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R.I. Isakov, L.O. Herasyenko, P.V. Kydon,  
Yu.O. Fysun, O.O. Belov<sup>1</sup>, N.G. Pshuk<sup>1</sup>, A.M. Skrypnikov  
Poltava State Medical University, Poltava  
<sup>1</sup>National Pirogov Memorial Medical University, Vinnytsya

## PREDICTORS OF THE FORMATION AND FEATURES OF THE CLINICAL PICTURE OF ADJUSTMENT DISORDERS

e-mail: larysaherasyenko@gmail.com

The war in Ukraine influenced the emergence of a significant number of people who have suffered severe psychological trauma and need forehanded, modern and effective medical care. The purpose of the study was to investigate the predictors of the formation of adjustment disorders and the features of the course and differences in the clinical picture of adjustment disorders during the war in Ukraine. The following methods were used to achieve the purpose and implementation of the tasks of this study: information-analytical, clinical-anamnestic, clinical-psychopathological, psychodiagnostic, psychometric and statistical methods of mathematical processing of the obtained results. According to the results of the conducted research, it was found that the main predictors of the formation of adaptation disorders are forced relocation, both within the country and abroad, and especially during which a person feels the influence of a stress factor, in particular, and experiencing negative emotions for a long time.

**Key words:** adjustment disorders, internally displaced persons, stress, depression, anxiety.

Р.І. Ісаков, Л.О. Герасименко, П.В. Кидонь, Ю.О. Фисун, О.О. Белов,  
Н.Г. Пшук, А.М. Скрипніков

## ПРЕДИКТОРИ ФОРМУВАННЯ ТА ОСОБЛИВОСТІ КЛІНІЧНОЇ КАРТИНИ РОЗЛАДІВ АДАПТАЦІЇ

Війна в Україні вплинула на появу значної кількості осіб, що перенесли важку психотравму та потребують своєчасної, сучасної та ефективної медичної допомоги. Метою роботи було дослідити предиктори формування, особливостей перебігу та відмінностей клінічної картини розладів адаптації під час війни в Україні. Для досягнення мети і реалізації завдань даного дослідження були використані наступні методи: інформаційно-аналітичний, клініко-анамнестичний, клініко-психопатологічний, психодіагностичний, психометричний та статистичні методи математичної обробки отриманих результатів. За результатами проведеного дослідження встановлено, що основними предикторами формування розладів адаптації є вимушене переселення, як в межах країни, так і за її межами та особливо під час якого людина відчуває вплив стресового фактору, зокрема, і переживання тривалий час негативних емоцій.

**Ключові слова:** розлади адаптації, внутрішньо переміщені особи, стрес, депресія, тривога.

*The work is a fragment of the research project "Systematic approach to the study of stress-related disorders (formation mechanisms, diagnosis, psychosocial maladaptation, therapy, rehabilitation and prevention)", state registration No. 0119U102861.*

Interest in various aspects of mental disorders of a stressogenic nature is periodically fueled by social cataclysms that cause an increase in the number of patients of the corresponding profile [9]. Unfortunately, the war in Ukraine influenced the emergence of a significant number of people who have suffered severe psychological trauma and need forehanded, modern and effective medical care [1, 5]. Predictors of the emergence and formation of traumatic stress disorders are not only direct participation in hostilities, but also social perturbations in persons who were forced to leave their homes and became refugees or internally displaced persons (IDP). The causes of distress that lead to the development of adaptation disorders are change in the usual environment: unusual living conditions, moving both within the country and relocation to another country, change in the language environment and, as a result, a barrier during communication, change in cultural and religious traditions [10, 13]. During the COVID-19

pandemic, the population as a whole experienced a powerful stressful impact at the informational, interpersonal, family, and professional levels. After all, it is known that each subsequent critical stress reduces a person's general stress resistance, which leads to relapse of adjustment disorders, post-traumatic stress disorder [6, 11].

According to UN estimates, at least 11.7 million people have been forced to leave their homes due to hostilities on the territory of Ukraine, of which 5.5 million have sought refuge outside Ukraine, and 6.2 million have moved to regions within the country. Almost all of these people need various types of psychological assistance, psychosocial support and highly qualified specialized aid [12].

Adjustment disorders are quite common in the practice of doctors of all specialties, starting from the primary level of medical care, while the hypodiagnosis of this pathology and the insufficient providing of patients with the necessary psychiatric and psychotherapeutic help are obvious [3, 8]. The main danger of this pathology, in addition to the high risk of suicidal manifestations, is the prospect of deepening psychopathological symptoms with the development of dysthymia, depressive episodes or nosophobic manifestations within the framework of the formation of a hypochondriac personality orientation [2, 7]. It is also necessary to take into account the fact that prolonged and unfavorable variants of the course of adjustment disorders can lead to the formation of secondary chemical and non-chemical addictions [15].

The problem of improving the system of providing medical care to patients with stress-related disorders is a priority task during military operations in Ukraine, and helping patients with adjustment disorders is a priority task among the population [8].

**The purpose** of the study was to investigate the predictors of the formation of adjustment disorders and the features of the course and differences in the clinical picture of adjustment disorders during the war in Ukraine.

**Materials and methods.** A comprehensive examination of 148 persons (104 women and 44 men) diagnosed with adjustment disorders (F43.2) according to the ICD-10 was conducted [4, 14]. All patients gave written informed consent to participate in the study and were treated at the CE "Regional Institution of Mental Psychiatric Care of the PRC" and received counseling at the Department of Psychiatry, Narcology and Medical Psychology of the Poltava State Medical University.

The criteria for inclusion patients in the study were as follows:

- established diagnosis of AD (F43.2) according to ICD-10;
- capable persons of legal age (from 18 to 60 years old).

The exclusion criteria were as follows:

- abuse of narcotic substances or alcohol;
- incapacitated;
- presence of severe concomitant somatic pathology;
- have a psychiatric diagnosis other than AD;
- pronounced suicidal behavior.

The following methods were used to achieve the purpose and implementation of the tasks of this study: information-analytical, clinical-anamnestic, clinical-psychopathological, psychodiagnostic, psychometric and statistical methods of mathematical processing of the obtained results. During the research, the main method of examination was the clinical-psychopathological method, which was used on the generally accepted principles of psychiatric examination through interviewing and observation with further verification of the obtained data based on the diagnostic criteria of ICD-10. The following examination methods were used: the Clinical Global Impression Scale (CGI-S) (1976); the Clinical Global Impression – Improvement scale (CGI-I) (1976); Columbia Suicide Severity Rating Scale (C-SSRS) was used to assess the severity of suicide and the suicidal risk.

The analysis of socio-demographic and anamnestic characteristics of persons with adjustment disorders showed that women of the age group of  $42.5 \pm 5.3$  years and men of the age group of  $48.5 \pm 4.5$  years prevailed. The majority of the examined had higher education – 111 (75.00 %), in particular 78 (75.00 %) women and 33 (75.00 %) men, 7 (4.73 %) patients had incomplete secondary education, in particular, 5 women (4.81 %) and 2 men (4.55 %), with complete secondary education – 30 (20.27 %) examined, where women 21 (20.19 %) and men 9 (20.45 %), in accordance. There was not a single patient without education. The majority of the examined were engaged in intellectual work – 108 (72.97 %) persons, 30 (20.27 %) worked physically, 10 (6.76 %) IDP were unemployed. 18 (12.16 %) persons assessed their own property status as low, while 41 (27.70 %) considered it satisfactory and 89 (60.14 %) assessed the level of their own income as high. According to marital status 33 (22.30 %) persons were married at the time of the survey, 59 (39.86 %) were divorced, and 56 (37.84 %) had never been married. Among the examined internally displaced women with AD, 34 (32.69 %) had one child, 22 (21.15 %) women had no children, and 48 (46.16 %) of the patients had two or more own children.

Anamnestic studies of these patients proved the presence of hereditary burden of affective disorders (13.30 %), premorbid personality accentuations (psychasthenic – 42.42 %, dysthymic – 28.03 %) and chronic factors of mental traumatization (74.2%).

Among the harmful habits, tobacco addiction was the most common and was found in 46 (44.23 %) women and 19 (43.18 %) men, in accordance. Signs of binge drinking were diagnosed in 10 (9.62 %) examined women and 6 (13.64 %) men. 2 (1.35 %) patients reported the use of narcotic substances in the anamnesis, and currently all persons denied drug use. 83 (56.08 %) persons with AD had no detected harmful habits and addictions.

Using the clinical-anamnestic examination method, it was found that 47 (31.76 %) persons had a history of suicidal statements, and 9 (6.08 %) had incomplete suicide attempts. According to C-SSRS it was established that at the time of the examination all patients did not have pronounced suicidal tendencies, but 35 (23.65 %) persons reported suicidal thoughts, of which 26 (17.57 %) persons noted suicidal thoughts less than once a week and 9 (6.08 %) persons noted suicidal thoughts once a week. More pronounced intensity of suicidal thoughts was not determined in the examined patients.

**Results of the study and their discussion.** According to the results of the research, the following predictors of the formation of AD were determined:

– Change of the usual environment 69 (46.62 %) (inappropriate or unusual living conditions, displacement within the country, change of cultural or religious traditions), which is characteristic mainly for internally displaced persons, migrants, refugees;

– Transformation of social status 53 (35.81 %) (negative changes in social status, change in professional activity, discrepancy between educational level and forced employment) was found among persons who were forced to leave their homes during the war in Ukraine;

– Nosogenic effects 26 (17.57 %) (including iatrogenic).

These patients are characterized by the experience of “stress”, which means a stressful event, and not a general adaptation syndrome as a universal physiological reaction. All examined patients suffered from adjustment disorders – states of subjective distress that arose during the period of adaptation to stressful events and significant changes in lifestyle, interfering with the productivity of social functioning. The reason for the development of maladaptation was stress of a non-critical level for the individual. Typical situations for patients that lead to the development of adjustment disorders were a change in the usual environment, transformation of social status, breaking up with significant people, but the determining factor in each case was not the context of psychotraumatic impact, but the individual significance of psychogenesis. An important criterion in the diagnosis of adjustment disorders was the individual's subjective experience of his inability to cope with the problem on his own: to change the situation, accept it as reality or adjust to it. As a result, the patient felt despair, hopeless, socially isolated, and lost perspective. At the same time, the external criteria of social functioning were not grossly violated and were mainly manifested by a certain decrease in productivity in everyday activities. According to anamnestic evidence, the pre-nosological development of psychosocial maladjustment was similar to the signs of burnout syndrome, accompanied by sleep disturbances, asthenia, emotional lability, anxiety and autonomic dysfunctions, which were regarded as signs of fatigue. According to our observations, the clinical manifestations of adjustment disorders at the stage of deployed manifestations are extremely individual and variable, their structure resembles an "iceberg" with a tip that, although clearly visible, actually represents only a small part of the total array of problems. The predominance of anxious and depressive symptoms was quite frequent, which complicated the initial diagnosis and required the use of appropriate scales, questionnaires, and careful study of the patient's history. It should be taken into account that subdepressive episodes are sometimes mistaken for adaptation disorders, for which psychogenic influences play a triggering or pathoplastic role. Correction of the diagnostic error in such case is possible over time, when the severity of affective symptoms with endogenomorphic features begins to increase in the clinical picture. In some cases, somatovegetative, vegetative-vascular and asthenic manifestations may come to the fore from the very beginning. Clinical forms with a predominance of antisocial behavior, angry and aggressive reactions are considered atypical.

The identified predictors of the formation of AD mostly had mixed nature and strengthened each other's effect and were noted mainly in patients who survived the occupation, migration abroad, had a language barrier during communication in other countries. Separation from significant people, experiencing negative emotions for a long time, such as anxiety, fear, anger were also influential

Depending on the characteristics of the dominant symptomatology within the framework of adjustment disorders, its two main clinical variants were conventionally distinguished: emotional and behavioral. In turn, the emotional variant of AD (F43.2) was divided into anxious, depressive (F43.20, F43.21) and mixed (F43.22).

*The depressive variant* was established in 14.87 % persons and was characterized by a decrease in the mood background to a subdepressive or mild depressive level. The clinical picture was represented by elements of a depressive assessment of oneself, the surrounding environment, and future prospects. Periodic feelings of depression, sadness, grief, tearfulness was noted. The depressed state was accompanied by emotional instability, fixation on the negative aspects and events of one's life. Feelings of hopelessness, loneliness, helplessness, dependence on surrounding circumstances and people are present. Decreased self-esteem was combined with uncertainty about one's professionalism, adequacy of one's needs and requirements, and decreased motivation for work. The patients' thoughts with this type of course were mainly focused on negative events in their lives, their current state, but they did not reach the degree of hopelessness and doom yet. There was a narrowing of the circle of constant interests and passions. Relations with family and loved ones took on a tone of passivity and indifference. In patients with a depressive variant of the course of adjustment disorders, there were complaints on impaired concentration of attention, difficulty in making decisions, and decrease in the level of motivation. In the clinical picture there was faintness, symptoms of irritable weakness, apathy, uninitiative and passivity.

*The anxious variant* was diagnosed in 12.16 % of the total number of patients and was characterized by unmotivated tension, a feeling of mental and physical discomfort, fears and worries that were directed to the future. General disquietude, nervousness, inability to relax, a feeling of internal trembling or "discomfort" and "pressure" in the chest, episodic feelings of purposeless anxiety, restless anticipation of bad news, disaster, trouble, fear for oneself and one's loved ones are present. Anxious thoughts that arose in patients formed the development of agripnic syndrome. In such patients, we noted difficulties in falling asleep, disturbances in the depth and duration of sleep. Quite often, with this clinical course, a tendency to reflection was observed, which manifested itself in doubts about the correctness of one's behavior, insecurity in one's abilities, and indecisiveness. Outbursts of irritability, nervousness directed against oneself were present in the clinical picture. In this group of patients, the leading place in the clinical picture was occupied by somatovegetative disorders in the form of: dizziness, headache, paleness or redness of the skin, blood pressure lability, tachycardia, a feeling of numbness or coldness of the extremities, hot or cold flashes, increased sweating, a feeling of coma in the throat, nausea. There was also pronounced asthenic symptomatology, which was characterized by manifestations of brokenness and irritable weakness, inattention and incoherence, rapid fatigue and exhaustion, hypersthenic reactions to external stimuli.

*The mixed variant (anxious-depressive)* (F43.22 mixed anxious and depressive reaction) is established in 41.89 % of the examined and is represented by a combination of clinical signs of the anxious and depressive variants. Anxiety and depressive disorders in AD did not reach such a degree that would make it possible to diagnose another depressive or anxiety disorder of a psychogenic nature. The difference in the clinical manifestation of the anxiety component was a combination of symptoms of mental and somatic anxiety in the form of anxious thoughts, apprehensions, and fears directed to the future. At the same time, a significant number of somatovegetative complaints were observed. The patients' sleep disorders were distinguished by a long period of falling asleep, when the patient could not get rid of unpleasant and disturbing thoughts, with frequent awakenings at night.

*AD with behavioral disturbances* (F43.24 adjustment disorder with predominance of behavioral disturbances and F43.25 adjustment disorder with mixed emotional and behavioral disorders) was established in 31.08 % of the examined and characterized by excessive excitability and irritability, nervousness and short-term situationally determined reactions of anger, resentment, aggression, accompanied by unproductive fussiness, inappropriate activity and conflict behavior. Characteristic symptoms for this group of patients were: intolerance, irritation, blaming others for all troubles. Such violation of behavior was not permanent and deeply rooted stereotype, it had a wave-like character. Such behavioral reactions were not characteristic for patients before the fact of psychotrauma and mostly appeared locally, in one or more spheres of life. In the clinical picture of AD with impaired behavior, somatovegetative manifestations were insignificant, their expressiveness and severity did not reach a significant level.

In this context, the concept of a mental adaptation barrier (individual functional and dynamic formation that prevents overstrain of adaptation mechanisms in order to avoid the formation of a state of mental maladaptation and psychogenic disorders, in particular adjustment disorders) is extremely important.

The mental adaptation barrier is a dynamic formation and in a state of mental stress it approaches the individual critical value. In the case of a harmonious psychological attitude to a stressful situation, personality traits that were previously in a latent state may appear under the influence of mental trauma. At the same time, a person uses all his reserve capabilities and sometimes becomes able to perform a particularly difficult activity without feeling anxiety, fear and confusion, which prevent maximally adaptive behavior.

However, a sudden and long-term stress on the functional activity of the adaptation barrier leads to its overload, which is manifested by a state of maladaptation. If the pressure on the mechanisms of mental adaptation intensifies, and the reserve possibilities are exhausted, then psychopathological syndromes may occur, which are the result of decompensation, a “breach of the barrier”.

As mentioned earlier, the breakthrough of the adaptation barrier in a crisis situation can occur at different levels: biological (vegetative-visceral), psychological (emotional-affective, motivational) or social, which refers to social factors that block urgent needs personality and prevent the achievement of life goals.

In the case of psychosocial maladaptation, we are talking about a violation of the process of not only the functional, but also the substantive side of socialization. An indicator of maladaptation is the lack of adequate and purposeful response in situations that require vigorous adaptation measures. In the end, it globally leads to a violation of professional activity, dependence on the help of others, deformation of the system of internal regulation, value orientations and social attitudes, loss of the ability to exist independently, to establish social ties.

Thus, it should be noted and it is worth remembering that each subsequent critical stress reduces a person's general stress resistance and can provoke a relapse of the adjustment disorder, if it was already in the anamnesis.

Phenomenologically the boundaries of adjustment disorders cover a wide range of conditions: from short-term stress reactions lasting less than a month to psychogenic disorders with a protracted course lasting up to 2 years. A favorable course of the disease is characterized by a gradual regression of psychopathological symptoms and a full recovery with the restoration of full-fledged social functioning. In the case of a protracted type of course, transformation occurs either into protracted maladaptive reactions, or into periodically repeated cliché-type reactions, in the intervals between which the condition normalizes. The main danger, in addition to the high risk of suicidal manifestations, is the prospect of deepening psychopathological symptoms with the development of dysthymia, depressive episodes or nosophobic manifestations within the framework of the formation of a hypochondriac personality. Prolonged and unfavorable variants of the course of adjustment disorders are often complicated by the development of secondary chemical and non-chemical addictions.

## Conclusion

According to the results of the conducted research, it was found that the main predictors of the formation of adaptation disorders are forced relocation, both within the country and abroad, and especially during which a person feels the influence of a stress factor, in particular, and experiencing negative emotions for a long time: anxiety, fear, anger, rage and helplessness. Forced resettlement affects the deterioration and transformation of a person's social status, and also has a traumatic effect. The obtained results convincingly prove the diversity of the course of the clinical picture of AD with isolated variants and forms, which requires an improvement in the quality of diagnostics, especially with increased risk groups.

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I.O. Kalynychenko, M.P. Gulich<sup>1</sup>, O.D. Petrenko<sup>1</sup>, L.S. Liubarska<sup>1</sup>, H.O. Latina  
Sumy State Pedagogical University named after A.S. Makarenko, Sumy  
<sup>1</sup> State Institution “O.M. Marzиеv Institute for Public Health of the National Academy  
of Medical Sciences of Ukraine”, Kyiv

## AWARENESS OF THE THREAT TO THE HEALTH OF BEHAVIORAL RISK FACTORS FOR NONCOMMUNICABLE DISEASES BY FUTURE TEACHERS

e-mail: irinakalinichenko2017@gmail.com

Recently, worsening of youth's health, taking into account the vulnerability of growing and developing organism to the influence of risk factors for chronic noncommunicable diseases has been of a significant concern. The purpose of research was to determine students' awareness of behavioral risk factors for the most threatening pathology of today and the role of a healthy lifestyle as a basis for preventing development of noncommunicable diseases. In order to achieve this goal 216 students of Sumy State Pedagogical University named after A. S. Makarenko were interviewed. A specially designed questionnaire was used. A high level of students' knowledge and awareness of the main factors for noncommunicable diseases development was established. However, 16.3 % of students do not realize the importance of rational nutrition, 24.2 % – the optimal level of physical activity, 26.9 % – the danger of drinking alcoholic beverages; 42.8 % of youth regularly drink alcoholic, low-alcoholic beverages and beer, 26.5 % of students are unaware of the dangers of smoking. 11.6 % of surveyed have excess body weight, with 25.5 % of overweight among boys and 7.7 % – among girls. The priority of ways of obtaining information on risk factors of chronic noncommunicable diseases by youth was established.

**Key words:** student youth, risk factors, noncommunicable diseases, lifestyle.

## I.O. Калиниченко, М.П. Гуліч, О.Д. Петренко, Л.С. Любарська, Г.О. Латіна УСВІДОМЛЕННЯ МАЙБУТНІМИ ПЕДАГОГАМИ ЗАГРОЗИ ДЛЯ ЗДОРОВ'Я ПОВЕДІНКОВИХ ФАКТОРІВ РИЗИКУ НЕІНФЕКЦІЙНИХ ЗАХВОРЮВАНЬ

Останнім часом суттєве занепокоєння викликає погіршення стану здоров'я молоді, враховуючи вразливість організму, що росте і розвивається, до дії факторів ризику розвитку хронічних неінфекційних захворювань. Метою наукового дослідження було визначити обізнаність студентів щодо поведінкових факторів ризику розвитку найбільш загрозливої патології сьогодення та ролі здорового способу життя як основи запобігання розвитку неінфекційних захворювань. Для досягнення мети було опитано 216 студентів Сумського державного педагогічного університету імені А.С. Макаренка. Була використана спеціально розроблена анкета. Встановлено високий рівень обізнаності та усвідомлення студентами основних чинників розвитку неінфекційних захворювань. Проте 16,3 % студентів не усвідомлюють важливість раціонального харчування, 24,2 % – оптимального рівня фізичної активності, 26,9 % – небезпеку вживання алкогольних напоїв, а 42,8 % молоді регулярно вживають алкогольні, слабоалкогольні напої та пиво, 26,5 % студентів не обізнані про шкоду тютюнопаління. Надлишкову масу тіла мають 11,6 % осіб, причому серед юнаків надлишкова маса тіла зареєстрована у 25,5 %, серед дівчат – у 7,7 % оглянутих. Встановлено пріоритетність шляхів отримання інформації молоддю про фактори ризику хронічних неінфекційних захворювань.

**Ключові слова:** студентська молодь, фактори ризику, хронічні неінфекційні захворювання, спосіб життя.

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In recent years, the attention of scientists and society in general to the problem of forming a healthy lifestyle has significantly increased, which is connected with the steady deterioration of the health status of different segments of the population, in particular, student youth [2]. Taking into account the above-mentioned, it is crucial to shaping the orientation of future teachers to preserve and improve their health. Solving the problem of preserving students' health requires the study of their awareness of the role of various factors for the development of noncommunicable diseases (NCDs) and their health threats [4].