

## Psychological counseling for post-traumatic stress disorder among Ukrainian refugees in Bălți, Republic of Moldova

Silvia Briceag<sup>a,\*</sup> and Sylvia Brichag<sup>b</sup>

<sup>a</sup> Faculty of Educational Sciences, Psychology and Arts,  
“Alec Russo” State University of Balti, Balti, Republic of Moldova

\*Corresponding author, e-mail: briceagsilvia58@gmail.com

<sup>b</sup> Department of Psychology,  
“Alec Russo” State University of Balti, Balti, Republic of Moldova

**Ricevuto:** 18.09.2025 - **Accettato:** 07.05.2026

**Publicato online:** 25.05.2026

### Abstract

The purpose of the study was to assess the prevalence of post-traumatic stress disorder and evaluate the psychological state of different categories of people who have experienced traumatic events. This study explored the level of post-traumatic symptoms among individuals experiencing PTSD, especially among Ukrainian refugees who had been exposed to traumatic events during the war. The main aim was to conduct a descriptive assessment of trauma-related symptoms and the need for psychological support. The research involved 20 Ukrainian refugees, mostly women between the ages of 25 and 35, who were living at the Healthy Gorod Center in the city of Bălți, Republic of Moldova. The study focused on an initial diagnostic phase to ascertain the participants' emotional and psychological state. Standardized clinical interviews and trauma assessment scales were used to measure the baseline level of post-traumatic symptoms. The study aimed to offer scientific evidence for the practical use of counseling in refugee mental health care. The practical significance of the work was that these results could be used by psychologists, psychiatrists and other mental health professionals to develop effective support programs for people with PTSD in Moldova.

**Keywords:** post-traumatic stress disorder; Ukrainian refugees; CBT-based counseling; mental health; traumatic experience; Republic of Moldova.

S. Briceag and S. Brichag / *Ricerche di Psicologia*, 2025, Vol. 48  
ISSNe 1972-5620, Doi: 10.3280/rip2025oa22849

Copyright © FrancoAngeli

This work is released under Creative Commons Attribution - Non-Commercial –  
No Derivatives License. For terms and conditions of usage please see: <http://creativecommons.org>

## Introduction

Since the outbreak of the full-scale war in Ukraine, forcibly displaced persons have faced not only direct exposure to life-threatening events but also ongoing post-displacement stressors that may intensify trauma-related symptoms. Among the most clinically significant consequences of such exposure is post-traumatic stress disorder (PTSD), which can manifest through intrusive memories, avoidance, hyperarousal, and marked impairment in everyday functioning (Kovalenko et al., 2023). In Moldova, where refugee support has largely relied on community-based and center-based assistance, early identification of PTSD symptoms is essential for organizing timely psychological care. PTSD is characterized by a number of symptoms, as shown in Table 1.

*Table 1 - Characteristics of PTSD symptoms*

<b>Symptom</b>	<b>Sign</b>
Reliving the traumatic situation	Nightmares, obsessive memories, a strong feeling of fear and horror, negative physical sensations
Avoidance of memories and thoughts	Avoiding thoughts, places, people, or situations related to traumatic experiences (e.g., changing jobs, moving)
Constant feeling of threat	Excessive vigilance, hypervigilance, avoidance of dangerous situations (for example, do not sit with your back to the door, check car mirrors)
Problems in the emotional sphere	Dysregulation of emotions: outbursts of aggression, self-harm, emotional numbness, inability to feel positive emotions
Belief in one's own worthlessness	Feelings of shame, guilt or personal insolvency, self-blame for one's own failures or events that have occurred
Difficulties in building relationships	Alienation, avoidance of acquaintances and social contacts, problems in establishing and maintaining emotional intimacy
Deterioration in various areas of life	Significant negative impact on personal, family, social, educational and professional life
Associated mental disorders	Depression, anxiety disorders, substance use disorders

Existing research indicates that structured psychological counseling, especially cognitive behavioral therapy (CBT) and related trauma-focused approaches, can reduce PTSD symptom severity and improve adaptation in trauma-exposed populations (Bisson et al., 2015; Bisson et al., 2022; Peconga & Høgh Thøgersen, 2020). At the same time, the literature linked to Moldova has more often addressed broader issues of sociocultural trauma, migration-related stress, or general mental health vulnerability than pilot PTSD assessments conducted directly in refugee service settings (Bodrug-Lungu et al., 2023; Colesnic, 2024). As a result, there remains a practical gap

between the general evidence base for trauma-informed counseling and the specific diagnostic needs of Ukrainian refugees currently residing in Moldovan support centers.

In response to this gap, the present study was designed as a diagnostic and feasibility-oriented assessment conducted among Ukrainian refugees residing in a refugee center in Bălți. The study did not test the effectiveness of an intervention at this stage. Rather, it sought to establish whether clinically meaningful PTSD symptoms were present at a level that would justify the subsequent implementation of a structured counseling program grounded in CBT principles. Such preliminary evidence is necessary before moving to a larger intervention study in the Moldovan context.

The primary objective was to assess PTSD symptom severity and the proportion of participants meeting PTSD criteria using a structured clinical interview, the Mississippi Scale for Combat-Related PTSD, and the Revised Impact of Event Scale. The secondary objective was to identify baseline psychological support needs relevant to the future development of a CBT-based counseling protocol for this setting. It was hypothesized that most participants would demonstrate clinically significant PTSD symptoms associated with war exposure and displacement, reflected in elevated IES-R scores and convergent findings across the diagnostic instruments. PTSD was therefore treated as the main study outcome, whereas anxiety, depressive manifestations, sleep disturbance, and medication use were considered descriptive contextual variables rather than independent endpoints.

## **Materials and Methods**

This research was designed as a single-arm, cross-sectional study focused strictly on an initial diagnostic phase to ascertain the participants' baseline emotional and psychological state. The study was conducted at the Center for Ukrainian Refugees "Healthy City" in the city of Bălți (Republic of Moldova). Participants were recruited from the population residing at the center. Inclusion criteria required participants to be Ukrainian refugees, aged between 25 and 35 years, and to have documented exposure to a traumatic event posing a direct threat of death or physical integrity related to the war. Exclusion criteria included severe psychotic disorders, current substance use disorder, acute suicidal risk, severe cognitive impairment, and inability to participate in the counseling sessions due to medical or psychiatric instability. The sample consisted of 20 participants, mostly women, which represents a limitation in terms of the generalizability of the results (Table 2). To manage potential drop-outs, the study planned to use weekly reminder

contacts, flexible scheduling, and make-up sessions. However, all 20 participants successfully completed the diagnostic assessments. All participants provided written informed consent prior to participation. The study protocol was reviewed and approved by the Ethics Committee of the State University of Medicine and Pharmacy “Nicolae Testemițanu” (Chișinău, Republic of Moldova), Protocol No. 12/34 dated 15 March 2023. The study was conducted in accordance with the principles of the Declaration of Helsinki. Any methodological adjustments were aligned with the findings at each stage of the study.

*Table 2 - Descriptive characteristics of study participants*

<b>Characteristic</b>	<b>Value</b>
Sex (Female/Male)	16/4
Age (years)	25-35 (Mean: 29.4 ± 2.8)
Legal status	Refugee (citizens of Ukraine)
Time since traumatic event	More than 1 month; the traumatic experience was primarily linked to events beginning in February-March 2022
Comorbidities	Depression (n = 8), anxiety symptoms (n = 7), sleep disturbance (n = 9), somatic stress complaints (n = 5), no documented comorbidity (n = 2)*
Concomitant medication	None (n = 10), anxiolytics/sedative-hypnotics (n = 3), antidepressants (n = 4), analgesics or symptomatic medication for stress-related complaints (n = 5)*

*Source:* compiled by the authors.

At the ascertainment phase, the diagnosis of PTSD was carried out using two diagnostic scales: the “Impact of event scale” (Horowitz et al., 1979) and the “Mississippi scale for combat-related PTSD” (Keane et al., 1988). Although the Mississippi Scale was originally developed for combat-related PTSD, its use in this study was justified because the participants experienced direct, prolonged exposure to active military hostilities and war-zone conditions, which closely mirror combat trauma. Both scales were administered using validated, culturally adapted Ukrainian and Russian language versions to accommodate the participants' native languages. Standardized scoring procedures were applied. For the Mississippi Scale, an established clinical cut-off score was utilized to identify significant PTSD symptoms, while the IES-R used standard cut-offs across its subscales to confirm the diagnosis and assess severity.

Based on the descriptive diagnostic results, the critical need for psychological intervention was established, leading to the formulation of recommendations for the quality use of CBT-based support.

## Results

### *PTSD symptoms in a sample of Ukrainian refugees in Moldova*

PTSD is a serious mental condition that occurs as a result of traumatic events that have caused intense fear, helplessness, or terror. It has a significant impact on a person's daily life, limiting social and professional activities. The causes of PTSD were related to events that went beyond the normal human experience and were perceived as a threat to life or physical integrity. Such events included military operations and armed conflicts, in which combatants, military personnel and civilians faced traumatic situations leading to serious mental consequences. Physical or sexual abuse was also one of the causes of the disorder, since people who had this experience, especially in childhood, had an increased risk of developing PTSD (El Founti Khsim et al., 2022). In addition, serious accidents such as car accidents, work accidents and other life-threatening events often provoked the development of the disorder. Natural and man-made disasters, such as earthquakes, floods, and fires, also caused severe stress and could have a long-term negative impact on a person's mental state (Tahernejad et al., 2023; Messina, 2025).

In particular, PTSD has caused a number of serious problems in various areas of life. Mentally, this has led to an increased risk of depression, anxiety disorders, and substance abuse (Bisson et al., 2015; Roberts et al., 2022). Physically, PTSD can worsen overall health, increase the risk of cardiovascular disease, and cause sleep disturbances (Kovalenko et al., 2023; Hundertailo, 2024). It also affected social relationships, causing difficulties in communicating with family and friends, social isolation and problems in professional activities, including decreased performance, increased fatigue and difficulty concentrating (Patrinichi, 2022). For example, after returning from a war zone, veterans experienced difficulties in adjusting to civilian life due to repetitive memories, emotional detachment, and increased anxiety. Victims of violence often faced constant fear, isolation and problems with trust in people, which are characteristic symptoms of PTSD. Such manifestations indicate a deep psycho-emotional traumatic experience that requires qualified psychological assistance. In addition, those affected by serious accidents may have developed a fear of travel and panic attacks that limited daily activities, including social isolation, reduced quality of life, and difficulty performing professional duties (Ahsan et al., 2023). In general, PTSD is a complex mental condition that requires timely detection and effective treatment.

PTSD is a complex and multifaceted psychological condition that arises as a delayed reaction to extremely stressful or life-threatening experiences

(Vakulyk, 2026; Efremov, 2026b; Stankovska et al., 2015). It is characterized by a range of emotional, cognitive, and behavioral symptoms that significantly affect an individual's psychological well-being and social functioning. Despite the rapid advancement of modern science and technology, the expansion of artificial intelligence, and the exploration of outer space, humanity continues to struggle with the psychological consequences of its own progress. In today's world, people are constantly exposed to socio-economic instability, armed conflicts, natural disasters, pandemics, and existential fears, all of which contribute to the rising prevalence of traumatic experiences (Asadzadeh et al., 2020). The key features of PTSD include intrusive memories of the traumatic event, nightmares, flashbacks, hyperarousal, emotional numbness, and avoidance of reminders related to the trauma. These symptoms may manifest in both acute and chronic forms and can persist for months or even years after the event. The condition affects not only combat veterans and disaster survivors but also civilians who have experienced violence, abuse, displacement, or other severe stressors. In many cases, the disorder leads to depression, anxiety, trust issues, difficulty concentrating, and disturbances in interpersonal relationships (Doehrmann et al., 2025; Efremov, 2026a; Messina et al., 2026).

Historically, PTSD has undergone significant evolution in terms of its recognition, terminology, and theoretical interpretation. The earliest documented descriptions of trauma-related symptoms date back to the late XIX century. During the industrial revolution in England, physicians observed cases of "nervous shock" in accident victims. In the United States, during the Civil War, similar symptoms were described as melancholia and mild psychosis caused by disappointment and longing for home. The German psychiatrist Hermann Oppenheim contributed greatly to early scientific understanding by describing "traumatic neurosis" and emphasizing the combined effect of psychological and physical trauma on the nervous system.

The XX century marked a crucial period in the development of trauma studies, particularly during and after the two World Wars. Soldiers exposed to new, more destructive weapons and large-scale violence were found to suffer from severe psychological consequences, often referred to as "shell shock" or "war neurosis". Later, researchers began to identify similar symptoms among civilians affected by natural and man-made disasters, including survivors of concentration camps and the atomic bombings in Japan. These experiences highlighted the profound impact of psychological trauma on the human psyche, regardless of the cause or context. The recognition of PTSD as a distinct clinical diagnosis came in the latter half of

the XX century. With the introduction of diagnostic classifications, particularly in the American DSM-III, the condition was officially defined and categorized. This marked a shift from viewing trauma as a temporary reaction to recognizing it as a long-term psychological disorder that requires professional intervention. Since then, research has expanded to explore the causes, risk factors, neurobiological mechanisms, and effective therapeutic approaches for treating the condition. Today, PTSD remains one of the most widely studied mental health issues due to its prevalence and impact. Advances in neuroscience, clinical psychology, and psychotherapy have improved our understanding of how trauma affects the brain and behavior. At the same time, there is growing awareness of the need for accessible mental health services, especially for vulnerable populations such as refugees, survivors of violence, and those living in conflict zones (Peconga & Høgh Thøgersen, 2020). Ultimately, understanding the nature and features of PTSD is essential for developing effective support systems and promoting psychological resilience in the face of adversity.

When post-traumatic stress disorder occurs, individuals develop a characteristic cluster of physiological, intellectual, emotional, and behavioral symptoms. Addressing these complex conditions requires structured psychological assistance, which generally proceeds through three main stages: establishing a safe atmosphere of contact, actively working with traumatic memories and experiences, and gradually reintegrating the individual into everyday life.

While various therapeutic modalities are recognized for trauma treatment, including Gestalt therapy and psychodynamic psychotherapy, Cognitive Behavioral Therapy (CBT) forms the specific theoretical foundation for the intervention model utilized in this study. By focusing on targeted techniques such as the desensitization and processing of traumatic experiences, this CBT-based framework directly informs the “Return to Life” protocol. This protocol is proposed as the primary intervention to alleviate the specific post-traumatic symptoms identified in the refugee sample.

### *Baseline diagnostic results*

The empirical findings reported in this section refer exclusively to the baseline (ascertaining) assessment. No intervention phase, control phase, or post-intervention measurements were completed within this pilot project. Therefore, the results should be interpreted as descriptive indicators of symptom burden and counseling need rather than as evidence of counseling effectiveness. Accordingly, the analysis focused on the initial diagnostic

assessment and on the translation of these findings into practice-oriented recommendations for future trauma-focused intervention studies.

The Center for Refugees from Ukraine “Healthy City”, was chosen as the basis for the experimental study. The experiment involved 20 citizens of Ukraine with refugee status, mostly women. Age category: from 25 to 35 years old. The ascertaining experiment is based on the diagnosis of post-traumatic stress disorder in the participants of the experiment using the “Impact of event scale” (Horowitz et al., 1979) and the “Mississippi scale for combat-related PTSD” (Keane et al., 1988).

Diagnosis at the ascertaining stage began with a structured clinical interview based on the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria. During this interview, clinical characteristics including symptom duration, preexisting comorbidities, and current medication usage were also recorded. All participants met criterion A, which indicates exposure to a traumatic event related to war and hostilities in the homeland that posed a direct threat to life or physical integrity. The reported reactions included fear, horror, and helplessness. Criterion A was therefore present in 100% of the sample and provided the basis for continuing the assessment of the remaining PTSD criteria.

Criterion B (persistent re-experiencing of the traumatic event) was met by 15 participants (75%). Re-experiencing manifested as disturbing dreams, intrusive images and thoughts, and intense emotional distress in situations that reminded participants of the traumatic event. Criterion C (avoidance of stimuli associated with trauma) was also met by 15 participants (75%). Participants described avoiding conversations about the traumatic event, emotional detachment from other people, and a diminished sense of future perspective.

Criterion D (persistent symptoms of increased arousal) was met by 14 participants (70%). The predominant manifestations were irritability, anger outbursts, heightened anxiety and vigilance, constant expectation of threat, and difficulty concentrating. Criterion E (duration of symptoms longer than 1 month) was met by 15 participants (75%), with symptom duration in most cases extending from February-March 2022. Criterion F (clinically significant impairment in important areas of life) was met by 13 participants (65%). Reported impairments included refusal of further self-realization, low self-esteem, social isolation, negative perception of self and others, irritability, and, in rare cases, self-injurious behavior. The results are summarized in Table 3 and Figure 1.

Table 3 - Structured clinical interview coding framework and baseline frequencies for DSM-5 PTSD criteria

Criterion	Operational coding rule used in the interview	n	%
A	Direct war-related exposure involving threat to life or physical integrity, accompanied by fear, horror, or helplessness	20	100
B	Intrusive memories, nightmares, or marked distress in response to trauma reminders	15	75
C	Avoidance of trauma-related thoughts or conversations; emotional detachment	15	75
D	Hypervigilance, irritability, anger outbursts, or concentration difficulties	14	70
E	Persistence of trauma-related symptoms for more than 1 month	15	75
F	Clinically significant impairment in social, personal, or everyday functioning	13	65

Source: compiled by the authors based on DSM-5 diagnostic criteria.

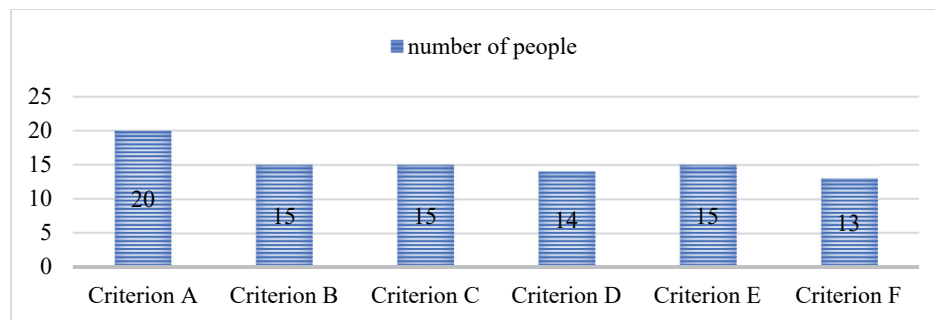


Figure 1 - Baseline frequency of PTSD diagnostic criteria identified in the structured clinical interview

Source: compiled by the authors.

The structured clinical interview therefore documented a substantial baseline burden of post-traumatic symptomatology: after universal endorsement of criterion A, between 65% and 75% of participants met each of criteria B-F. These frequencies support the conclusion that the sample required further trauma-focused psychological assessment and support (Table 4, Figure 1).

On the Mississippi Scale, 15 participants (75%) fell within the PTSD range, 3 (15%) showed elevated but subthreshold symptom burden, and 2 (10%) remained in the low-symptom range. Because higher Mississippi scores indicate greater trauma severity, these groupings were used as descriptive severity categories rather than as separate clinical diagnoses. The predominance of the PTSD-range category supports the interpretation that clinically meaningful trauma-related distress was widespread in the study sample.

Table 4 - Mississippi Scale categories and interpretive basis at baseline

Category	Interpretive basis	n	%
Good adaptation	Low symptom burden; below the study clinical threshold	2	10
Impaired adaptation	Elevated symptoms but below the PTSD threshold	3	15
PTSD range	Symptoms at or above the clinical threshold used in the study	15	75
Total	-	20	100

Source: compiled by the authors based on Keane et al. (1988).

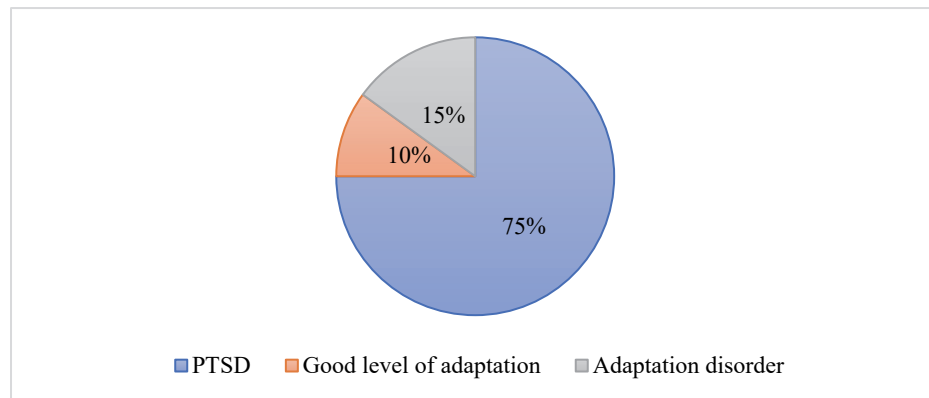


Figure 2 - Baseline distribution of Mississippi Scale categories in the sample

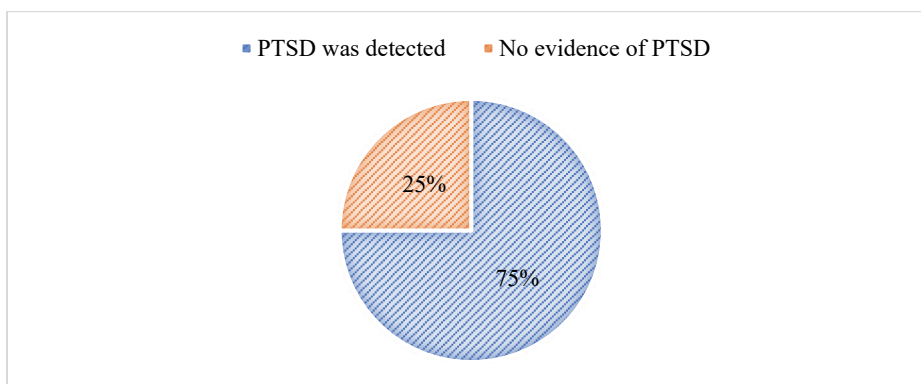
Source: compiled by the authors.

The IES-R was then used to summarise symptom intensity across the domains of intrusion, avoidance, and hyperarousal. Given the small sample and the refugee context, individual item profiles were not reported. Instead, only aggregate descriptive indices were retained in the manuscript in order to minimise re-identification risk. Table 5 and Figure 3 therefore present group-level IES-R summaries only.

Table 5 - Aggregate IES-R scores at baseline (group-level reporting)

Measure	Mean $\pm$ SD	Median	Range
Intrusion	26.70 $\pm$ 4.04	28.5	20-31
Avoidance	27.70 $\pm$ 4.04	29.0	21-31
Hyperarousal	25.05 $\pm$ 3.71	25.0	20-30
IES-R total	79.45 $\pm$ 11.30	84.0	61-90

Source: compiled by the authors based on Horowitz et al. (1979).



*Figure 3 - Baseline distribution of participants above and below the IES-R study threshold*  
 Source: compiled by the authors.

The IES-R results were consistent with the preceding assessments. The mean scores were  $26.70 \pm 4.04$  for intrusion,  $27.70 \pm 4.04$  for avoidance, and  $25.05 \pm 3.71$  for hyperarousal. The mean total IES-R score was  $79.45 \pm 11.30$  (median = 84.0; range: 61-90). Using the study threshold, 15 of 20 participants (75%) showed a score pattern consistent with clinically significant post-traumatic stress symptoms. Taken together, the baseline interview and scale results indicate pronounced counseling needs in this refugee sample.

## Discussion

Consistent with the high levels of avoidance, intrusion, and hyperarousal observed in our sample, external evidence identifies CBT as one of the most effective treatments for PTSD and complex PTSD. This therapeutic approach is based on changing negative thought patterns that affect a person's emotional state and behavior. In our sample, participants exhibited significant emotional distress and persistent repetition of traumatic experiences. For such cases, the literature indicates that CBT helps patients understand the relationship between thoughts, emotions, and behavioral responses, gradually reducing the impact of traumatic memories. Therefore, to address the specific symptoms of increasing agitation and avoidance noted in 70-75% of our respondents, we recommend the integration of main CBT techniques, which include cognitive restructuring, exposure therapy, training of emotion regulation skills, and working with triggers that trigger symptoms of the disorder.

The intervention follows a standardized six-week protocol delivered primarily in weekly 90-minute group sessions to foster peer support, supplemented by optional 45-minute individual sessions. To maximize engagement, the program is culturally adapted and delivered in the participants' native languages (Ukrainian or Russian), and it operates alongside concurrent psychiatric medication management and social support services. Treatment adherence is monitored via patient homework checklists and clinician logs, with all providers required to attend weekly clinical supervision. The protocol systematically progresses week by week: it begins with assessment and psychoeducation (Session 1), moves to stabilization and emotion regulation using relaxation and emotional diaries (Session 2), introduces cognitive restructuring to replace negative trauma-related beliefs (Sessions 3 and 4), applies exposure therapy to safely confront fears in a controlled environment (Session 5), and concludes with relapse prevention and skill-building for social reintegration (Session 6).

The use of CBT among survivors of war, violence or natural disasters helps to reduce anxiety, depression, emotional numbness and avoidance (Puhach et al., 2026; Romash et al., 2022). It is especially important to use CBT among military personnel and veterans, who often face the consequences of hostilities, which allows to rethink events and reduce feelings of guilt and shame. Group therapy for veterans helps to share experiences and create a supportive environment that reduces social isolation (Fedorenko & Stasiuk, 2026; Sorokowska et al., 2018; Elberg et al., 2026). Particular attention was paid to the study of the impact of PTSD on medical professionals, since specialists were often under constant stress, which increased the likelihood of developing this disorder. Research by Lu et al. (2021) showed that healthcare workers working on the frontline of the COVID-19 response had a significant risk of developing PTSD. High levels of stress, constant contact with seriously ill patients, fear of infection, limited opportunities for rest created favorable conditions for the occurrence of mental disorders. In addition, the study found that many doctors avoided seeking psychological help due to the stigma associated with mental disorders in the professional environment.

Similar results were obtained by Ferdohleb (2022), who studied the level of emotional burnout among specialists who regularly came into contact with injured patients. The author noted that prolonged exposure to high-stress environments led to the development of occupational exhaustion, which was often accompanied by symptoms of PTSD. A particularly high level of burnout was observed among doctors working in intensive care units, psychiatric hospitals, and military rehabilitation centers. The study emphasized that constant interaction with patients who had experienced

traumatic experiences contributed to the emergence of the so-called “secondary traumatization”, when medical professionals began to experience other people’s traumas as their own, which eventually led to the development of PTSD (Murray et al., 2020). The results obtained were important for the study, as these results highlighted the need to develop specific psychological support programs for health professionals. The importance of preparing future specialists to work in stressful situations and teaching them methods of psychological self-defense was also demonstrated. The implementation of PTSD prevention strategies among healthcare professionals, such as regular psychological consultations, support groups, stress management training, and improved working conditions, could significantly reduce the risk of burnout and improve the quality of professional performance (Bisson et al., 2021; Council of Europe, 2023).

Civilians affected by hostilities also need special attention. People who have experienced destruction, loss of loved ones, or forced displacement often experience severe anxiety, fear, and depression (Danylova, 2024; Negay et al., 2022). For them, the most useful are methods of stabilizing the emotional state, such as deep breathing techniques, progressive muscle relaxation and psychoeducation on the topic of PTSD and ways to overcome it. An important component is the “safe place” technique, which helps patients create a mental space that helps reduce anxiety. For example, a woman who survived the shelling was able to visit crowded places after a CBT course without panic attacks thanks to these techniques. Children and adolescents who have experienced traumatic events often show symptoms of PTSD due to sleep problems, aggressive behavior, and learning difficulties (Bastien et al., 2020; Lewis et al., 2020; Taylor Miller et al., 2021). Play therapy and cognitive-behavioral techniques in the form of fairy tale therapy are especially effective for them. It is also important to involve parents in the therapy process, which helps to create a stable environment for the child (Mavranzouli et al., 2020a). Studies have shown that children who received CBT in the form of art therapy coped better with emotions and adapted to social conditions (Schnitzer et al., 2021). For example, a 9-year-old boy who lost his parents during the war began to openly talk about his experiences after receiving CBT, which greatly eased his condition.

Specialists and coaches who work with people with PTSD must take into account the individual characteristics of each patient. One of the main recommendations is to use gentle exposure techniques to help patients face fears gradually, without excessive emotional overload. In addition, clients should be taught self-help skills, such as keeping an emotional diary and using breathing techniques. Professionals must also provide support and guidance to clients at all stages of therapy, especially those who have

experienced loss or abuse. For example, a psychologist who worked with a veteran first helped stabilize the emotional state, and then moved on to working with traumatic memories, which helped to avoid excessive stress (Cloitre, 2020). Overall, studies have confirmed the high effectiveness of CBT in treating PTSD symptoms among different populations. Veterans, civilians, and children who underwent CBT showed reduced anxiety, fear, and avoidance, as well as improved social adjustment. The effectiveness of CBT is due to its individualized approach, which allows you to adapt the methods to the needs of specific groups of the population. It is also important to ensure that mental health professionals are continuously educated and trained to improve therapies and increase their effectiveness. Cognitive-behavioral therapy remains one of the most effective tools in the field of psychological assistance, as it allows people who have experienced traumatic events to regain control of their lives, improve the quality of their emotional response and gradually return to normal functioning (Mavranezouli et al., 2020b; Marku et al., 2024; Abetova et al., 2023).

To reduce the level of PTSD in refugees in Moldova, it is necessary to introduce modern methods of psychological rehabilitation, educational courses for professionals and adopt the effective experience of other countries. One of the key areas is the training of doctors, psychologists and social workers in trauma-focused cognitive behavioral therapy, which is one of the most effective treatments for PTSD. Also important is a course in eye movement desensitisation and reprocessing (RemotEMDR, 2025), a method that is actively used in the United States and Europe to reduce the symptoms of trauma (Barawi et al., 2020). Israel's experience demonstrates the effectiveness of crisis intervention programs, which involve preparing military and civilians to cope with stressful situations before these situations arise. Such training can be adapted for the Moldovan military and rescuers. In the UK, the Trauma Risk Management program successfully detects signs of PTSD among the military and provides early support (Vianello et al., 2020).

In clinics in the Netherlands and the United Kingdom, this method is used to treat people who have experienced sexual abuse or abuse as children. Psychodrama, as a form of group psychotherapy, allows you to work through traumatic experiences through role-playing situations, is actively used in Germany, Austria and Latin America for the rehabilitation of victims of domestic violence. Body-centered therapy, which focuses on working with bodily sensations and muscle blocks, has proven to be effective in the European Union, particularly in Switzerland and Sweden, where it is used in rehabilitation programs for migrants, refugees and victims of natural disasters (Buja et al., 2020). These methods are increasingly being integrated

into interdisciplinary assistance programs, which helps to achieve sustainable results in overcoming post-traumatic conditions and returning people to a full life.

It is also worth introducing distance courses for veterans and civilians, including self-help programs based on CBT. In the UK, there are online platforms such as STOP-PTSD that can be adapted to the Moldovan realities (Ehlers, 2023). The use of group techniques, such as “Seeking safety”, should be expanded, which help to combine work with trauma with anxiety disorders. In addition, Moldova can adopt the experience of the Scandinavian countries, where art therapy, animal therapy and body-oriented therapy methods are actively used to reduce anxiety and stabilize the emotional state. In general, an effective fight against PTSD requires an integrated approach: training specialists, adapting international methods and developing affordable psychological assistance programs for all categories of the population.

## **Conclusions**

The diagnostic results of this study indicate a high prevalence of PTSD among the sampled Ukrainian refugees, with 75% of the participants meeting the diagnostic criteria based on standardized assessments. These findings confirm the profound psychological impact of war-related trauma on displaced individuals and highlight a critical need for targeted psychological support. While this study focused exclusively on the initial ascertaining phase to evaluate baseline trauma-related symptoms, the high rate of identified PTSD underscores the necessity for mental health professionals in Moldova to develop and implement structured intervention programs. Based on the literature reviewed, evidence-based approaches such as cognitive-behavioral therapy (CBT) represent a highly relevant framework for future clinical interventions with this demographic.

In Moldova, evidence-based methods of psychotherapy help to overcome PTSD, which is implemented at the Mental Health Center Centrul Comunitar de Sănătate Mintală for emotional support from family and friends. The government’s significant steps include ensuring access to psychiatric and psychological services through a network of community mental health centers and organizing rehabilitation programs at specialized institutions such as the Diomid Herman Institute of Neurology and Neurosurgery in Chisinau and the Clinical Psychiatric Hospital.

The primary limitation of this study is the small, localized sample of 20 female participants residing in a single refugee center in Moldova, which

strictly limits the generalizability of the findings to broader populations. Prospects for further research include empirically testing the effectiveness of the proposed “Return to Life” CBT program through formative and control experiments, as well as expanding the sample size to validate these initial diagnostic findings across diverse refugee demographics.

### **Funding details**

This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

### **Disclosure statement**

The authors report there are no competing interests to declare.

### **References**

- Abetova, A.A., Raspopova, N.I., Yessimov, N.B., Prilutskaya M.V., Cherchenko, N.N., & Kachiyeva, Z.S. (2023). Clinical and genetic features of personalized antipsychotic therapy of patients with paranoid schizophrenia of the Kazakh ethnic group in the republic of Kazakhstan. *Georgian Medical News*, 342(9), 80-90. <https://pubmed.ncbi.nlm.nih.gov/37991961/>.
- Ahsan, A., Nadeem, A., Habib, A., Basaria, A.A.A., Tariq, R., & Raufi, N. (2023). Post-traumatic stress disorder following childbirth: A neglected cause. *Frontiers in Global Women's Health*, 4, 1273519. Doi: 10.3389/fgwh.2023.1273519.
- Asadzadeh, L., Jafari, E., Kharaghani, R., & Tareman, F. (2020). Effectiveness of midwife-led brief counseling intervention on post-traumatic stress disorder, depression, and anxiety symptoms of women experiencing a traumatic childbirth: A randomized controlled trial. *BMC Pregnancy and Childbirth*, 20(1), 142. Doi: 10.1186/s12884-020-2826-1.
- Barawi, K.S., Lewis, C., Simon, N., & Bisson, J.I. (2020). A systematic review of factors associated with outcome of psychological treatments for post-traumatic stress disorder. *European Journal of Psychotraumatology*, 11(1), 1774240. Doi: 10.1080/20008198.2020.1774240.
- Bastien, R.J.B., Jongsma, H.E., Kabadayi, M., & Billings, J. (2020). The effectiveness of psychological interventions for post-traumatic stress disorder in children, adolescents and young adults: A systematic review and meta-analysis. *Psychological Medicine*, 50(10), 1598-1612. Doi: 10.1017/S0033291720002007.
- Bisson, J.I., Ariti, C., Cullen, K., Kitchiner, N., Lewis, C., Roberts, N.P., Simon, N., Smallman, K., Addison, K., Bell, V., Brookes-Howell, L., Cosgrove, S., Ehlers, A., Fitzsimmons, D., Foscari-Craggs, P., Harris, S.R.S., Kelson, M., Lovell, K., McKenna, M., McNamara, R., Nollett, C., Pickles, T., & Williams-Thomas, R. (2022). Guided, internet based, cognitive behavioural therapy for post-traumatic stress disorder: Pragmatic, multicentre, randomised controlled non-inferiority trial (RAPID). *BMJ*, 377, e069405. Doi: 10.1136/bmj-2021-069405.

- Bisson, J.I., Cosgrove, S., Lewis, C., & Robert, N.P. (2015). Post-traumatic stress disorder. *BMJ*, *351*, h6161. Doi: 10.1136/bmj.h6161.
- Bisson, J.I., Wright, L.A., Jones, K.A., Lewis, C., Phelps, A.J., Sijbrandij, M., Varker, T., & Roberts, N.P. (2021). Preventing the onset of post traumatic stress disorder. *Clinical Psychology Review*, *86*, 102004. Doi: 10.1016/j.cpr.2021.102004.
- Bodrug-Lungu, V., Toma, N., & Toma, S. (2023). Sociocultural trauma among marginalized families in Moldova. In T. Glebova & C. Knudson-Martin (Eds.), *Sociocultural Trauma and Well-Being in Eastern European Family Therapy* (pp. 59-73). Springer. Doi: 10.1007/978-3-031-29995-7\_5.
- Buja, A., Vianello, F.A., Zaccagnini, F., Pinato, C., & Maculan, P. (2020). Health issues in female Moldovan migrants in a north-eastern Italian region. *European Journal of Public Health*, *30*(5), 166-751. Doi: 10.1093/eurpub/ckaa166.751.
- Cloitre, M. (2020). ICD-11 complex post-traumatic stress disorder: Simplifying diagnosis in trauma populations. *British Journal of Psychiatry*, *216*(3), 129-131. Doi: 10.1192/bjp.2020.43.
- Colesnic, C. (2024). Post-traumatic stress disorder and its influence on different brain structures. In S. Groppa (Ed.), *10th International Medical Congress for Students and Young Doctors* (pp. 196). Continental Grup.
- Council of Europe. (2023). *12 psychologists from the National Centre of Psycho-Pedagogical Assistance completed a training of trainers on trauma treatment techniques and prevention of burnout*. <https://go.coe.int/m9IPd>.
- Danylova, T. (2024). War, mental health and philosophy as intellectual therapy. *Humanities Studios: Pedagogy, Psychology, Philosophy*, *12*(1), 89-96. Doi: 10.31548/hspedagog15(1).2024.89-96.
- Doehrmann, A., Bibb, S.A., Kreutzer, K.A., & Gorka, S.M. (2025). Trauma type and posttraumatic stress symptoms in youth the mediating role of intolerance of uncertainty. *Journal of Nervous and Mental Disease*, *213*(8), 196-201. Doi: 10.1097/NMD.0000000000001837.
- Efremov, A. (2026a). Age-Specific Mental Health Profiles of Combat Veterans: Post-Traumatic Stress Disorder and Related Disorders. *Journal of Rational - Emotive and Cognitive - Behavior Therapy*, *44*(1), 4. Doi: 10.1007/s10942-025-00637-7.
- Efremov, A. (2026b). Integration of AI and Neuroscience: New Methods in Studying the Causes of Mental Disorders. *International Journal of Psychiatry in Medicine*. Doi: 10.1177/00912174261428872.
- Ehlers, A., Wild, J., Warnock-Parkes, E., Grey, N., Murray, H., Kerr, A., & Clark, D.M. (2023). Therapist-assisted online psychological therapies differing in trauma focus for post-traumatic stress disorder (STOP-PTSD): A UK-based, single-blind, randomised controlled trial. *Lancet Psychiatry*, *10*(8), 608-622. Doi: 10.1016/S2215-0366(23)00181-5.
- El Founti Khsim, I., Martínez Rodríguez, M., Riquelme Gallego, B., Caparros-Gonzalez, R.A., & Amezcua-Prieto, C. (2022). Risk factors for post-traumatic stress disorder after childbirth: A systematic review. *Diagnostics*, *12*(11), 2598. Doi: 10.3390/diagnostics12112598.

- Elberg, D., Sharma, P., Fernández Alvarez, J., Shen, K., & Tzur Bitan, D. (2026). Mental illness attributions and their association with psychotherapy change process expectations. *Journal of Nervous and Mental Disease*. Doi: 10.1097/NMD.0000000000001868.
- Fedorenko, Yu., & Stasiuk, V. (2026). Existential challenges of war: The role of spirituality, meaning of life and value orientations in the psychological recovery of military personnel who have participated in combat operations. *The Bulletin of National Defence University of Ukraine*, 21(1), 115-121. Doi: 10.33099/2617-6858-26-21-1-115-121.
- Ferdohleb, A. (2022). The Pro-QOL questionnaire: Quality of professional life among nurses. *Moldovan Journal of Health Sciences*, 29(1), 85.
- Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of event scale: A measure of subjective stress. *Psychosomatic Medicine*, 41(3), 209-218. Doi: 10.1097/00006842-197905000-00004.
- Hundertailo, Yu. (2024). Prospects for promotion psychohygiene practices during war time. *Scientific Studios on Social and Political Psychology*, 30(2), 46-52. Doi: 10.61727/sssppj/2.2024.46
- Keane, T.M., Caddell, J.M., & Taylor, K.L. (1988). Mississippi scale for combat-related PTSD: Three studies in reliability and validity. *Journal of Consulting and Clinical Psychology*, 56(1), 85-90. Doi: 10.1037/0022-006x.56.1.85.
- Kovalenko, I., Berezan, O., & Pomohaibo, V. (2023). Post-traumatic stress disorder for military servants: Theory, research and treatment. *Psychology and Personality*, 13(2), 263-278. Doi: 10.33989/2226-4078.2023.2.288310.
- Lewis, C., Roberts, N.P., Gibson, S., & Bisson, J.I. (2020). Dropout from psychological therapies for post-traumatic stress disorder (PTSD) in adults: Systematic review and meta-analysis. *European Journal of Psychotraumatology*, 11(1), 1709709. Doi: 10.1080/20008198.2019.1709709.
- Lu, M.Y., Ahorsu, D.K., Kukreti, S., Strong, C., Lin, Y.H., Kuo, Y.J., Chen, Y.P., Lin, C.Y., Chen, P.L., Ko, N.Y., & Ko, W.C. (2021). The prevalence of post-traumatic stress disorder symptoms, sleep problems, and psychological distress among COVID-19 frontline healthcare workers in Taiwan. *Frontiers in Psychiatry*, 12, 705657. Doi: 10.3389/fpsyt.2021.705657.
- Marku, E., Miska, X., & Vyshka, G. (2024). Impact of Stress Perception Among Nursing Students in Albania During the COVID-19 Pandemic. *Journal of Research and Health*, 14(6), 547-554. Doi: 10.32598/JRH.14.6.2457.1.
- Mavranezouli, I., Megnin-Viggars, O., Daly, C., Dias, S., Stockton, S., Meiser-Stedman, R., & Pilling, S. (2020a). Research review: Psychological and psychosocial treatments for children and young people with post-traumatic stress disorder: A network meta-analysis. *Journal of Child Psychology and Psychiatry*, 61(1), 18-29. Doi: 10.1111/jcpp.13094.
- Mavranezouli, I., Megnin-Viggars, O., Grey, N., Bhutani, G., Leach, J., Daly, C., Dias, S., Welton, N.J., Katona, C., El-Leithy, S., Greenberg, N., Stockton, S., & Pilling, S. (2020b). Cost-effectiveness of psychological treatments for post-traumatic stress disorder in adults. *PloS One*, 15(4), e0232245. Doi: 10.1371/journal.pone.0232245.

- Messina, A. (2025). Dissociative symptoms in schizophrenia: a connection to inflammatory processes. *Middle East Current Psychiatry*, 32(1), 96. Doi: 10.1186/s43045-025-00593-z.
- Messina, A., Bella, F., Maccarone, G., Avincola, G., & Signorelli, M.S. (2026). Astrocyte-mediated hippocampal damage in the pathogenesis of dysexecutive syndrome following COVID-19: A narrative review. *Journal of Psychiatric Research*, 194, 164-173. Doi: 10.1016/j.jpsychires.2026.01.007.
- Murray, H., Grey, N., Wild, J., Warnock-Parkes, E., Kerr, A., Clark, D.M., & Ehlers, A. (2020). Cognitive therapy for post-traumatic stress disorder following critical illness and intensive care unit admission. *Cognitive Behaviour Therapist*, 13, e13. Doi: 10.1017/S1754470X2000015X.
- Negay, N.A., Altynbekov, K.S., Raspopova, N.I., Abetova, A.A., & Yessimov, N.B. (2022). Genetic predictors of schizophrenia and their features in individual ethnic populations (review article). *Georgian Medical News*, 331(10), 6-11. <https://pubmed.ncbi.nlm.nih.gov/36539123/>.
- Patrinichi, D. (2022). Post-traumatic stress disorder: A possible factor of migraine chronification. In S. Groppa (Ed.), *9th International Medical Congress for Students and Young Doctors* (pp. 195). Continental Grup.
- Peconga, E.K., & Høgh Thøgersen, M. (2020). Post-traumatic stress disorder, depression, and anxiety in adult Syrian refugees: What do we know? *Scandinavian Journal of Public Health*, 48(7), 677-687. Doi: 10.1177/1403494819882137.
- Puhach, S., Vizniuk, I., Paikus, M., Dolynnyi, S., & Dolynna, A. (2026). Psychological mechanisms and behavioural strategies for the social adaptation of military personnel in wartime. *The Bulletin of National Defence University of Ukraine*, 21(1), 97-106. Doi: 10.33099/2617-6858-26-21-1-97-106.
- RemotEMDR. (2025). About us. <https://www.remotemdr.com/about/>.
- Roberts, N.P., Lotzin, A., & Schäfer, I. (2022). A systematic review and meta-analysis of psychological interventions for comorbid post-traumatic stress disorder and substance use disorder. *European Journal of Psychotraumatology*, 13(1), 2041831. Doi: 10.1080/20008198.2022.2041831.
- Romash, I., Neyko, V., Romash, I., Dzivak, K., Gerych, P., Panchyshyn, M., Gerych, O., & Pustovoyt, M. (2022). Post-traumatic stress disorder as a nosological unit: Difficulties of the past and challenges of the future. *Scientific Studies on Social and Political Psychology*, 28(2). Doi: 10.33120/ssppj.vi50(53).596.
- Schnitzer, G., Holttum, S., & Huet, V. (2021). A systematic literature review of the impact of art therapy upon post-traumatic stress disorder. *International Journal of Art Therapy*, 26(4), 147-160. Doi: 10.1080/17454832.2021.1910719.
- Sorokowska, A., Groyecka, A., Karwowski, M., Frackowiak, T., Lansford, J.E., Ahmadi, K., Alghraibeh, A. M., Aryeetey, R., Bertoni, A., Bettache, K., Blumen, S., Błazejewska, M., Bortolini, T., Butovskaya, M., Cantarero, K., Castro, F. N., Cetinkaya, H., Chang, L., Chen, B.-B., Cunha, D., David, D., David, O. A., Dileym, F. A., Domínguez Espinosa, A. D. C., Donato, S., Dronova, D., Dural, S., Fialová, J., Fisher, M., Gulbetekin, E., Akkaya, A. H., Hilpert, P., Hromatko, I., Iafate, R., Iesyp, M., James, B., Jaranovic, J., Jiang, F., Kimamo, C. O.,

- Kjelvik, G., Koç, F., Laar, A., Lopes, F. A., Macbeth, G., Marcano, N. M., Martinez, R., Mesko, N., Molodovskaya, N., Moradi Qezeli, K., Motahari, Z., Mühlhauser, A., Natividade, J. C., Ntayi, J., Oberzaucher, E., Ojedokun, O., Omar-Fauzee, M. S. B., Onyishi, I. E., Paluszak, A., Pierce, J. D., Pillay, U., Portugal, A., Razumiejczyk, E., Realo, A., Relvas, A. P., Rivas, M., Rizwan, M., Salkičević, S., Sarmány-Schuller, I., Schmehl, S., Senyk, O., Sinding, C., Sorbring, E., Stamkou, E., Stoyanova, S., Šukolová, D., Sutresna, N., Tadinac, M., Tapanya, S., Teras, A., Ponciano, E. L. T., Tripathi, R., Tripathi, N., Tripathi, M., Uhryn, O., Yamamoto, M. E., Yoo, G., & Sorokowski, P. (2018). Global study of social odor awareness. *Chemical Senses*, *43*(7), 503-513. Doi: 10.1093/chemse/bjy038.
- Stankovska, G., Osmani, F., Pandilovska, S., & Dimitrovski, D. (2015). Association between puberty, bulimia nervosa and depression. *Bangladesh Journal of Medical Science*, *14*(4), 327-330. Doi: 10.3329/bjms.v14i4.19308.
- Tahernejad, S., Ghaffari, S., Ariza-Montes, A., Wesemann, U., Farahmandnia, H., & Sahebi, A. (2023). Post-traumatic stress disorder in medical workers involved in earthquake response: A systematic review and meta-analysis. *Heliyon*, *9*(1), e12794. Doi: 10.1016/j.heliyon.2023.e12794.
- Taylor Miller, P.G., Sinclair, M., Gillen, P., McCullough, J.E.M., Miller, P.W., Farrell, D.P., Slater, P.F., Shapiro, E., & Klaus, P. (2021). Early psychological interventions for prevention and treatment of post-traumatic stress disorder (PTSD) and post-traumatic stress symptoms in post-partum women: A systematic review and meta-analysis. *PloS One*, *16*(11), e0258170. Doi: 10.1371/journal.pone.0258170.
- Vakulyk, I. (2026). Psychosocial impact of war on Ukrainian youth: Analysis of resilience, social adaptation, and civic engagement. *Humanities Studios: Pedagogy, Psychology, Philosophy*, *14*(1), 52-66. Doi: 10.31548/hspedagog/1.2026.52.
- Vianello, F.A., Zaccagnini, F., Pinato, C., Maculan, P., & Buja, A. (2020). Health status of female Moldovan migrants to Italy by health literacy level and age group: A descriptive study. *BMC Public Health*, *20*(1), 1502. Doi: 10.1186/s12889-020-09582-9.