

THE PSYCHOLOGICAL CHARACTERISTICS OF POSTTRAUMATIC STRESS DISORDER IN CHILDREN IN OUTPATIENT CARE

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The article explores the psychological characteristics of post-traumatic stress disorder (PTSD) in children who have been affected by traumatic events during the war in Ukraine through an empirical study. The analysis takes into account methods for diagnosing and correcting this disorder. The impact of military conflicts on the mental health of children has been experimentally investigated, in particular, it was found that the majority of children who have witnessed violence, bombings, or the loss of loved ones demonstrate clinical manifestations of PTSD. Bombings, the loss of loved ones, and physical violence are just some of the traumatic experiences that military conflicts can bring about, which can lead to symptoms of PTSD. The need for early detection and timely intervention to support their mental health is underscored by the presence of more pronounced symptoms in children who have experienced multiple traumas. According to research, intrusions, affective arousal, and impaired cognitive functioning are the most frequent symptoms. The results of the study confirm that PTSD develops in 20–30 % of children who have experienced traumatic events. Children are most likely to experience intrusions and impaired cognitive functioning as symptoms of PTSD. Intrusions manifest as recurring memories, nightmares, and flashbacks, which cause intense fear and anxiety. Impaired cognitive functioning can manifest as difficulties with concentration and memory, which negatively affects learning and social interactions. The impact of trauma on children's self-esteem can result in depressive symptoms. It has been noted that these symptoms can be long-lasting and affect all areas of the child's life, including relationships with family and peers. An emphasis is placed on the importance of timely psychological assistance when developing a program of corrective measures to support children who have experienced trauma. The role of outpatient supervision in the identification and treatment of PTSD, which includes active parental involvement and a multidisciplinary approach to treatment, is identified.

Key words: post-traumatic stress disorder, children, outpatient care, psychological support, military conflicts, PTSD symptoms.

Шевченко С. В., Варіна Г. Б. ПСИХОЛОГІЧНІ ОСОБЛИВОСТІ ДІАГНОСТИКИ ПОСТРАВМАТИЧНОГО СТРЕСОВОГО РОЗЛАДУ В ДІТЕЙ В УМОВАХ АМБУЛАТОРНОГО НАГЛЯДУ

У статті на основі емпіричного дослідження досліджуються психологічні особливості посттравматичного стресового розладу (далі – ПТСР) у дітей, які постраждали від травматичних подій під час війни в Україні. Аналіз ураховує методи діагностики та корекції цього порушення. Експериментально досліджено вплив воєнних конфліктів на психічне здоров'я дітей, зокрема встановлено, що в більшості дітей, які стали свідками насильства, вибухів або втрати близьких, спостерігаються клінічні прояви ПТСР. Бомбардування, втрата близьких і фізичне насильство – лише деякі з травматичних переживань, які можуть спричинити воєнні конфлікти, що може призвести до симптомів ПТСР. Необхідність раннього виявлення та своєчасного втручання для підтримки психічного здоров'я підкреслюється наявністю більш виражених симптомів у дітей, які пережили численні травми. Згідно з дослідженнями, найпоширенішими симптомами є вторгнення, афективне збудження та порушення когнітивних функцій. Результати дослідження підтверджують, що ПТСР розвивається у 20–30 % дітей, які пережили травматичні події. Діти найчастіше відчують втручання та порушення когнітивного функціонування як симптоми ПТСР. Втручання проявляються у вигляді повторюваних спогадів, кошмарів і спогадів, які викликають сильний страх та тривогу. Порушення когнітивного функціонування може проявлятися труднощами з концентрацією та пам'яттю, що негативно впливає на навчання й соціальні взаємодії. Вплив травми на самооцінку дітей може призвести до симптомів депресії. Відзначено, що ці симптоми можуть бути тривалими і впливати на всі сфери життя дитини, включно зі стосунками з родиною та однолітками. Акцентовано увагу на важливості своєчасної психологічної допомоги при розробці програми корекційних заходів підтримки дітей, які пережили травму. Визначено роль амбулаторного спостереження у виявленні та лікуванні ПТСР, що містить активну участь батьків та мультидисциплінарний підхід до лікування.

Ключові слова: посттравматичний стресовий розлад, діти, амбулаторна допомога, психологічна підтримка, воєнні конфлікти, симптоми ПТСР.

Introduction. The issue of children who have been affected by the occupation forces' aggression is of utmost urgency, considering that Ukraine has been in an open military conflict with Russia since 2014. With the beginning of the full-scale invasion of the occupation forces into Ukraine, which began on February 24, 2022, and continues to this day, even more families, including children, have found themselves under threat of life and security. Many families, particularly those living in areas of active hostilities, are forced to leave their homes and seek refuge and protection in internal or external displacement. The effects of military conflicts and wars are always serious for children, especially when they see violence, lose close relatives, destroy homes, and struggle to obtain basic necessities of life. [1, p. 20]. Occupation, daily rocket attacks and sounds of air raid sirens, the need to seek shelter and run to dangerous bomb shelters day and night, the inability to fully attend educational, creative, and sports facilities for child development – all these factors have a serious impact on children's physical and psychological health, psychosocial development, mental and emotional activity, education, and their general well-being [2, p. 209]. Post-traumatic stress disorder (PTSD) is a common outcome of exposure to war, which has a significant impact on children's mental health [3, p. 30]. War stressors can cause psychological and emotional problems in children, which can lead to functional and organic changes in physical health [4]. In Ukraine, the epidemiological situation with the spread of post-traumatic stress disorder is currently as follows. The World Health Organization has estimated that one in every four people in Ukraine is currently at risk of developing severe mental disorders. As a result of the ongoing war, more than 8.5 million Ukrainians are at risk of developing mental disorders, such as depression and post-traumatic stress disorder (PTSD), as noted by Michel Kazatsky, Special Advisor to the World Health Organization Regional Office for Europe. The Ministry of Health expects that more than 15 million Ukrainians will need psychological support due to the conflict [5, p. 12]. Expert estimates indicate that from 40% to 50% of the population of Ukraine will need various levels of psychological assistance; in particular, this applies to approximately 1.8 million military personnel and veterans, as well as about 7 million elderly people. In addition, it is estimated that approximately 3-4 million people will need drug treatment. The war is predicted to have a negative impact on the mental health of at least one in five people [6, p. 748]. According to the Ministry of Health, PTSD may develop in 20% to 30% of those who have experienced traumatic events. A similar but slightly different estimate by WHO representative Jarno Habicht indicates that about a quarter of the population of Ukraine – almost 10 million people – will suffer from conditions such as anxiety, stress and PTSD. According to the WHO, one in two Ukrainians will face mental health problems by 2025. The psychological rehabilitation of Ukrainians after the conflict may take up to 20 years, according to some experts. The Russian aggression against Ukraine has caused a significant displacement of children from their homes, and estimates suggest that this number is around 4 to 5 million. Volodymyr Martyniuk, Chairman of the Council of the Ukrainian Academy of Children's Disabilities, predicts that the majority of these children will display clinical signs that indicate post-traumatic stress disorder (PTSD). But despite the estimates and forecasts regarding the number of mental disorders and the impact of aggressive factors (stressors) that continue and can put millions of our children at risk of developing PTSD, there is a risk of missing the onset of this insidious disorder in a child and not providing such important timely assistance [1, p. 20]. The problem of timely detection and treatment of PTSD in children in war conditions is serious and requires increased attention from parents, kindergarten teachers and teachers of educational institutions (after all, 60% of the time children spend in schools and kindergartens); and requires clinical vigilance from primary care physicians [6, p. 748]. Summarizing all of the above, I can confidently say that increased attention to the problem of timely detection of PTSD in children in conditions of ongoing war is relevant, and the psychological features of the course of this disorder in children are an important topic of research and can be of great importance for improving the well-being of children who have experienced traumatic events of war.

The purpose of our study is an empirical study of the clinical and psychological features of the manifestation of post-traumatic stress disorders in children in outpatient care.

Materials and methods. The presented goal was addressed through the use of the following methods. The analytical-sampling method (analysis of available medical documentation from medical institution databases) was used at the first stage of recruiting children in order to identify children at risk (potentially traumatic event in history) of developing PTSD and children who consulted a doctor with recurring non-specific physical health problems (according to the recommendations of the unified clinical protocol of primary, secondary (specialized) and tertiary (highly specialized) medical care, approved by the Order of the Ministry of Health of Ukraine dated February 23, 2016 No. 121), aged 7 to 18 years, for further study, from all children undergoing outpatient care in a separate (Svyatoshyn) district of Kyiv. Children and their parents were interviewed as part of the socio-demographic method. The collection of general information included the child's age, family composition, family, social status, information on parents' education, and data on family medical history. The data was entered into the child's personalized card. The criteria for inclusion in the sample for the study at the first stage were:

1. The child's age is from 7 to 18 years at the time of inclusion in the study.
2. Children who lived in the Svyatoshynskyi district of Kyiv and nearby cities, district centers, and settlements and witnessed hostilities or were in occupations (Bucha, Irpin, Vorzel, Borodyanka town, Moshchin village, Pushcha Vodytsia, etc.) in February-March 2022 and witnessed a PTE (potentially traumatic event).
3. Children living in the Svyatoshynskyi district are currently experiencing bombing/their homes have been hit by missiles or drone strikes/have witnessed missiles or drones hitting nearby homes.
4. Children who have been in Ukraine and have a history of a potentially traumatic event and are receiving outpatient care and primary care (family doctors, psychologists, teachers, parents) in Ukraine and abroad.
5. Children who have sought medical attention for recurring, non-specific physical health problems.
6. Children from disadvantaged families.

Thus, relevant information was collected from several sources: children's medical records, and/or from the words of parents, teachers, psychologists. The master's study was open to all children who were at risk of developing PTSD. The next stage included 30 children whose parents gave voluntary consent to participate in the study and in the presence of voluntary consent to participate in the study from the child himself, provided that he had reached the age of 14.

At the second stage of the study, a questionnaire method was applied. The child's examination was started by determining the type of traumatic event, which was then used to investigate the presence and severity of traumatic symptoms. All children and their parents who agreed to participate in the study were interviewed using a modified (8 items were added by the staff of the Department of Psychiatry and Narcology of the O.O. Bogomolets National Medical University, which directly assessed the traumatic experience associated with the war and the child's reaction to it) screening for traumatic events: "Checklist of traumatic events, children's version" (2014 ©UCLA, Ukrainian translation by the Institute of Mental Health of the UCU) for the presence of any traumatic events recently or in the past, and a description of examples of such events (was a participant or witness of a disaster, military events, violence, etc.). Children and adolescents' complaints, life history, diseases, and mental state were studied using both clinical and anamnestic methods simultaneously. The collection of the children's life history and diseases was conducted through a clinical interview with them and their parents, an analysis of available medical documentation, and characteristics of the child from school. The child's psychological state was evaluated through a general medical examination that was not noticed during the interview, and possible injuries, physical damage, and signs of physical and sexual violence were identified.

The criteria for inclusion in the sample for the third stage of the study (30 respondents) were:

1. Having experienced a traumatic experience that was a direct result of military action and/or domestic violence.
2. Availability of voluntary consent to participate in the study from the child's guardians.
3. The availability of voluntary consent to participate in the study from the child himself, provided that he has reached the age of 14.

At the third stage of the study, after determining the presence and type of traumatic event, in case of detection of individual symptoms, a survey (psychodiagnostic method) was conducted using a structured interview to verify PTSD. The interview was adapted and translated into Ukrainian by a group of researchers from the Institute of Mental Health of UCU in 2014. The interview used was the "Index" PTSD reactions for children / adolescents DSM – V ((University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA PTSD-RI)). This questionnaire is recommended for use to identify traumatic events and assess symptoms of posttraumatic stress disorder in school-age children and adolescents. At this stage, information was also collected from several sources – parents and the children themselves. In case of differences in responses, all events that met the criteria for PTSD in DSM – V, declared by both respondents, were considered traumatic.

The experimental base of the study was a children's outpatient clinic in one of the districts of Kyiv. The study was conducted during April-September 2024. The sample of the study at the first stage consisted of 1325 children aged 7-18 years, who were on outpatient supervision of the primary link of observation. For the second stage, 30 respondents were selected according to the "Criteria" for inclusion in the study. Psychological examination of all subjects was conducted at the second stage of the sample, when the physical condition of the victims allows them to interact with a psychologist and identify the main psychological consequences of injuries. Participants were divided into two groups depending on gender. The average age of the participants was 12.9 years. The age distribution of the participants is as follows: children aged 7-10 years – 8 participants; children aged 11-14 years – 7 participants; children aged 15-18 years – 11 participants. This age distribution allows for a detailed analysis of the impact of traumatic events on different age categories of children. The research was conducted as part of the project under the SI Baltic Sea Neighbourhood Programme: "Quality Education and Welfare for Children in Vulnerable Life Situations: Developing and Assuring Staff Competences for Holistic Support Systems in Ukraine, Poland, and Sweden"

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Results. A modified traumatic events toolkit, “Traumatic Events Checklist, Children’s Version,” was used to assess the presence, characteristics, and severity of traumatic events. Among children who have experienced traumatic events, various types of injuries have been identified, which can be classified by their frequency of occurrence as follows:

Traumatic events related to military actions (war): most of the study participants (29 children) witnessed military actions or bombings, which left them with a deep trace of fear and anxiety. The results of the analysis of the number of traumatic events experienced are presented in Table 1.

Table 1

Distribution of the number of traumatic factors associated with military operations

Type of traumatic event experienced related to military operations	Number of children abs. (%)
Did you survive the bombing?	29 (97%)
Have you lived in a bomb shelter?	17 (57%)
Have you seen military action?	16 (53%)
Have you seen your friends’ homes destroyed as a result of hostilities?	16 (53%)
Have you seen anyone seriously injured?	10 (33%)
Did you not have access to food due to the fighting?	9 (30%)
Have you seen your own home destroyed as a result of hostilities?	6 (20%)
Have you seen the bodies of those killed in military action?	6 (20%)
Did you not have access to water due to the fighting?	3 (10%)

According to the results of the analysis of the number of traumatic events experienced, presented in Table 1., it was found that the majority of children were exposed to several traumatic factors related to military actions (on average 3.7) , in particular, 97% survived bombing, and 57% lived in bomb shelters. This may indicate a serious impact of military conflicts on the mental and physical well-being of children, which requires urgent response and support. The average number of traumatic events experienced at the level of $M = 9.5$ traumatic events.

Physical Abuse: This type of trauma was recorded in 25 children (83% of those who experienced traumatic events). Children reported incidents of being beaten (directly or witnessed) or being mistreated at home and at school, which resulted in lasting emotional consequences.

Psychological violence: 20 children (67% of those who experienced traumatic events) reported being victims of psychological violence, which took the form of bullying, humiliation, or emotional pressure from peers or adults.

Death or loss of a loved one: 18 children (60% of those who experienced traumatic events) reported the loss of loved ones, which caused them to feel deep grief, anxiety, and fear.

Accidents: 23 children (77% of those who experienced traumatic events) experienced accidents that resulted in physical injuries or serious psychological distress.

Polymorphism of clinical manifestations of PTSD in children and adolescents. Given that different traumatic factors can cause different severity of trauma, at the third stage of the study, a structured interview was conducted to verify PTSD or to identify individual symptoms of psychological trauma. The assessment of clinical manifestations in children and adolescents included in the study was carried out using the clinical scale of PTSD in children and adolescents (“PTSD Reaction Index for Children/Adolescents DSM – V” (University of California at Los Angeles Post-traumatic Stress Disorder Reaction Index (UCLA PTSD – RI)). The results of the assessment are presented in Table 2.

Table 2

**Number (abs.,%) of children who had “present” symptoms (3 or 4 points)
from all DSM – V clusters (B, C, D , E)**

Children with “present” symptoms of all clusters among 30 respondents	of them are girls	of them are boys
6	2	4
20%	7%	13%

Based on the data presented in Table 2, several conclusions can be drawn. First, the detection of “present” symptoms of PTSD in children and adolescents indicates that the traumatic factors they experienced have a significant impact on their psychological state. Of the 30 respondents, 6 children (20%) demonstrated symptoms, indicating the presence of problems that require attention, which fully corresponds and confirms the results of world statistics. Second, the analysis of the data shows that among children with “present” symptoms of PTSD, there are more boys (4 out of 6) compared to girls (2 out of 6). This may indicate that boys may be more vulnerable to certain types of trauma or that their symptoms may be more pronounced. The results of the analysis of the presence of symptoms from different clusters (PTSD DSM-V) in children and adolescents included in the study are presented in Table 3.

Table 3

Symptomatic profile of PTSD in children and adolescents: study results

Name of PTSD symptom clusters according to DSM- V criteria	Number of children (abs., %) who showed symptoms among all respondents (30 children)
Symptoms of intrusions (Cluster B)	15 (50%)
Avoidance symptoms (C cluster)	8 (27%)
Symptoms of cognitive and mood impairment (D cluster)	18 (60%)
Symptoms of affective arousal (E cluster)	17 (57%)
Symptoms of dissociation	2 (7%)
No symptoms were detected	3 (10%)

The presence of PTSD symptoms in children and adolescents included in the study can be inferred from the data presented in Table 3. The traumatic events had a significant impact on the mental state of the highest number of respondents, who reported symptoms of intrusions (50%). This may indicate that children often experience repeated memories or flashbacks, which is characteristic of PTSD. Among respondents, 60% had symptoms of cognitive impairment and mood disorders, and 57% had symptoms of affective arousal. This suggests that traumatic experiences can have a negative impact on children's emotional state and cognitive functioning, which can hinder learning and social adaptation. According to 27% of avoidance symptoms, some children attempt to avoid situations that remind them of traumatic experiences, which can lead to isolation and limited social interactions. The presence of a dissociative subtype of PTSD was less common (7%), which may indicate that this defense mechanism is not dominant among children and adolescents who have experienced traumatic events. The fact that 10% of respondents did not exhibit any symptoms may indicate different levels of resilience to traumatic events or the existence of protective factors in these children. The results indicate that there was no significant difference in the severity of PTSD in children of different age groups, with moderate-severe symptoms dominating.

Conclusions. The diagnosis of PTSD is a complicated and multifaceted process that necessitates a comprehensive approach that takes into account various aspects of mental health, including emotional, behavioral, and physical symptoms. An important factor that makes it difficult for children to access the necessary psychological help is the social stigma and fear of discrimination, which emphasizes the need to create a safe environment for open discussion of traumatic experiences. According to the study, most children who had traumatic experiences displayed symptoms of PTSD, which included a high frequency of intrusions, avoidance, and affective arousal. The study also confirmed global statistics, according to which an average of 20% of people who have experienced a potentially traumatic event are diagnosed with PTSD. The study found that children who had traumatic events experienced various types of traumatic events, which may have affected their mental and physical well-being. Among the types of traumatic events, the most common were events related to military operations (29 children, 97%), 29 (97%) children witnessed bombings, and 57% lived in bomb shelters, which indicates a deep trace of fear and anxiety left by these events. There was also a high level of physical abuse, experienced by 83% of children, and 67% were victims of psychological abuse. The loss of loved ones affected 60% of children, causing deep emotional distress, while 77% of children experienced accidents. The data obtained suggests that children who have experienced traumatic events, especially during military conflict, should receive immediate response and psychological rehabilitation programs. Thus, the results of the study emphasize the importance of a comprehensive approach to the assessment and treatment of PTSD in children, as well as the need for further research in this area to ensure effective support for children who have experienced traumatic events.

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