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STRESS AND REPRODACTIVE HEALTH OF ADOLESENT GIRLS

This work examines the level of stress and its impact on the reproductive health of teenage girls aged 15-17 years old who have been in a state of chronic psycho-emotional tension since the beginning of the full-scale invasion of the Russian Federation into Ukraine. Under wartime conditions, adolescents are exposed to multiple stress factors: from disruption of everyday life to a constant safety risk, which creates the basis for long-term physiological and psychological changes. Special attention is given to reproductive health, because adolescence is a critical period for the formation of hormonal balance and the development of the reproductive system.

Within the study, possible short-term and long-term consequences of chronic stress that girls may face in the future were analyzed. The collected material makes it possible to assess the frequency of menstrual cycle disorders and other dysfunctions related to the psycho-emotional state. The study was conducted in autumn 2023 and reflects the current state of the problem under the conditions of a prolonged military conflict, making the obtained results important for medical, psychological, and educational practice.

During the study, a theoretical analysis of modern scientific approaches to the impact of stress on the human body in general and on the reproductive health of adolescent girls, especially, was carried out. To obtain empirical data and provide a quantitative assessment of the prevalence of stress-related manifestations, a survey was conducted among female students in grades 10-11. The collected responses made it possible to analyze the intensity of stress, the frequency of physiological and psycho-emotional disturbances, and to identify possible correlations between the living conditions of the respondents (in Ukraine or abroad) and the nature of the identified changes.

Based on the collected statistical data, a comparative description of the level of stress and its consequences in different groups of adolescent girls was developed,

which made it possible to identify key risks for their reproductive health. The conducted analysis revealed differences in the frequency and nature of stress-related manifestations depending on the living conditions of the respondents and helped determine the most vulnerable physiological and psycho-emotional indicators. In addition, the study results informed the development of practical recommendations for stress prevention and management aimed at supporting adolescents' physical and psychological well-being in the current socio-psychological context.

The survey involved 50 respondents aged 15-17. Among them, 30% were living abroad, while 70% were girls who remained in Ukraine from 24 February in 2022 or returned after a temporary stay abroad. The analysis of the responses showed the presence of several factors that cause an increased level of stress among the respondents. The most common factors were: following the news, reported by 30% of the participants; air alerts and explosions – 54%; adaptation to a new environment or country – also 54%; and 8% of the respondents indicated other stress-related situations connected with academic workload, preparation for admission to universities, and general psycho-emotional tension.

Since the beginning of the full-scale invasion in Ukraine, the most common health problems reported by female students were menstrual cycle disorders that occurred as a result of changes of residence and the influence of stress factors. A considerable number of respondents also reported eating and sleep disorders, sudden changes in body weight, depressive states, and other psychosomatic manifestations. Among the reproductive system disorders, cases of secondary amenorrhea, polycystic ovary syndrome (PCOS), and endometriosis were identified.

Overall 11 girls with such disorders sought medical or psychological assistance: 4 participants consulted a gynecologist, 4 consulted a psychologist, and 3 consulted a pediatrician. At the same time, 22 respondents did not seek help from specialists, citing a lack of need or unwillingness to do so, while 8 girls stated that they required professional assistance but did not have the opportunity to obtain it. The remaining participants (9 persons) reported no health problems and did not express a need for specialist consultation.

During the analysis of changes in the menstrual cycle and its regularity among the surveyed respondents were obtained the following results: 56% of the girls experienced periodic menstrual delays from the beginning of the full-scale invasion and at the time of the study; 26% of the participants had their duration and characteristics of the cycle gradually normalized, while 18% of respondents did not report any disruptions in the cycle. After assessing a possible connection between the observed changes and experienced stress, we found out that 17% of participants

fully attributed the cycle disturbances to stress factors, 56% partially attributed them, and 27% did not find any link between stress and changes in the menstrual cycle.

Therefore, the conducted study confirmed that adolescent girls experience a state of chronic stress regardless of their current residence (in Ukraine or abroad), which indicates the systemic nature of psycho-emotional strain under wartime conditions. The relationship between stress and disruptions in the menstrual cycle was also analyzed, including secondary amenorrhea, acyclic bleeding, and the appearance of reproductive system disorders. The majority of respondents partially or fully associate these changes with experienced stress factors. In addition, a problem of limited access to medical care was identified: nine respondents reported that they require specialist consultations but are unable to obtain them, which may complicate the timely diagnosis and treatment of such disorders.

Considering this, the obtained results emphasize the need to develop comprehensive psychological support programs and preventive measures for adolescent girls during the war period. Special attention should be paid to teaching stress-management skills, normalizing sleep and nutrition, as well as disseminating information about the possible consequences of chronic psycho-emotional strain for reproductive health in the future.