patolohiyu, shcho vynykaye na zahal´nomu hrunti: diabet i sertsevo-sudynni zakhvoryuvannya". Ukr.med.chasopys. 2 (58), pp. 1−10 (In Russian).

15. Pedersen, S.S., Denollet, D., 2003. "Osobystist ´typu D, sertsevi zakhvoryuvannya ta pohirshennya yakosti zhyttya: ohlyad". Eur J of Cardiovasc Prev and Rehabil. 10(4), pp. 241−248. PMID: 14555878.

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ЗАСТОСУВАННЯ МЕТОДИЧНОГО КОМПЛЕКСУ ОЦІНЮВАННЯ ФУНКЦІРНАЛЬНОГО СТАНУ ЛЮДИНИ З УРАХУВАННЯМ СХИЛЬНОСТІ ДО ПОСТТРАВМАТИЧНИХ СТРЕСОВИХ РОЗЛАДІВ

Вступ. Психоемоційні перевантаження стають дедалі вагомішими на тлі глобальних змін і катастроф, що розгортаються на наших очах. Ці перевантаження є причиною погіршення здоров'я, що вимагає негайного втручання. Тому, затребуваними на сьогодні є технології (програмно-апаратні комплекси) оцінювання функціонального стану людини, які базуються на простих, доступних широкому загалу, параметрах фізичного і психічного здоров'я. Ці технології носять скринінговий характер, що робить їх зручним інструментом для своєчасного виявлення, моніторингу, та корекції схильності особистості до певних захворювань.

Мета статті: провести серед науковців різних вікових груп пілотне дослідження, направлене на виявлення ПТСР-позитивних осіб або тих, що схильні до синдрому ПТСР, на фоні пандемії Covid-19. На основі індексів і оцінок, які розраховуються за допомогою отриманих показників фізичного і психічного стану, оцінюється рівень, ресурси та особливості прояву розладів фізичного та функціонального стану здоров'я у даного контингенту.

Методи: інструментальні, лабораторний, антропометричний, описовий, соціального опитування, метод кількісних оцінок, аналітичний.

Результати. Розроблено технологію оцінювання функціонального стану людини, що базується на простих, доступних широкому загалу параметрах фізичного і психічного здоров'я, на основі яких розраховуються індекси і оцінки стану людини, за якими судять про стан фізіологічних систем і здоров'я в цілому. Проведено пілотне дослідження, направлене на виявлення ПТСР-позитивних осіб розумової праці на фоні пандемії Covid-19 та оцінювання рівня та ресурсів здоров'я.

Висновок. Визначено попередні діагностичні критерії відповідності синдрому ПТСР психофізичним характеристикам людини, які можуть бути використані як скринінгові для своєчасного виявлення загрози ПТСР та серцево-судинних захворювань у осіб, трудова діяльність яких пов'язана з підвищеним інтелектуальним та психоемоційним навантаженням.

Ключові слова: *фізичні та психоемоційні перевантаження, посттравматичний стресовий розлад, Covid-19, пост-ковідні далекобійники, фізичний та функціональний статус здоров'я., індекси та оцінки, узагальнена оцінка здоров'я.*