

REVIEW ARTICLE

AN ANXIETY AS A RESPONSE TO DISTRESS AND AS A SYMPTOM OF STRESS DISORDERS IN WARTIME

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ABSTRACT

The aim: A comprehensive analysis of anxiety as an emotional state and pathopsychological symptom in the situation of a massive humanitarian catastrophe in wartime

Materials and methods: A systematic search was conducted up to April 2022 in the following databases: Google Scholar, PubMed, DOAJ, and CORE. Three reviewers independently assessed full-text articles according to a predefined aim. We used a quantitative and qualitative approach to infer. The range of mental reactions to the intensive stress with a pooled prevalence of anxiety was estimated. Anxiety as an independent structural psychological phenomenon or incorporated into more complicated mental states, including mental disorders, was assessed.

Conclusions: The anxiety features as an expected mental reaction to the threatening environment are established, the analysis of anxiety development trajectories was shown, and the basic principles of psychological care in anxiety states are considered. The criteria of pathological anxiety, the characteristic of the anxiety symptom as a structural element of psychiatric diseases, and the modern methods of treatment of anxiety disorders are presented. Many specialists in the different areas work with anxious people and patients with anxiety disorders in the Ukrainian current situation, so it was concluded that understanding and being aware of the differentiation of anxiety states will improve psychological care and, if necessary, will lead to providing of a full spectrum of specialized medical care.

KEY WORDS: anxiety, distress, emotional reaction, stress disorders

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INTRODUCTION

The Russian-Ukrainian war and its active phase has multidimensional significance and existential essence, according to many experts. Thus, the report of the Ukrainian Institute of the Future "Ukraine 2022. How not to lose your chance to become a strong state" dated April 22, 2022 identifies the components of a major humanitarian catastrophe and prognoses the affecting for development of the entire civilized world [1]. Globally, this period will be studied by many generations of both Ukrainian and world experts at various levels, including the medical aspect and, mainly, mental health. Factors that significantly change the mental functioning of people in situations of humanitarian catastrophe are changes or destruction of public consciousness, lack of abilities (resources) to overcome external stress, change of life goals and stereotypes with the formation of macro- and microsocial crises. Risk groups for social stress include the military, as well as their relatives and general civilian population, regardless of their stay in the war zone [2]. The war, which is essentially a great humanitarian catastrophe, provokes various reactions in mental functioning. Their range is quite wide: from social tension and psychosocial adjustment disorders to the development of clinically defined forms of pathology. Among all these manifestations, anxiety is dominant, which occurs in the vast majority of cases in the event of humanitarian catastrophe [3].

The definition of trauma and traumatic experience is not always clear. Traumatic spectrum experiences range from mild to moderate anxiety, which may have little effect on daily functioning, to severe psychotic conditions that require long-term treatment. Among the main types of traumas that cause mental health disorders, experts single out sexual and physical abuse of children, mass interpersonal violence, fires and burns, large-scale traffic accidents and traffic incidents, rape and sexual violence, torture, participation in hostilities, experiencing life-threatening medical events, torture, internal displacement or forced migration, situations in which people witness murders and suicides, etc. [4]. Psychological trauma connected with intensive stress can be multiple. Fundamental scientific data provided by foreign authors will be useful in analyzing the situation with the consequences of traumatic experiences. The results showed that the prevalence of post-traumatic stress disorder among the abovementioned individuals was 32%, anxiety 22%, depressive disorders 17%. It was also found that 74% of respondents who needed psychiatric care did not receive it for 12 months [5]. Another large-scale study found that 20.2% of internally displaced persons (IDPs) had moderate or severe anxiety, 25% had depression, and 16% had both anxiety and depression [6]. Given these data, we can estimate that potential psychological trauma can develop in at least 25% of stressed persons in a war time.

However, the real consequences of trauma in society will obviously be much more dramatic.

THE AIM

The research was aimed to focus on anxiety as a most common type of emotional reaction for intensive life-threatening stress in wartime with estimating it's physiological and pathological features.

MATERIALS AND METHODS

412 publications were screened according to the established aim. These databases were searched using the terms identified in the title, abstract, or key words. We used the following databases: Google Scholar, PubMed, DOAJ, and CORE. Articles were exported to a reference manager where duplicate articles were excluded (281). Two authors first screened the titles and abstracts, reviewed the full text of all potential resources, and extracted the data. Disagreements were resolved by consensus. Where disagreements were unresolved, the third reviewer provided input. Abstracts or studies that were not available or publications that did not provide adequate information for categorizing the study were excluded from the study. Finally 37 publications were included in the research with the next data analysis.

REVIEW AND DISCUSSION

Anxiety that develops as a result of traumatic factors operating under martial law is a natural and predictable reaction. It helps to respond to danger in time and protect yourself and your loved ones. Types of response to a threatening situation, which are defined by behavioral patterns - "flight", "freeze" or "fight" are physiologically determined and help to survive in case of danger. In fact, tangibility of the danger factor, its intensity and duration, as well as the personal determinants of the individual experiencing it, can also affect the type and duration of these reactions. It is scientifically proven that the risk of post-traumatic stress disorder will not develop in all people who have experienced a traumatic event and will not exceed 20-25% but will increase if the effects of danger factors persist for a long time. [7]. Differences in the way we suffer from the war trauma in Ukraine can be determined by several important factors, as far as we are concerned. One of which is the nature of hostilities in different parts of the country. In some regions, these are active hostilities that fit into a kind of "linear" understanding of war as a front line moving from one place to another. This is a "visible" threat that exists "here and now". However, in other regions rocket attacks are launched on cities where there is no fighting. This creates a sense of an ever-present "invisible" threat that is unpredictable and indefensible. Prolonged action of this trigger forms is the ground for anxiety disorders, namely panic attacks and states accompanied by generalized anxiety, constant "waiting for a catastrophe", as well as prolonged sleep disturbances and circadian rhythms in general, as air raid alarms are often announced at night.

It is also necessary to identify certain vulnerable groups, including children and adolescents who have witnessed the bombings, deaths of relatives, including parents, and were left completely alone, without care, and therefore have developed anxiety and adjustment disorders [8].

Vulnerable groups also include the elderly, who are unable to flee from the war due to their physical health. According to doctors working in these areas, older people have depressed reactions to stressful situations. Uncertainty and often the inability to meet their own living needs at the proper level lead to increased anxiety and, consequently, deterioration of mental health in general. This vulnerable category of citizens needs special attention and efforts to be provided with adequate medical treatment during the war, necessary medicines and care. Evacuation is an equally stressful factor for the elderly, as it is a confrontation with a new unknown, which can be both mentally traumatic and physically unsuitable for people with special needs. It is also worth noting that the vulnerable state of this category of our fellow citizens can also be used for manipulation and unconscious violence, and eventually, their personal losses as a result of the war may be more significant [9].

It is also necessary to single out groups of volunteers who are numerous and actively working throughout Ukraine. There is now a "emotional burnout syndrome" among volunteers. We should also not forget about people who have been suffering from severe mental illnesses for many years. These are patients with schizophrenia, bipolar disorder, etc. Against the background of a stressful situation, there are episodes of exacerbation and the need for hospitalization. Supportive housing (nursing homes), where people with severe mental illnesses live, have also been evacuated to the western regions of Ukraine. This situation increases the burden on inpatient institutions of specialized and non-specialized type and again requires medical professionals to pay attention to mental health problems in this category of patients [10].

Anxiety is to some extent a normal and psychologically adequate emotion in a dangerous situation. The person feels inner anxiety, overflowing with thoughts of approaching something unpleasant, combined with fear, at the physical level - rapid breathing and heartbeat, discomfort in the body (behind the chest, back, abdomen, limbs). Anxiety is a combination of emotions such as fear, sadness, shame, guilt [11]. At the same time, anxiety is not a stable state, but develops according to certain patterns. This phenomenon is logically considered as a sequence of cognitive, affective and behavioral reactions that are actualized as a result of human exposure to stressors. In this case, stress stimuli can be both external and due to some internal factors, which are interpreted by the subject as dangerous or threatening. Cognitive hazard assessment thus actualizes a state of anxiety or an increase in the level of intensity of this state. Summarizing the above, the state of anxiety can be included in the structure of the overall anxiety process, which consists of the following components that unfold over a period of time: stress – perception of threat – state of

anxiety [12]. If the resources to overcome or avoid stress are insufficient, psychological defense mechanisms come into action, the function of which is to reduce anxiety. The main task of these mechanisms is to transform the perception of the stimulus that causes anxiety. Thus, in this case, the state of anxiety involves the following sequence of stages: state of anxiety – cognitive reassessment – use of available resources or psychological protection [13,14].

The role of anxiety as a danger indicators is leading and ultimately decisive in finding the threat and stimulating defense mechanisms in the body. It should also be noted that the alarm function extends far beyond the real situation and takes into account the experience of the individual's past, as well as works in accordance with their vision of the future [15]. The tension in the mechanisms of psychological adaptation as a result of an anxious reaction also plays a motivating role, which encourages effective adaptation. All the above statements correspond to the basic tenets of Hans Selye's stress theory. The scientist noted that under the influence of stress factors in the body there are changes in three successive stages: alarm, resistance and exhaustion [16]. It is on the launch and dynamics of the first stage, the alarm stage, depends the possibility of adequate psychological adaptation and the reaction of the human psyche on the trajectory of maintaining normal mental functioning and effective solution of pressing life problems [17,18]. At the same time, mental functions change: mental processes are activated, all attention is focused on the stimulus, increased personal control of the situation is revealed, psychological protection systems and coping strategies are launched. The concept of coping is understood as cognitive, emotional and behavioral efforts aimed at overcoming difficulties in a stressful situation. It should be noted that each of the components has its own "load". Thus, a person's cognitive efforts are aimed at analyzing the problem, drawing up a possible action plan, finding alternative ways out of the situation, etc. With the help of emotional efforts the person controls their experiences, seeks emotional support from others. Behavioral efforts allow an individual to achieve the desired result [19]. When considering the role of coping strategies in ensuring mental health, it is important to compare them with the psychological defense mechanisms. Relevant literary sources note that the main difference between these phenomena is that coping behavior strategies are used by individuals consciously and can change depending on the circumstances, and the psychological defense mechanisms are subconscious, and in the case of their consolidation become maladaptive [20]. Markers of effective coping are stable task performance, emotional state control, realistic view of yourself and others, ability to maintain positive self-esteem, to maintain "rewarding" interpersonal contacts, to switch and distract [21,22].

In the event of exposure to a significant traumatic factor, it is necessary to use preventive methods for the development of pathological conditions in the short and long term. Self-help techniques that everyone must master have proven themselves well for this purpose. Among the general recommendations, the following should be noted: establish and follow the daily routine plan, practice mental and physical activity, regularly do gratitude practice, notice and limit the anxiety triggers, refer to reliable sources of news [23]. Specialists from the International Trauma Healing Institute (Israel) have developed a 5-steps model of assistance in critical situations, which is aimed at relaxing stress, and decreasing the intensity of unpleasant physical sensations, stuck emotions or negative thoughts. Using this algorithm people in crisis will prevent the accumulation of stress and trauma and will avoid serious consequences. The steps are easy to follow and can be used as an option for self-care and helping others in any situations [24]. Often people can cope on their own after a traumatic experience and will not need mental health professional care, with important points being the support of relatives, the opportunity to discuss exciting moments with loved ones, return to routine, set aside time for yourself, hobbies, public recognition of humanitarian disaster victims. Cases of anxiety lasting more than 1 month or less than 1 month with a negative impact on quality of life require the attention of experts [25].

From the point when anxiety as a psychological phenomenon begins to affect the quality of human life, interfering with the realization on the personal and social levels, it becomes pathological (maladaptive). Pathological anxiety is not associated with a real threat and is not adequate to the significance of the situation, is highly pronounced and causes severe negative subjective feelings, leads to a decrease in productive activity and, as a rule, involves all spheres of human life. At the same time, it is one of the most common psychopathological symptoms at various levels of mental illness, from mild subthreshold neurotic disorders to severe psychotic pathology [26]. In the case of hostilities on the territory, regardless of the presence of a person in the combat zone or outside it, there are predisposing factors that affect the development of pathological anxiety. First of all, it concerns the characteristics of the traumatic event – intensity, exposure, prevalence, personal significance, level of cruelty, probability of threat to life, unpredictability, related life problems. Significant predisposing mechanisms are personal characteristics – the past traumatic experiences, the individual psychological characteristics, inherent coping strategies, mental disorders in the anamnesis, as well as biological factors. The social environment is also significant – lack of social support, dysfunctional family interaction, social conditions in general before the traumatic event, availability of preventive programs and crisis intervention matter as well [27].

When experiencing massive traumatic events, pathological anxiety either completely exhausts the clinical presentation of the disease, or is part of the structure of more complex psychopathological syndromes, giving them a unique clinical content, or acts as a basis for psychopathological or psychosomatic manifestations [28]. Anxiety is one of the most common manifestations of mental pathology and a frequent symptom of depression, acute hallucinatory delusions, organic disorders, alcoholism and other addictive disorders. When anxiety and

depression accompany each other, we may talk about a mixed anxiety-depressive disorder, but if the symptoms of anxiety and depression become equally severe – it is already about a comorbid disorder [29].

Medical specialists working with patients who show signs of pathological anxiety should identify anxiety as a symptom, establish a syndromic diagnosis (anxiety syndrome or the one combined with other manifestations of equivalent intensity and impact on the person), refer to a psychiatrist, perform therapeutic interventions in accordance with clinical guidelines and unified protocols in case of mild or moderate anxiety (syndromic diagnosis involves the possibility of prescribing anti-anxiety drugs on a syndromic basis), conduct treatment according to recommendations and in conjunction with a psychiatrist [30].

The experience of war, mass human rights abuses or forced displacement can have profound effects on how survivors perceive the world. This effect goes far beyond the construct of direct post-traumatic stress. Therapeutic programs should include a set of cognitive, behavioral, interpersonal and social interventions, and if necessary, involve the psychotropic medicines [31].

Effective implementation of mental health and psychosocial support programs during wartime helps to provide the necessary services to reduce suffering and provide decent support to help develop recovery, self-healing and survival skills. Therefore, an extremely urgent task not only for medical, psychological or social professionals, but also for society as a whole is the timeliness, accessibility and professionalism of providing the necessary assistance to each person affected by the traumatic consequences of hostilities. According to the recommendations of the Inter-Agency Standing Committee (IASC), mental health and psychosocial support should be based on the 4 main areas reflected in the IASC intervention pyramid. Recommended interventions are divided into non-specialized, which may be provided by non-mental health professionals, and specialized ones [32].

In most clinical guidelines, we encounter two areas of professional care – medical correction and psychotherapeutic interventions. It is stated that this assistance is provided by narrow specialists in the field of mental health. However, current opportunities for such people to receive quality care are much wider. Therefore, first of all, it is important to differentiate between care in the acute period, when the action of the traumatic factor is still occurring, or immediately after it. This means that only people who are nearby at the time have the opportunity to help during this period. In fact, the need for psychological care skills during this period is critical, so these skills should be possessed by the vast majority of the population, as well as the first aid skills. The best way to organize this kind of care is through training in basic psychological first aid skills in case of trauma, which should involve, first of all, servicemen, doctors of all specialties, volunteers, rescue and communal services workers, as well as representatives of the education sector. Access to such training in wartime can be ensured not only through direct training, but also through innovative information technology, including online seminars and placement of educational resources on separate platforms. In this way, victims can receive primary care, which can significantly affect their future condition. It should be remembered that one of the basic needs of successful mental recovery after trauma is the need for security. This objective need can be provided by persons who come into contact with the victim in the first hours and days after the traumatic event. As for the next stage of assistance, differentiation and qualification of the person's state are important. It is necessary to find out what the exposure to trauma was and what the risk of developing post-traumatic stress disorder is [33]. This is essential depending on whether a person will need the psychotherapeutic intervention conducted by a specialist who has professional education and experience in dealing with trauma. Unfortunately, a significant mistake in Ukrainian reality today is that psychotherapeutic services are provided by specialists who have no education in the field of trauma therapy. The main risks for the victim in this case are deepening of the experiences associated with the traumatic event, inability to handle them properly and concomitant disorders occurrence. Given the wide range of mental disorders associated with trauma, the possibility of comorbid disorders and highly probable social problems, the development of the therapy algorithm involves an individual approach, with possible involvement of family members and social interventions.

Therefore, medical treatment of persons with traumatic experience and its feasibility should be determined individually, taking into account clinical criteria and the degree of the patient's dysfunction in different areas of life [34]. The most common problems encountered with medical treatment of such patients are the inexpediency of prescribing medications generally in cases where other types of care are more appropriate, as well as the inability to regularly consult a doctor and incorrect treatment, dependence on drugs [35]. No less important is the use of other treatment methods, which can be recommended as an adjunct therapy or as a full-fledged intervention. These could be mobile applications for auxiliary diagnostics, as well as for self-help to victims. Namely, applications that help to reduce the level of anxiety and depressive experiences, to monitor the dynamics of the state, to improve cognitive abilities, which are reduced against the background of anxiety and depression, and to improve the quality of life [36].

Among other interventions, methods that improve interneuronal transmission play an important role, while significantly affecting the general cognitive abilities of victims who are impaired in trauma-related disorders. Along with medical and psychotherapeutic interventions, in recent years the use of non-invasive methods of brain stimulation is considered as the third and new option for the treatment of mental disorders. They include transcranial magnetic stimulation, which is currently widely used and demonstrates the convenience and safety of use for patients [37].

CONCLUSIONS

The full-scale war launched by the Russian Federation against Ukraine is an event that is equated with an act of genocide against the Ukrainian people. The consequence of this war is not only the combined and multiple trauma experienced by hundreds of thousands of people, but also, perhaps, the emergence of new types and ways of experiencing traumatic events that will be the subject of research by mental health professionals in the coming years and decades. The scale of the traumatic effect on the population of our country leads to the awareness that each of the health professionals at some point in their professional activities will be forced to interact with people who have experienced traumatic events and provide assistance. Working with trauma will be part of the professional experience of doctors of various specialties, social and pedagogical workers, which encourages us to deepen existing knowledge about trauma and its consequences for different groups.

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