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Special features of a nurse's psychological security in a COVID-19 pandemic

OLENA HREK, HANNA TOLSTYKH. **Special features of a nurse's psychological security in a COVID-19 pandemic.** *The article considers the problem of studying the psychological security of an individual in domestic and foreign approaches. The concept of a psychological security of an individual, its structural components, criteria and factors of influence are taken into account; features of a psychological security of a specialist in extreme conditions are examined. It has been established that a person's professional activity has an impact on his/her physical, mental, and social health, leading to specific forms of mental disorders. This is especially evident in the activities of health professionals. Peculiarities of structural components concerning psychological security of a nurse, namely the motivational-volitional, value-semantic, and inner comfort components are studied. The following research methods are used: the viability test by S. Maddy (adapted by D. Leontiev and O. Rasskazova) and "The scale of professional activity motivation" by K. Zamfir (modified by A. Rean) to study the motivational-volitional component of psychological security of an individual; the method of difficult life conditions by D.O. Leontiev to*

study the value-semantic component; the questionnaire "State of health in extreme conditions" by A. Volkov and N. Vodopianova to study the inner comfort of an individual. Spearman's correlation method was used for statistical analysis. The analysis of the results suggests that nurses need psychological help during the pandemic.

Key words: security, psychological security, vitality, professional activity, extreme conditions, health professionals.

Introduction. In today's world, security is one of the most important factors in forming a comfortable human relationship with the outside world. However, recent events in society, namely the pandemic, lead to a violation of the basic human need for security. That is, people are forced to adapt to new living conditions, create new social and personal space, and need psychological help. This problem is especially acute for health professionals.

During the pandemic there was an intensification of professional activities of health workers, their high productive workload. Round-the-clock rotation of nurses has led to their psycho-emotional stress progress. It is the health professionals who have recently taken responsibility for people's lives and health. All these factors also lead to emotional and professional burnout, i.e., the quality of the nurse's work begins to decline, professional errors appear, the number of conflicts at work and at home increase, which leads to dismissal. We should state that in medical institutions enough attention is paid to occupational safety, but the psychological security of the health worker is almost not taken into account, although the latter is the key to maintaining psychological and physical health.

Theoretical substantiation of the problem. A significant number of scientific works are devoted to the problem of psychological security. In them this concept is considered as a process, feature, and as a state that manifests itself at the level of society (I.A. Baieva, B.A. Yermieev, O. Yu. Zotova, O. M. Kamenska, O.V. Lazorko, N.O. Lyz, Ya.V. Podoliak, I.I. Prikhodko, N.L. Shlikova, etc.). N.O. Lyz considers psychological security as a state of dynamic balance of a person's attitude to the world, himself/herself and others, his/her activity and satisfaction. These factors correspond to different influences of external and internal world and allow a person to maintain integrity, self-development, realize their own goals and values during life activity [5]. Among the personality traits that determine psychological security, the scientist distinguishes

individual-psychological (critical thinking, attention, volitional sphere, emotional stability), personal (adequate self-esteem, self-actualization and reflection) and socio-psychological (adequate ratio of subjective ideas) ones.

Modern researches in domestic and foreign science prove that psychological security has a significant impact on work efficiency. Thus, the psychological security of the individual contributes to effective work in uncertainty, slows down negative processes in the group, and it is defined as the equivalent of invulnerability, i.e., people with a sense of security are more open, use protective mechanisms to maintain self-esteem less, which helps them easily deal with factual and symbolic threats [2]. The science considers psychological security of the worker at the level of an individual, group and at the organizational level, and it is also connected with features of individual perception of threats, first of all, at the level of microenvironment of an organization [12]. Among the psychological factors that affect psychological security, there are five main ones: 1) workload; 2) relations within the organization; 3) mental stress experienced by the employee; 4) job satisfaction; 5) the level of safety of working conditions. However, in the researches of scientists such factors as "workload" and "mental stress" are among the most influential ones. They directly affect occupational safety and job satisfaction, and therefore indirectly affect the perception of security by workers [9].

In his works, I.I. Prikhodko examines the psychological security of a specialist in extreme activities and defines it "as a complex multilevel dynamic system that reflects the degree of mental protection, the ability to maintain optimal functioning and to eliminate external and internal threats, to maintain at a sufficiently stable and capable level the performance of combat missions in normal and extreme conditions of activity" [6, p. 118]. Also, the scientist considers four-factor structure of psychological security of the expert in extreme kinds of activity: 1. Moral-communicative component (moral regulators of interaction of the person with social environment); 2. Motivational-volitional component; 3. Value-semantic; 4. Inner comfort (self-assessment of personal safety or assessment of interaction with the environment) [6, p. 119].

According to S.O. Bohomaz, N.V. Kozlova, T.Ye Levytska, E.I. Meshcheriakova, psychological security in extreme situations is a resource that helps to overcome threats, and professional health of a man in conditions of professional activity in which there is a risk of extreme situations depends on it [11].

According to O.M. Kamenska individual psychological characteristics of a person, his/her individual experience and integrity, human development and personal growth, self-actualization of personality, harmony with himself/herself are psychological security criteria [3]. The ability and willingness to recognize, anticipate and avoid dangers, to have relevant knowledge, skills and abilities, and a sufficient level of development of perceptual, mnemonic, intellectual and other abilities together with formed motivation to ensure safety are the internal conditions of psychological security

Vitality is the basis of psychological security in crisis situations. Vitality (according to Baeva I.O.) is manifested in the ability of a human to maintain stability in an environment with certain parameters that can have a traumatic effect, as well as to resist destructive external and internal influences. That is, disintegration of an individual is hindered by his/her psychological stability, which, in turn, contributes to the establishment of harmony and full psychological health. Thus, mental health, psychological stability of an individual, vitality and will to live are the necessary conditions for the formation of psychological security [1].

While studying the factors that ensure the psychological security of an individual, scientists identify them by associating them with the degree of objectivity. Thus, considering psychological security as awareness by a mentally healthy person at the level of experience as a personal sense of the degree of congruence of ideal, desired ideas about themselves, their place in life and the actual state of things in a particular life situation, three sets of factors are distinguished [1, p. 42] : 1) 1-st set – factors of objective order that ensure psychological security of an individual at the level of personality (satisfaction of basic human needs); 2-nd set – factors of objective and subjective order that ensure psychological security of an individual as a social type (personal potential of adaptive capabilities of a human within socially acceptable moral norms, the ability to understand and accept others, be socially significant among others, accepted by others); 3-rd set – factors of subjective order that ensure psychological security of a person as an individuality (personal content and semantic attitude, ensuring the formation of individuality and personality orientation).

According to researchers Hu Z., Chen B. and others, health professionals potentially have a negative sense of frustration and insecurity when working with patients with COVID-19. Given the duration of the COVID-19 crisis, healthcare workers experience severe psychological stress due to the fact that they cannot fully reveal their

faces when communicating with patients and do not come into direct contact with them, so they feel guilty, defenseless and depressed, which leads to the spread of mental disorders (anxiety, depressive disorders and post-traumatic stress disorder) [8; 10]. It has also been proved that healthcare workers develop symptoms of PTSD, depression, anxiety and emotional burnout during the COVID-19 pandemic [10]. Thus, the protection of mental health and the formation of psychological security of health professionals, especially nurses, is one of the most pressing issues in science today. The most common stressors in nurses are their own financial problems, inability to provide care to patients, perception of the death process of patients, relationships with doctors and other nurses. That is, different aspects of professional activity are stated to be the causes of mental stress in nurses.

The purpose of our research is to study structural components of nurses' psychological security during the COVID-19 pandemic.

Methodology and techniques. The empirical study involved 50 nurses aged 25-45 who work in medical institutions.

The following empirical methods were used in the study: conversation, observation, analysis of activity products and specific methods, just the viability test by S. Maddy (adapted by D. Leontiev and O. Rasskazova) and "The scale of professional activity motivation" by K. Zamfir (modified by A. Rean) to study the motivational-volitional component of psychological security of an individual; the method of difficult life conditions by D.O. Leontiev to study the value-semantic component; the questionnaire "State of health in extreme conditions" by A. Volkov and N. Vodopianova to study the inner comfort of an individual.

Results of the research. Examining the first component of psychological security of the individual, namely motivational-volitional one, we found that the nurses under study had an average level of viability ($\bar{X}$ average = 82.03), which indicates a decrease in the ability to withstand stress. However, among the studied ones 25% had a low level of viability, which shows the presence of a low level of development of this indicator. In the work of the subjects the average level of involvement was revealed, which indicates that they do not get enough satisfaction from their own activities; the indicator of control revealed a medium and high levels, i.e., the subjects felt the ability to control life events and influence them; in terms of risk acceptance, the average level prevails, i.e., they are not very sure that everything that is happening contributes to their development. According to scientists, it is vitality that is an integral

personal characteristic of a medical worker, which is due to involvement in the process of activity and job satisfaction [7].

The motives of professional activity of nurses during the pandemic (according to the method by K. Zamfir) were studied and it was found that the subjects were dominated by external positive motivation (X average = 3.38), i.e., the determinants of their activities made up of financial reward, career desire, need to achieve social prestige and respect from others. 24% of nurses under survey were found to have an undesirable motivational complex, i.e., dominated by external negative motivation, their activity was stipulated by motives to avoid, desire not to do something wrong, by the possibility of trouble, which led to emotional instability and burnout. A more positive motivational complex was found in 26% of respondents, namely internal motivation, i.e., the content of their activity was influenced by internal rather than external incentives, the reward for their activities was made up of their own sense of competence, self-confidence, self-satisfaction and self-realization.

Also, the level of well-being of nurses in a pandemic was studied. We found out that 15% of subjects had a high level of psychological resilience and good adaptability, 60% had a moderate level of psychological resilience and 25% had a low level. A detailed analysis of the results revealed that among nurses 60% had a high level of psychophysical fatigue, 10% of subjects had a high level of willpower, 20% of respondents had emotional instability, 10% had autonomic instability, sleep disorders were observed in 50% of subjects, anxiety and fear were found in 25%, and maladaptation was found in 20% of the nurses under study.

The research examined the relationships of structural components of psychological security in nurses and identified significant correlations between the motivational-volitional component of "external negative motivation" and indicators of internal comfort of the individual such as "psychophysical fatigue" ($r = 0.32$, $p = 0.05$), "violation of will" ($r = 0.40$, $p = 0.05$), "emotional instability" ($r = 0.52$, $p = 0.01$), "sleep disturbance" ($r = 0.33$, $p = 0.05$), "anxiety and fears" ($r = 0.61$, $p = 0.01$), "maladaptation" ($r = 0.59$, $p = 0.01$), i.e., negative internal comfort results in increase of negative motivation of professional activity.

Significant negative relationships were revealed between the indicator of the motivational-volitional component "internal motivation" and indicators of internal comfort of the individual such as "psychophysical fatigue" ($r = -0.69$, $p = 0.01$), "violation of will" ($r = -0.55$, $p = 0.01$), "emotional instability" ($r = -0.63$, $p = 0.01$), "sleep disturbance" ($r = -0.53$, $p = 0.05$), "anxiety and fears" ($r = -0.74$, $p = 0.01$), "maladaptation"

($r = -0.73$, $p = 0.01$), i.e. the motivation of professional activity will decrease with negative inner comfort of the individual.

It was determined that the nurses with a high level of vitality had a high level of development of meaningful life orientations (at the level of $p = 0.05$), i.e., they were more productive, more emotional and interested in their activities in life, purposeful and able to control their own lives and make decisions.

Conclusions. The obtained results of the theoretical research allowed us to study the concept of psychological security of the individual, to determine it and the peculiarities of its formation in nurses.

The features of the structural components of the psychological security of nurses are empirically stated. We established that the average level of viability, involvement and risk-taking prevails in the subjects, and the level of control is above average. The respondents were revealed to be dominated by external positive motivation and an average level of psychological resilience, but there were subjects with a low level of psychological resilience who needed psychological help. The relationships between the structural components of the psychological security of the nurses have been established.

Prospects for the future are the development of a program of psychological support for health professionals in order to overcome emotional and professional burnout with the use of modern innovative technologies, as well as the development of psycho-hygienic and psycho-preventive measures.

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Abstracts

ОЛЕНА ГРЕК, ГАННА ТОЛСТИХ. Особливості психологічної безпеки медичної сестри в умовах пандемії COVID-19. У статті розглянуто проблему вивчення психологічної безпеки особи-

стості у вітчизняних та зарубіжних підходах. Розглянуто поняття психологічної безпеки особистості, її структурні компоненти, критерії та фактори впливу; особливості психологічної безпеки особистості фахівця в екстремальних умовах. Встановлено, що професійна діяльність людини має вплив на її фізичне, психічне та соціальне здоров'я, призводить до специфічних форм психічного порушення. Особливо це проявляється в професійній діяльності медичних працівників. Досліджено особливості структурних компонентів психологічної безпеки особистості медичної сестри, а саме мотиваційно-вольовий, ціннісно-смысловий компонент та компонент внутрішнього комфорту. Були використані наступні методики дослідження: тест життєстійкості С. Мадді (в адаптації Д. Леонтьєва та О. Рассказовой) та «Шкала мотивації професійної діяльності» К. Замфір (в модифікації А. Реана) для вивчення мотиваційно-вольового компоненту психологічної безпеки особистості, методика СЖО Д.О. Леонтьєва для вивчення ціннісно-смыслового компоненту, опитувальник «Самопочуття в екстремальних умовах» А. Волкова та Н. Водоп'янової для вивчення внутрішнього комфорту особистості. Для статистичного аналізу був використаний кореляційний метод за Спірменом. Проведений аналіз результатів дозволяє стверджувати, що медичні сестри під час пандемії потребують психологічної допомоги.

Ключові слова: безпека, психологічна безпека, життєстійкість, професійна діяльність, екстремальні умови, медичні працівники.

ЕЛЕНА ГРЕК, АННА ТОЛСТЫХ. **Особенности психологической безопасности медицинской сестры в условиях пандемии COVID-19.** В статье рассмотрена проблема изучения психологической безопасности личности в отечественных и зарубежных подходах. Рассмотрены понятия психологической безопасности личности, ее структурные компоненты, критерии и факторы воздействия; особенности психологической безопасности личности специалиста в экстремальных условиях. Установлено, что профессиональная деятельность человека оказывает влияние на его физическое, психическое и социальное здоровье, приводит к специфическим формам психического нарушения. Особенно это проявляется в профессиональной деятельности медицинских работников. Исследованы особенности структурных компонентов психологической безопасности личности медицинской сестры, а именно мотивационно-волевой, ценностно-смысловой компонент и компонент внутреннего комфорта. Были использованы следующие методики исследования: тест жизнестойкости С. Мадди (в адаптации Д. Леонтьева и О. Рассказовой) и «Шкала мотивации профессиональной деятельности» К. Замфир (в модификации А. Реана) для изучения мотивационно-волевого компонента психологической безопасности личности, методика СЖО Д.О. Леонтьева для изучения ценностно-смыслового компонента, опросник «Самочувствие в экстремальных условиях» А. Волкова и Н. Водопьяновой для изучения внутреннего комфорта личности. Для статистического анализа был использован корреляционный метод по Спирмену. Проведенный анализ результатов позволяет утверждать, что медицинские сестры во время пандемии нуждаются в психологической помощи.

сказовой) и «Шкала мотивации профессиональной деятельности» К. Замфир (в модификации А. Реана) для изучения мотивационно-волевого компонента психологической безопасности личности, методика СЖО Д.О. Леонтьева для изучения ценностно-смыслового компонента, опросник «Самочувствие в экстремальных условиях» А. Волкова и Н. Водопьяновой для изучения внутреннего комфорта личности. Для статистического анализа был использован корреляционный метод по Спирмену. Проведенный анализ результатов позволяет утверждать, что медицинские сестры во время пандемии нуждаются в психологической помощи.

Ключевые слова: безопасность, психологическая безопасность, жизнестойкость, профессиональная деятельность, экстремальные условия, медицинские работники.

OŁENA HREK, HANNA TOŁSTYCH. **Cechy bezpieczeństwa psychicznego pielęgniarki w warunkach pandemii COVID-19.** W artykule rozpatruje się zagadnienie badania bezpieczeństwa psychicznego jednostki w podejściu krajowym i zagranicznym. Rozważa się koncepcję bezpieczeństwa psychicznego jednostki, jego elementy strukturalne, kryteria i czynniki wpływu; cechy psychologicznego bezpieczeństwa osobowości specjalisty w warunkach ekstremalnych. Stwierdzono, że aktywność zawodowa człowieka wpływa na jego zdrowie fizyczne, psychiczne i społeczne, prowadząc do określonych form zaburzeń psychicznych. Jest to szczególnie widoczne w działalności zawodowej pracowników służby zdrowia. Zbadano specyfikę komponentów strukturalnych bezpieczeństwa psychicznego osobowości pielęgniarki, mianowicie komponentu motywacyjno-wolitionalnego, wartościowo-znaczeniowego oraz komponentu komfortu wewnętrznego. Zastosowano następujące metody badawcze: badanie prężności S. Maddiego (w adaptacji D. Leontieva i O. Rasskazovej) oraz „Skalę motywacji aktywności zawodowej” K. Zamfir (w modyfikacji A. Reana) do badania komponentu motywacyjno-wolitionalnego bezpieczeństwa psychicznego jednostki, test znaczących orientacji życiowych D. Leontieva do zbadania komponentu wartościowo-znaczeniowego, kwestionariusz „Samopoczucie w warunkach ekstremalnych” A. Volkova i N. Vodopianovej do zbadania komfortu wewnętrznego jednostki. Do analizy statystycznej wykorzystano metodę korelacji rang Spearmana. Analiza wyników pozwala stwierdzić, że pielęgniarki potrzebują pomocy psychologicznej podczas pandemii.

Słowa kluczowe: bezpieczeństwo, bezpieczeństwo psychiczne, prężność, aktywność zawodowa, warunki ekstremalne, pracownicy medyczni.