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УДК 159.91:159.942:159.944

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PSYCHOPHYSIOLOGICAL REACTIONS TO EMOTIONAL STRESS

У роботі здійснено комплексний аналіз психофізіологічних реакцій на емоційне напруження як багатокомпонентного процесу, що охоплює зміни функціонування серцево-судинної системи, параметрів дихання, м'язового тонусу та активності вегетативної нервової системи. Розглянуто механізми формування зазначених реакцій під впливом стресових стимулів, їхню взаємодію та роль у забезпеченні адаптаційних процесів організму.

Ключові слова: *психофізіологія, емоційне напруження, стресова реакція, серцево-судинні зміни, дихальні параметри, м'язовий тонус, вегетативна регуляція, адаптаційні процеси, поведінкові патерни.*

The paper presents a comprehensive analysis of psychophysiological responses to emotional stress as a multidimensional process involving changes in the functioning of the cardiovascular system, respiratory parameters, muscle tone, and the activity of the autonomic nervous system. The mechanisms underlying the formation of these responses under the influence of stress stimuli are examined, along with their interaction and role in ensuring the body's adaptive processes.

Keywords: *psychophysiology, emotional tension, stress response, cardiovascular changes, respiratory parameters, muscle tone, autonomic regulation, adaptive processes, behavioral patterns.*

The basics of psychophysiology reveal the close relationship between psychological phenomena and physiological processes in the human body. This makes it possible to explore how emotions, stress, intellectual activity affect physical well-being, and vice versa, how physiological processes can change the psychological balance.

Thanks to the basics of psychophysiology, it can be determined that, for example, excitement and anxious thoughts arise not only in the mind, but also change the hormonal background, the work of the heart, and the rhythm of breathing. In addition, the physiological state of the body can determine how calm or emotional a person is about what is happening. Yes, bad habits, improper nutrition and chronic fatigue change the level of chemicals in the body. In particular, an increase or decrease in the level of serotonin, the so-called "happiness hormone", immediately affects the mood [3].

Learning the basics of psychophysiology helps to get to know yourself and others better. It is a step towards a deeper understanding of how our body and mind function. Knowledge of the basics of psychophysiology is important in order not only to treat symptoms, but also to focus on the root of problems, to make life more balanced and healthy.

Emotional tension is a special emotional state that can occur in both children and adults as a

sult of exposure to a pronounced stimulus, in particular a traumatic situation that causes stress. It characterized by intense emotional experiences, which during speech communication are perceived y the individual as an obstacle to the achievement of communicative intentions. Emotional tension so affects the course of cognitive processes, their productivity. It also leaves its imprint on e perception of information.

Emotional tension can occur in a person under difficult conditions, with mental and emotional verload, created by:

− the need for a quick decision to make a responsible decision;
− the difficulty of the task;
− lack of time when a person performs a meaningful activity for him;
− increased responsibility for the work performed;
− failures in activity, etc. [1].

Emotional tension is a consequence of the imbalance of the motivational and emotional balance etween an objective event and its reflection in the psyche of the individual (in a subjective way).

The deterrent to the formation of emotional tension can be the will. However, it is able regulate human behavior only consciously. Deep psychophysiological mechanisms require deep gulation. Therefore, in this case, special emotional and volitional training is necessary.

An acute stress response is a temporary reaction that develops in a person in response to nusual physical or mental stress. The variability of the reaction in reality can be varied and combined. he heart begins to beat faster, breathing becomes more frequent, muscles tense up. At the eurobiological level, the sympathetic nervous system is activated, which mobilizes resources in ngerous conditions. Its task is precisely to help a person get out of the epicenter of this dangerous tuation. At this point, the focus of attention can narrow: thoughts concentrate only on survival and ctions "here and now". People often describe this state as if they were "in a fog": events are perceived distinctly, and some moments are erased from memory.

Stress is a non-specific reaction of the human body in response to a strong unexpected effect of n external stimulus. It mobilizes resources and triggers the body's defense mechanisms, activates the pposition to dangerous and threatening external influences and adaptation to new conditions [2].

During stress, significant psychophysiological and biochemical changes occur in the body, the llowing hormones are released: adrenaline is the main stress hormone, which has a complex effect n the body, mobilizing attention and memory; its level increases in situations of fear, pain, rage, nger; norepinephrine - increases motor activity and affects brain activity, acuteness of sensory erception; an important function of this hormone is the ability to reduce pain; cortisol - activates brain nction, in stressful conditions helps to find a way out of a critical situation, helps the body produce ore energy.

Stress hormones cause rapid heartbeat and breathing, increased blood pressure, muscle tension, lated pupils and increased sweating - this is the body's reflex reaction to the threat.

Psychophysiological responses to emotional stress demonstrate a close relationship between ental processes and physiological changes in the body. Stress and acute emotional states mobilize the ody's resources, activate the sympathetic nervous system and change hormone levels, which ensures laptation to new or dangerous conditions.

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