SMPP Studia Migracyjne Przegląd Polonijny

Migration Studies – Review of Polish Diaspora
Online First, http://www.ejournals.eu/Studia-Migracyjne/
DOI: 10.4467/25444972SMPP.24.005.19672

(Why?) Evidence-Based Treatments for War-Related Posttraumatic Stress Disorder

AGNIESZKA POPIEL[1]
ORCID: 0000-0001-9990-4971
Centrum Badań Klinicznych i Doskonalenia Psychoterapii, Instytut Psychologii, Uniwersytet SWPS

EWA PRAGŁOWSKA[2]
ORCID: 0009-0002-1783-6456
Klinika Terapii Poznawczo-Behawioralnej Uniwersytetu SWPS

BOGDAN ZAWADZKI[3]
ORCID: 0000-0002-6578-8412
Wydział Psychologii, Uniwersytet Warszawski

Abstract

Any war increases at least twice the prevalence of post-traumatic stress disorder (PTSD) in its victims. Post-traumatic stress disorder (PTSD) affects about 10% of car accident victims, half of the people who have experienced rape or war, and victims of violence. PTSD negatively affects the quality of life. It is associated with direct and indirect health costs. Any effort to treat and prevent PTSD with evidence-based methods is our obligation toward trauma victims and to professionals at an increased risk of job-related traumatization. In the paper, we will focus on three aspects. First – a rationale of decision making – the role of evidence in elaborating the intervention guidelines will be described. Second, an overview of evidence-based guidelines for the psychological help and for the diagnosis and treatment of PTSD will be presented, according to current NICE (National Institute of Care Excellence) and APA (American Psychological Association) and meta-analyses focusing on war-related trauma. The third part of the paper will be devoted to the prevention of PTSD in people who are exposed to professional, duty-related trauma – the data on the efficacy of preventive interventions together with a short description of the programs (on the example of "Effective performance under stress" program designed to prevent PTSD in firefighters and other professions).

Key words: PTSD, refugees, evidence-based, trauma-focused CBT, prevention

[1] Contact: apopiel@swps.edu.pl
[2] Contact: epraglowska@swps.edu.pl
[3] Contact: bogdan@psych.uw.edu.pl

Please cite as: Popiel, A., Pragłowska, E., Zawadzki, B. (2024). (Why?) Evidence-Based Treatments for War-Related Posttraumatic Stress Disorder, *Studia Migracyjne – Przegląd Polonijny*, Online First. DOI: 10.4467/25444972SMPP.24.005.19672.

Introduction

The emphasis on evidence-based medicine/psychotherapy is rooted in the idea that treatment decisions should be informed by the best evidence, rather than relying solely on tradition, intuition, or anecdotal experience. The goal is to provide patients (suffering from any disease or mental disorder) with the most effective and beneficial care based on the current state of scientific knowledge. In times of peace, providing evidence-based treatments is the goal of health policies attempting to find an equilibrium between scientific knowledge, availability of professional resources, and the cost-effectiveness of treatments. War ruins any equilibrium by a drastic increase in needs and a decrease in professional and material resources. Scientific evidence supporting the choice of treatments disappears especially when we speak about mental disorders and psychological treatments. In this paper, we argue that the knowledge about evidence-based treatments for war-related post-traumatic stress disorder is important as a basis for present and planning future interventions, given the number of people affected by war trauma directly and indirectly, and facing its consequences when war is over.

Forced migrants, as a result of conflict, are a population with a greatly elevated risk of mental health problems, including posttraumatic disorders. The war in Ukraine caused a multi-million wave of refugees. Some of them experienced the trauma of war related to a direct threat to life or violence. Despite research on psychological and pharmacological treatment methods that allowed to identify effective methods of treating PTSD, few people suffering from post-traumatic disorders receive evidence-based treatment, especially in regards to psychological treatment (psychotherapy). Several reasons can be identified. Within the health system – there is a lack of emphasis on psychological treatments of documented efficacy, and limited availability of professionals with appropriate skills. However, the organisation of help for war-traumatized populations is much broader than the health system. Search for help starts with noticing the problem and knowledge about where/who can provide professional treatment. So limited knowledge of aid organisers and of refugees – potential patients themselves can create a barrier to effective and recommended care. Therefore, the need for knowledge about possible consequences of traumatic events for mental health and the awareness of available and recommended psychological interventions is not limited to mental health professionals. It should be a part of general knowledge, like medical first aid.

In this paper, we will describe the main aspects of post-traumatic psychopathology, then a common ground for establishing the effectiveness of psychological and pharmacological treatments in research studies, and a summary of recommended treatments (state-of-the-art 2024) according to guidelines (that take into consideration methodologically sound studies. We will also refer to prevention issues that as such are underlined, but the available research is limited. The first study on the

efficacy of PTSD prevention which we referred to in the paper can be a source of reference in planning treatment and prevention strategies regarding migrant populations.

Trauma, PTSD, and mental disorders

"Post-traumatic stress disorder (PTSD) is a phenomenon of particular interest in the 21st century…Unfortunately, the present world situation is likely to give us many more opportunities to study ASD and PTSD" wrote, in 2004, Nancy Andreasen, a co-author of a diagnostic category and conceptual framework of PTSD in the diagnostic system DSM (Andreasen: 2004). Indeed, considering only the studies on war-affected zones in the XXI century they revealed that PTSD is prevalent in 28,5% of Syrian students (Yousef et al.: 2021), 35.9% of children in the Gaza Strip (Espie et al.: 2009), 23.2% of adults in Palestine, 48% among traumatized Cambodian children (Perkins, Ajeeb, Fadel, Saleh: 2018). It is enough to search any reliable database to find research with similar findings. About whom do these findings talk about – what does it mean to suffer from PTSD?

Psychopathology as a discipline of science on the border between psychology and medicine attempts to find common features in unique individual experiences of mental suffering. It gives them names (i.e. symptoms) and tries to find patterns of how they are grouped and under which conditions. The next step is establishing the border between experiencing some symptoms in normal life (the memory of the unexpected death of a loved person will always bring *sadness)* and a disorder (frequent, vivid, involuntary memories as *flashbacks* interrupt the daily activity, and the intensity of *sadness* is overwhelming) – setting the diagnostic criteria that may serve as an indication that treatment is necessary. To find a common language between clinicians, researchers and patients, the names are given to symptoms and disorders and clinical descriptions are published. The most common handbooks are the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM) and the International Classification of Diseases (ICD) by the World Health Organization. Referring to them enables studies on prevalence, course, treatments and prevention and is usually a starting point for a clinician in understanding PTSD.

Originally, in the DSM III R classification, the criterion indicating the traumatic nature of the stressor was: the catastrophic dimension of the event in which the person was a participant ("The person has experienced an event that is outside the range of usual human experience and that would be markedly distressing to almost anyone", APA: 1980). It seems, however, that the subjective assessment of the stressor is much more important than the objective one. It should be emphasized that both the concept of "trauma" and the "traumatic nature of the stressor" are controversial terms concerning mental life. While the word "trauma", referring to the violation of

the integrity of tissues under the influence of external factors, is not controversial in medicine, its use in psychology/psychiatry faces limitations.

Trauma, in a general sense, refers to a psychological, emotional, or physical response to an event or series of events that is distressing or disturbing. The nature of the event or events to trigger such distressing reactions has to relate to external danger – facing death, injuries, abuse – experiences including accidents, natural disasters, violence, abuse, or other life-threatening events. Such triggering events are described as **traumatic stressors.** Trauma often overwhelms an individual's ability to cope and may have long-lasting effects on mental and emotional well-being including **post-traumatic disorders** with PTSD (Post-traumatic stress disorder)

"War trauma" specifically refers to the psychological and emotional impact of exposure to the horrors and stresses of war. War trauma can affect individuals who have directly experienced combat, as well as those who have witnessed or been indirectly affected by war-related events. It encompasses a range of reactions, including post-traumatic stress disorder (PTSD), anxiety, depression, and other mental health challenges.

Trauma is more and more often diagnosed not as an "objectively" dramatic event, but as a terrifying life experience, confronting a person with a feeling of fear, helplessness, and horror. It is these emotions, the reaction of the individual, and not the "objective" dimension of the drama of the situation that makes the event traumatic (Brunet: 2007, Popiel, Pragłowska: 2008). Although the final common pathway of this reaction (in the psychological and physical/autonomic sense) results in a similar clinical picture (it means a diagnosis of PTSD) there are many different kinds of stressors and individual reactions to them. Experiencing bombing during the war — a man-made and unanticipated disaster that produced confrontation with the unexpected death of people, concomitant physical injuries, and the psychological terror that was intended — is indeed something outside "the normal human range". Experiencing a car crash is an accident, and therefore has a different impact than man-made malevolence; but still around 10% suffer from PTSD. First responders – rescue workers, medical doctors, and firefighters have chosen their job/service with foreknowledge of its risks, so the psychological impact is different (but still around 15% of emergency personnel (paramedics), 13% of rescue teams, 7% of firefighters and 5% of police officers will suffer (Torchalla, Strehlau: 2018).

The structure of the symptoms of PTSD is however not related to the type of experience lived. Suffering from PTSD means experiencing disturbing symptoms and impaired functioning associated with recurring memories of the event, flashbacks (that usually have content that is related to the type of trauma – like bombing, facing unexpected death), a state of chronic arousal (that's why PTSD is *a stress* disorder) outbursts of anger, sleep problems, and massive avoidance of stimuli that are associated with trauma (like not willing to speak about what happened, avoiding underground shelters, avoiding people who were present at that time and place

etc.). Thus, it is a disorder that negatively affects the quality of life. All these symptoms lead to a worse functioning of a person in many areas of life. The difficulty in diagnosing PTSD is very often associated with efforts to avoid any memories of the trauma. Talking about trauma is one of those painful memories that are recurrent and frightening. In many situations, post-traumatic stress disorder remains undiagnosed, because the patient, avoiding trauma memories, does not talk about them, but focuses on non-specific symptoms of low mood, and sleep disturbances. The empathy of helpers sometimes … does not help, because after such an obvious traumatic experience, observable changes in a person's behaviour seem justified. After a few initiatives of suggesting professional help at the beginning, with time, the situation stabilizes. Close ones see that a person has changed after surviving the bombing – and hope that "time will heal the wounds". Sometimes fortunately it is true, but in this paper, we focus on people for whom time does not bring changes but worsens the situation. It is therefore important to know the role of time in the dynamics of post-traumatic symptoms development.

Time matters

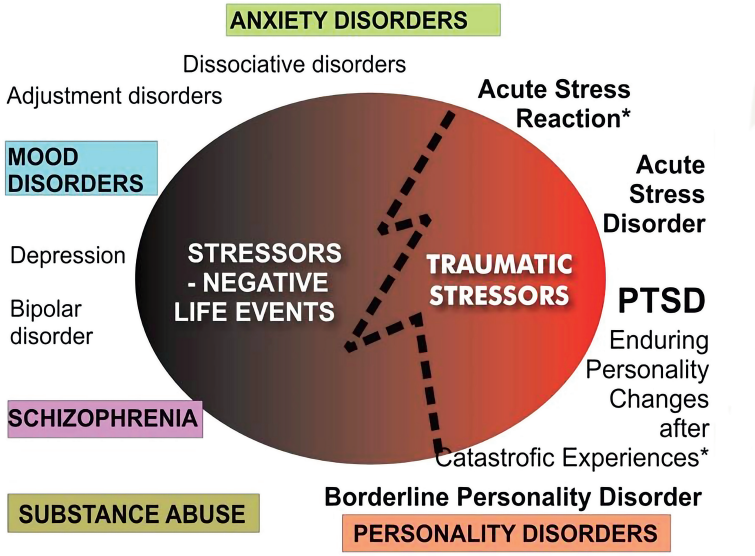
Isn't it normal to experience horror, arousal, anxiety, and nightmares right after the bombing? Certainly, it is. The same symptoms that motivate you to escape, stay alert, and not trust to some extent are adaptive. So right after the traumatic event, they are usually described as an *Acute stress reaction* (ICD-11: 2018) and they are **not** considered a mental health issue. At this stage, the only help that is most precious is the compassionate human attitude. In the World Health Organization (WHO: 2011) terms it is called *Psychological first aid* (a manual published in many languages on the webpage WHO). Taking care of a person's safety, physical health and basic living conditions are main goals at this stage. Only in the case of symptoms – behaviours that might put a person or others in danger – professional/medical (or specialized psychological) help may be needed. Variants of Psychological First Aid (PFA) manuals designed by psychologists describe a systematic set of helping actions involving: contact and engagement, safety and comfort, stabilization, information gathering, practical assistance, connection with social supports, information on coping support, and linkage with collaborative services. They aim to reduce initial post-trauma distress and support adaptive functioning (Ruzek et al.: 2007). In the majority of cases, this is enough because resilience in the face of adversities and trauma lets humanity survive and develop adequate coping through the ages of development. So gradual spontaneous recovery is expected. But when this "normal reaction to an abnormal situation" lasts longer than a month (a criterion for Acute stress disorder, DSM-5, APA: 2013) it suggests that the symptoms are stable, the PTSD diagnosis is possible, and the natural mechanisms of resilience require therapeutic support. Despite not receiving help, about 50% of people with persistent PTSD symptoms over two

years still have a chance of spontaneous remission (Kessler et al.: 2005). This confirms that time heals wounds, but for some the right method of therapy can make it not too long. Other people where this natural recovery has been impaired are still struggling with PTSD and face its consequences, not limited to a long-term disruption of functioning in the social world, including the family world but also the emergence of further disorders, somatic problems, addictions, elevated suicide risk, and finally permanent personality change (WHO: 1998; see Zawadzki, Popiel: 2012). Providing treatment at the right moment is essential to alleviate suffering and prevent further consequences in health, personal, professional and social life.

The psychopathological spectrum of trauma consequences is wider than PTSD. According to the diathesis-stress model of aetiology, depression is frequently triggered by a stressful life event like loss (of a relationship, or a person); the same applies to the onset of schizophrenia after a stressor. Not surprisingly a traumatic stressor can also be a trigger of any mental disorder.

Fig. 1.

Psychopathological spectrum of trauma consequences (from Popiel, Pragłowska: 2009a).



The displacement of nearly 6.5 million people inside Ukraine, with a further 3.2 million fleeing the country (Zaliska et.al.: 2022, Długosz: 2023) due to the Russian invasion of Ukraine, reflects the population of refugees that has a higher risk of poor mental health, both as a consequence of adverse or traumatic premigration experiences and as a result of post-migration difficulties (Porter, Haslam: 2005; Długosz: 2023). Migrants who are exposed to armed conflict are at high risk of all mental disorders listed in Figure 1. However, there is a discrete group of disorders of stress

and trauma, with PTSD as a prototype. They are specifically triggered by traumatic stressors, as depicted in Figure 1. (Popiel, Pragłowska: 2009a). Post-traumatic stress disorder and other mental disorders affect at least one in three refugees (Turrini et al.: 2017). In the systematic review and meta-analysis of Cristina Mesa Vieira et al. (2022) the estimated prevalence of current post-traumatic stress disorder was 31% (95% CI 23–40); the prevalence of current major depressive disorder of 25% (17–34); and prevalence of generalised anxiety disorder of 14% (5–35). For them adequate treatment is essential.

In summary:

- Reaction to traumatic stressors (including war-related) often overwhelms an individual's ability to cope and may have long-lasting effects on mental health (posttraumatic stress disorder or other mental disorders).
- Taking care of a person's safety, physical health and basic living conditions is the main goal at the first stage and is the content of the so-called *first psychological aid.* Many people will recover naturally within the first months after trauma. So intervention plans should take time into consideration
- If the natural recovery has been impaired – professional diagnosis is needed keeping in mind that war refugees are at elevated risk for PTSD, depression and anxiety disorders.
- In such a case it is essential to provide adequate evidence-based treatment.

Treatment. A rationale of decision making

What does it mean: a "right" treatment? Treatments of mental disorders fall into two main categories – pharmacotherapy and psychotherapy. Pharmacotherapy (psychotropic medication) is a domain of medical doctors (general medical doctors should be able to diagnose and prescribe the most common antidepressant and antianxiety medications). For more complex cases, a specialized psychiatrist's[4] diagnosis and treatment may be required. Psychotherapy as a psychological treatment should be delivered by psychotherapists[5] (psychologists, medical doctors or other medicine-related professions) trained in a specific treatment method.

Since the first studies on the efficacy of psychotropic medication, the methodology of research on the effectiveness of therapy *(treatment outcome studies*) in psychology and medicine has improved considerably. Studies on pharmacotherapy and psychotherapy efficacy and effectiveness have many common features, primarily the RCT (randomised controlled trial) regimen, but if the method of therapy is not a chemical

[4] Psychiatrists are medical doctors after additional postgraduate training in psychiatry.

[5] In many countries the profession of psychotherapist is not regulated therefore there is a need to check the education and qualifications (in case of trauma work – check whether the therapist is experienced in NICE recommended treatments).

substance with a strictly defined composition, and the result is a psychosocial impact – some aspects become complicated. The quality of the study on the effectiveness of psychotherapy depends, among other things, on whether: the group subjected to the intervention was precisely defined (for example if the diagnosis of the disorder was carried out using tools ensuring the validity and reliability of the measurement, in the case of PTSD – if post-traumatic stress disorder is the main diagnosis), whether the method – the therapy protocol was described in a way that allowed replication (in psychotherapy this means a description of a method in a manual that can be equivalent to a precise description of a chemical structure and dosage of a medication under study – also described by a study manual). Other aspects also need to be controlled – whether the method was applied correctly, whether the control conditions were well defined, whether the study plan and the number of subjects provided adequate statistical power, whether the analyses were adequate, whether randomization was taken care of and the determination of primary and secondary variables appropriate for the purpose of the study etc (for the complexity of clinical research see: Kazdin: 2016). Then when a single trial of treatment exists and the method was validated as effective – other questions arise – like whether it has been replicated for the same disorder in other populations, cultures or other types of trauma. In making healthcare management decisions, patients and clinicians must weigh up the benefits and downsides of alternative strategies. Decision-makers will be influenced not only by the best estimates of the expected advantages and disadvantages of the treatment but also by their confidence in these estimates (Guyatt et al.: 2008). Guidelines and recommendations should therefore indicate the quality of the evidence (*high* – when the desirable effects clearly outweigh the undesirable effects and further research is very unlikely to change our confidence in the estimate of effect; *low or very low* when further research is very likely to have an important impact on our confidence in the method with *moderate* in between when there is a chance that further research is likely to have an impact). There are disorders and clinical phenomena where there are almost no studies, or they are too inconclusive to recommend a kind of treatment in the guidelines. This is usually the case for less prevalent disorders. The disorders that are the most frequent consequence of war trauma – PTSD, depression and anxiety disorders are the most common in the population. When psychological treatments are concerned, the last 50 years resulted in an enormous number of studies on psychotherapy methods. It allows indicating methods that are effective, potentially effective; methods that have no significant effects or are even harmful (like CISD – Critical Incidence Stress Debriefing, NICE: 2019) and also methods that have not been studied at all. Nowadays, methodological awareness is important in the face of many publications that a pure marketing of a psychotherapy method. Good guidelines are based on the results of studies that followed the abovementioned methodology and as a summary, they can help clinicians and policymakers; hence why in the next part we present a few main aspects of NICE guidelines for PTSD (2018).

In summary:

- Psychotherapy as a psychological treatment should be delivered by psychotherapists (psychologists, medical doctors or other medicine-related professions) trained in a specific treatment method.
- Methodologically sound studies reveal differences between psychological treatment methods in various disorders; some methods have never been tested in outcome studies.
- For treatment providers it is important to consider recommendations indicating the quality of the evidence as the basis of choice for practice.

Evidence-based guidelines for PTSD treatment

There are agencies with transparent procedures for analysing data leading to clinical guidelines that can help a single clinician (to make the most important decision: what treatment, for whom), and a patient (to make an evidence-based choice about his treatment), as well as policymakers that are responsible for solutions in the health system. An example of an institution providing comprehensive clinical guidelines is the National Institute for Clinical Excellence in the United Kingdom, established in 1999. The NICE guideline for PTSD treatment covers

> "recognising, assessing and treating post-traumatic stress disorder (PTSD) in children, young people and adults. It aims to improve quality of life by reducing symptoms of PTSD such as anxiety, sleep problems and difficulties with concentration. Recommendations also aim to raise awareness of the condition and improve coordination of care" (NICE: 2005; NICE: 2018).

Based on available evidence, and meta-analyses concerning both psychosocial interventions and pharmacological treatments, their comparison as monotherapies and the efficacy of combined treatment, the authors reached several conclusions concerning:

1) preparation for treatment:

   "Give information and support to people with PTSD (and their family members or carers as appropriate) covering: common reactions to traumatic events, including the symptoms of PTSD and its course assessment, treatment and support options where their care will take place",

2) recommended first-line treatments:

   "Offer an individual trauma-focused CBT intervention to adults with a diagnosis of PTSD or clinically important symptoms of PTSD who have presented more than 1 month after a traumatic event. These interventions include: cognitive processing therapy, cognitive therapy for PTSD, narrative exposure therapy, prolonged exposure therapy"

(An umbrella term for all these methods is *trauma-focused CBT (TFCBT),* and one form of trauma-focused psychotherapy has been developed specifically for refugees: narrative exposure therapy (NET).

3) medication:

"Do not offer drug treatments, including benzodiazepines, to prevent PTSD in adults. Consider venlafaxine or a selective serotonin reuptake inhibitor (SSRI), such as sertraline, for adults with a diagnosis of PTSD **if the person has a preference for drug treatment**. Review this treatment regularly".

4) managing complications:

"Consider antipsychotics such as risperidone in addition to psychological therapies to manage symptoms for adults with a diagnosis of PTSD if: they have disabling symptoms and behaviours, for example, severe hyperarousal or psychotic symptoms and their symptoms have not responded to other drug or psychological treatments".

The abovementioned quotations do not substitute for following the full guidelines that we recommend as an important source of information about evidence-based treatments for PTSD (NICE: 2018) and other mental health problems that can be diagnosed in refugees (i.e. anxiety disorders and depression have separate guidelines). We have included them to draw attention to the discrepancy between usual care and treatments that might be effective. Such *discrepancy* exists even in rich countries with no war, where there are attempts to improve access to psychological treatments (i.e IAPT in UK[6]). The biggest humanitarian crisis in Europe since WWII that was caused by the Russian invasion of Ukraine made this discrepancy turn into an abyss. With full awareness of the context, let us point out that war refugees deserve the best available treatment. If the modern understanding of evidence-based practice (EBP) is the integration of 1) the best available research with 2) clinical expertise in the context of 3) patient characteristics, culture and preferences – delivering treatment to refugees is a challenge for a (quite idealistic) equilibrium of EBP. Reference to the best available research, to evidence-based treatments is a challenge because clinicians, overwhelmed by the scale of the tragedy, sometimes tend to do *anything* to help, forgetting about evidence that the TF-CBT approach has been the most supported treatment for PTSD in refugees although with limited effectiveness; but there is evidence (Bryant et al: 2023). Many studies have proven the possibility of translating trauma-focused CBT methods like prolonged exposure into different trauma groups and languages, including the work of our team on PTSD in car accident victims in Poland (Popiel, Zawadzki, Pragłowska, Teichman: 2015) that enabled to deliver training in prolonged exposure to approx. 2000 psychologists (see Popiel, Zawadzki: 2021). It is a drop in the ocean – but given that every treatment

[6] https://www.england.nhs.uk/mental-health/adults/nhs-talking-therapies/

was aimed at the suffering from PTSD of a single person which added to the suffering and decreased the quality of life of all families – small numbers matter. Also, the number of medical doctors and psychologists systematically trained in Ukraine (Kuroń: 2023, personal communication). Nevertheless, limited access to clinicians well-trained in TF-CBT is an obstacle, so many clinicians do not have expertise in this area. Having that in mind, a systemic effort of policymakers should be directed to the places that can effectively use the support they get for delivering evidence-based treatment. A valuable source of specialists and information can be the Ukrainian Association for CBT, a member of EABCT[7] grouping CBT therapists, many of whom can deliver TF-CBT or the Polish Association for CBT[8], the largest psychotherapeutic organization in Poland focused on evidence-based treatments. Both are members of an umbrella organization – the European Association for Behavioural and Cognitive Therapies (EABCT)[9] with its working group on the humanitarian crisis. Certainly providing evidence-based treatments to PTSD sufferers: refugees (also as internally displaced people and those who survived without leaving their town) means that while maintaining flexibility, psychotherapists should not make too many modifications to the verified therapy protocol. For this to happen, we must know the language of the patient very well. This is not always possible. Cognitive-behavioural therapy with the participation of an interpreter has similar effectiveness to the one carried out in direct contact or online in your native language, but this is the patient's preference and possibilities to be taken into consideration. Another problem is the patient's involvement in therapy and their ability to develop skills in managing the symptoms of PTSD. Although a person with PTSD is in a safe place in our opinion, it is completely new to them and connects with an unknown language, reality and culture. This can additionally maintain anxiety and arousal. The therapist's dilemma is whether to provide general psychological support of limited efficacy (although important from a human point of view, and as a part of social support) or to make a decision to conduct empirically verified therapy, despite the limitations imposed by the context in which it is carried out? There is no clear answer to these questions. The war situation in Ukraine and our experience indicate that it is usually the decision of the person/patient who experiences symptoms of PTSD. One solution was online therapy conducted by a therapist who knew Ukrainian/Russian/Polish. The patient decided whether, while staying in the territory of Ukraine, he was in a place that he could consider safe for him at that moment. It should be added that the ethical problem – although incidental, that therapists had to face is that trauma affects both sides of the conflict and it is worth being prepared for ethical dilemmas or those providing assistance – also in the territory affected by war.

---

[7] https://eabct.eu/

[8] www.pttpb.pl

[9] https://eabct.eu/resources/humanitarian-crises-ressources/

The third aspect is the patients' – refugee characteristics. A "Mental Health" part of a WHO report on Ukrainian refugees in Poland underlined that regardless of the percentage of mental health problems "respondents in the behavioural insights interview also said that they knew of mental health and psychosocial support services and had been offered psychological help and counselling, but most had not used these services and those who did said they had stopped", because

> "other people must need these more than they do... those who had been more directly impacted by fighting in the areas they had left, even when they themselves were from such places. Several respondents shared that there may be stigma related to using mental health services and a belief that only people with serious mental disorders or those who cannot cope with their problems would turn to a psychologist. Some people said the support services were offered only as group counselling sessions, and they were not comfortable sharing very personal issues in a group setting. … Language was a concern in this respect as well, because of a fear of not being understood. Interpretation services were considered more problematic in this setting due to confidentiality" (WHO: 2023).

The increased risk of mental health disorders in migrants exposed to armed conflict can be understood not only as a result of war-related trauma but a cumulation of pre-migration stressors in countries of origin, displacement-related stressors and post-migration conditions in host countries. Nevertheless, after exposure to violence, post-traumatic stress disorder was the most prevalent disorder, with a current prevalence of 31% and a lifetime prevalence of 32%, with depression and generalised anxiety disorder in second place (Mesa-Vieira et al.: 2022) – each of these disorders can be treated efficiently, if noticed and well diagnosed. For this to happen, not only the professionals providing treatment need to be prepared. Sensitivity and knowledge of all individuals and services involved in helping may be essential in noticing problems behind the facade indicated by the responders quoted in the WHO report on Ukrainian refugees in Poland.

A step back to the preparation step in the NICE guidelines may be helpful. Starting with information, including the efficacy of trauma work with an interpreter or searching for a therapist speaking the patient's language. A lot has been said about psychological treatments as a method of choice. But coming back to the guidelines and our studies mentioned earlier (Popiel et al.: 2015) – although not a first choice – pharmacotherapy also works and for many people can be the best solution.

Evidence-based treatments address universal mechanisms of human reactions to traumatic stressors, although studies on refugees underline the necessity of taking into consideration the individualistic vs collectivistic cultures they come from, or the cumulative nature of trauma superimposed by living problems in a new country (Bryant et al.: 2023). These universal mechanisms apply to people who provide help.

In summary:

- Evidence-based practice is rooted in the idea that treatment decisions – both pharmacological and psychotherapy should be informed by the best evidence, rather than relying solely on tradition, intuition, or anecdotal experience. The goal is to provide patients with the most effective and beneficial care based on the current state of scientific knowledge.
- For PTSD – the most common consequence of war trauma international treatment guidelines (NICE, APA) recommend psychotherapy. Trauma-focused cognitive-behavioural therapy (TF-CBT) is a set of methods of choice. Pharmacotherapy can also be considered when TF-CBT is not available or the patient chooses medication, or other factors (like refugee characteristics, and culture) may negatively influence the treatment effect.
- Studies on treatment efficacy are essential, but the possibility of preventing PTSD should also be a focus of attention.

Prevention of PTSD in people who are exposed to occupational, duty-related trauma

Epidemiological indicators such as *disability-adjusted life-years* (DALYs) rank PTSD 12th among psychiatric and neurological disorders, indicating a higher burden in middle and low-income countries and the need for preventive and therapeutic measures (von der Warth, Dams, Grochtdreis, König: 2020). From this perspective, researching the determinants of therapy and prevention of PTSD seems obvious.

There are several ways of classifying preventive activities. Caplan and Grunebaum (1967) distinguish preventive actions taken before the onset of symptoms of the disease, aimed at reducing risk factors or strengthening resilience (first-degree prevention), actions taken when the first signs of the disease appear, but there are no specific symptoms yet (second-degree prevention, for example, screening tests in refugees) and activities referred to as third-degree prevention, aimed at the reduction of the risk of complications or disability. Another classification distinguishes preventive activities covering the entire population (universal prevention), selected groups (selective prevention) and groups at risk of a specific disease (targeted prevention). Concerning post-traumatic disorders, "real" prevention can be called first and second-degree actions (Howlett, Stein: 2016). Third-degree interventions, i.e. interventions following the onset of PTSD symptoms, often described as prophylactic, can be considered an appropriate form of therapy.

The NICE guidelines (2019), published in December 2018, for the first time indicate the need for preventive interventions, but in fact, they refer to tertiary prevention (impact in a specific situation **after** the traumatic stressor and the occurrence

of (expected) symptoms of an acute stress reaction; they are to protect against the consolidation of symptoms in the form of PTSD and its consequences).

First-degree interventions aim to reduce the risk of exposure to traumatic events or enhance resilience in the context of trauma and can be universal or selective. Surprisingly in the literature, there is almost no evidence on the efficacy of first-degree prevention programs aimed at preventing PTSD. One of the few sources of data on the efficacy of such interventions comes from the Polish project "PTSD: Diagnosis, Therapy, Prevention" of the National Science Centre. If traumatization is predictable, such as due to occupational exposure in representatives of services like disaster workers, medical services or firefighters, then there is another possibility, namely the pre-traumatic strengthening of resilience. The results of our prospective research lead to quite optimistic conclusions (Popiel et al.: 2019a). This program "Effective performance under stress" was selective (prevention of PTSD) and was carried out in a group of firefighters as a 15-hour workshop during vocational training accompanied by a self-help brochure for use outside the training. The content is based on the assumptions of cognitive-behavioural psychotherapy (enhancing self-efficacy via psychoeducation, exercises in dealing with physiological arousal, control of maladaptive thoughts and negative emotions, and training in developing cooperation in a team including seeking support). As a result, lower levels of PTSD symptoms, avoidance-oriented cognitive strategies for regulating emotions, and higher engagement were observed in the training group (with control of occupational traumatization in both groups one year after the training). The longitudinal effect of our study was relatively small (d ≅0.30) with the reported decline in knowledge and skills levels after a year of service, which clearly suggests the need to repeat the training and adapt its content to the current experience.

The training happened before the refugee crisis in 2022. In Poland, volunteer fire brigades at the first line of organizing help together with many local organizations. As it frequently happens, the problems that arose during that time triggered requests for basic training in first psychological help[10] and the "Effective performance under stress" program (Popiel et al.: 2019a,b). Ideally, such training aimed at building resilience would be a part of any medical and professional education in helping services. In times of relative peace first responders, medical and other services are the ones at increased risk of traumatization. At war, the quotation from the medical journal Lancet (2022):*Today in Ukraine, medics are on the front line, working tirelessly to save lives while risking their own…* lets us shift attention to people who have a guarantee of being traumatised because of their choice or necessity of duty/profession/service.

[10] "Psychological tools for non-clinicians helping others in extreme life situations" a one-hour webinar in Polish can be found at https://eabct.eu/trainings-and-webinars/ and has been delivered to all volunteer firebrigades in Poland.

There is another important lesson learned in the context of evidence-based psychological methods. The example comes from a second-degree prevention method called *debriefing* (CISD, Mitchel: 1995), an individual or group discussion of a traumatic event during the first 72 hours after the trauma, which was intended to verbalize thoughts and emotional sensations and mobilize individual resources to deal with the consequences of the event. It has been suggested that the mechanism of action includes an early receipt of social support and "ventilation" of emotions, necessary for cognitive (memory) reconstruction and restructuring of a traumatic event, which was supposed to weaken stress and physiological responses (Feldner et al.: 2007). However, it turned out that debriefing not only does not reduce the risk of developing PTSD but increases the risk of developing PTSD after a mass trauma (Bisson et al.: 1997, Mayou et al.: 2000). In recent versions of the NICE (2019) or APA (2017)[11] guidelines, *debriefing* opens the chapters "what not to do" and for clinicians, it is a *memento* that a psychological method can actively harm.

As these data show, active preventive effects on all people who have suffered trauma fail, and worse – in an inappropriate form they can even harm. Recommendations for this post-traumatic period therefore include basic human help described earlier as first psychological aid, observation of the process of individual coping and, possibly, initiation of therapy only in the event of a significant deterioration in the mental state of the injured person, e.g. the development of symptoms of acute stress disorder (see NICE: 2018). In other words, humanitarian help is essential but right after the traumatic event only careful observation and not taking active professional/psychiatric or psychological action, because they can interfere with the process of self-recovery in resilient people. Meanwhile, the myth of the need to intervene professionally during this period is still alive. It is reproduced both in media coverage, e.g. through typical questions asked by journalists to victims such as: Have you been provided with psychological help? What's worse, it is also common among aid services, as well as in the consciousness of psychologists. Perhaps sending a specialist – a psychologist – is often easier than organising what a person really needs right after a traumatic experience – safety, attentive, gentle presence of loved ones. And maybe because from the beginning we are educated in such a belief that activity is better than passivity; task-oriented action rather than non-action. The social costs of this myth are also difficult to estimate. Justified preventive measures for PTSD in this post-traumatic period refer to the case of the occurrence of symptoms of acute stress disorder and they involve trauma-focused CBT (NICE: 2018) or guided self-help that can be helpful in refugees[12] (Bryant: 2023).

To sum up, exposure to traumatic events is a component of human fate; its time and circumstances are difficult to predict, except for aid or order services, for which

[11] https://www.apa.org/ptsd-guideline

[12] https://www.who.int/publications/i/item/WHO-MSD-MER-16.2

it is part of professional work. Paradoxically however, it can – the risk of experiencing trauma can also be controlled and limited to some extent. It sounds strange, but people have been trying to do it for centuries, believing in the prophetic power of Tarot card divination, the protective effect of amulets or the possibility of "undoing bad luck". We try to penetrate the future and the possible risks associated with it and control them through magical actions, but the same effects can be achieved through deliberate and organized social actions (e.g. construction of retention reservoirs as a form of flood prevention) or individual (e.g. the use of protective devices to protect against falling at work or, as is currently the case in a pandemic – maintaining isolation or wearing masks). The rest is a matter of fate and the necessary acceptance of the risks resulting from life, including professional work, in which traumatization is inscribed. But even then, it is possible to achieve something more – a certain degree of resistance to traumatic events. Complete preparation is not possible, but eliminating maladaptive beliefs or ways of regulating emotions/coping with stress is already within the reach of many people (Popiel et al.: 2019). If it is not possible to eliminate the experience of traumatic events itself, then at least it is possible to limit their destructive impact on mental life – to make it easier to cope with them on your own. However, if this path fails, you can finally seek professional help – immediately after the trauma, when you clearly cannot cope; or in the long term, when the problems last / intensify and your efforts to cope do not bring the expected effect.

In summary:

- Preventing PTSD should be a focus of attention, especially for people who have a guarantee of being traumatised because of their choice or necessity of duty/profession/service.
- The phrase 'prevention is better than cure' (attributed to Erasmus in around 1500) is an axiom in medicine – a statement self-evidently true to such degree that there are few studies on the effectiveness of interventions aimed at preventing PTSD.
- Nowadays there is data on possible harm due to psychological interventions such as CISD (Critical Incidence Stress Debriefing) aimed at preventing PTSD in mass trauma victims.
- There is evidence for the possibility of pre-traumatic strengthening of resilience. shown in the study of the "Effective performance under stress" program designed for representatives of services like disaster workers, medical services or firefighters.

Conclusions

In Evidence-Based Medicine/Treatment/Practice (EBM, EBT, EBP), the term "evidence-based" refers to an approach to practice that emphasizes the use of the best available evidence from scientific research in making decisions about individual patient

care. It is a systematic and structured approach to medical decision-making that integrates clinical expertise, patient values, preferences and unique circumstances in the decision-making process, and the best available evidence – the most current and relevant scientific research evidence. This evidence is often derived from well-designed clinical trials, systematic reviews, and other research studies.

The goal of trauma therapy is for the patient to return to life as it was before the trauma or even mobilize such resources to make the "new" life possible and sometimes even more full. In the case of war victims who lose loved ones, or are physically mutilated, they must flee their country; conducting therapy requires special treatment and attention on how to motivate a patient to undertake therapy without knowing with whom, where, and when they will be able to start their "new" life.

Professionals must be committed to maintaining a hopeful attitude that a new life is possible for a person from whom the war took (frequently) everything. This is a moral stance, while professionals towards the patients must also offer the best available and tested method – psychological or pharmacological. The role of policy-makers is to consider the best available, evidence-based methods in systemic health-care planning and the education of medical and psychological specialists. If there is a role of science in mental health, its main achievements are treatments that have been tested and can be delivered relatively safely, as well as methods that prevent the development of PTSD in those who help others. Untreated post-traumatic disorders in millions of people are devastating for individuals and society. Professional resources will always be limited. This paper also emphasises the need for careful planning for a postwar period and for the countries where war refugees are to reclaim their lives from trauma. Sticking to guidelines as much as possible and choice of evidence-based treatments enables assessment of the timeframe and risks of any psychological and medical intervention. Providing evidence-based prevention methods would help protect people who are at additional risk of trauma just because of the choice of their service or profession of helping others.

References

American Psychiatric Association (APA). (1980). *Diagnostic and statistical manual of mental disorders. Third edition. Text revision*. Washington: American Psychiatric Association.

American Psychological Association (APA). (2014). Guidelines for prevention in psychology. *American Psychologist*, *69*, 285–296.

Andreasen N. C. (2004). Acute and delayed posttraumatic stress disorders: a history and some issues. *American Journal of Psychiatry 161*,1321–1323.

Bryant R. A., Nickerson A., Morina N., Liddell B. (2023). Posttraumatic Stress Disorder in Refugees. *Annual Review of Clinical Psychology*, *19*, 413–436. https://doi.org/10.1146/annurev-clinpsy-080921-080359

Bisson J. I., Jenkins P. L., Alexander J., Bannister C. (1997). Randomized controlled trial of psychological debriefing for victims of acute burn trauma. *British Journal of Psychiatry*, *171*, 78–81.

Bisson J. I., Roberts N. P., Andrew M., Cooper R., Lewis C. (2013). Psychological therapies for protect post-traumatic stress disorder (PTSD) in adults. *Cochrane Database of Systematic Reviews*, *12*: CD003388. two:10.1002/14651858.CD003388.pub4

Bonnano G.A. (2005). Resilience in the face of potential trauma. *Current Directions in Psychological Science*, *14*(3), 135–138.

Caplan G., Grunebaum H. (1967). Perspectives on primary prevention. A review. *Archives of General Psychiatry*, *17*(3), 331–346. https://doi.org/10.1001/archpsyc.1967.01730270075012

Długosz P. (2023). War trauma and strategies for coping with stress among Ukrainian refugees staying in Poland. *Journal of Migration and Health*, *8*, 100196. https://doi.org/10.1016/j.jmh.2023.100196

Espie E., Gaboulaud V., Baubet T., Casas G., Mouchenik Y., Yun O., … Moro M. (2009). Trauma-related psychological disorders among Palestinian children and adults in Gaza and West Bank, 2005–2008. *International Journal of Mental Health Systems*, 3(1), 21. doi: 10.1186/1752–4458-3-21

Feldner M. T., Monson C. M., Friedman M. J. (2007). A critical analysis of approaches to targeted PTSD prevention: Current status and theoretically derived future directions. *Behavior Modification*, *31(1)*, 80–116.

Guyatt G. H., Oxman A. D., Vist G. E., Kunz R., Falck-Ytter Y., Alonso-Coello P., Schünemann H. J., GRADE Working Group (2008). GRADE: an emerging consensus on rating quality of evidence and strength of recommendations. *BMJ (Clinical research ed.)*, *336*(7650), 924–926. https://doi.org/10.1136/bmj.39489.470347.AD

Javanbakht A. (2022). Addressing war trauma in Ukrainian refugees before it is too late. *European Journal of Psychotraumatology*, *13*(2), 2104009. https://doi.org/10.1080/20008066.2022.2104009

Howlett J. R., Stein M. B. (2016). Prevention of trauma and stressor-related disorders: A review. *Neuropsychopharmacology Reviews*, *41(1)*, 357–369.

Kang T. S., Goodwin R., Hamama-Raz Y., Leshem E., Ben-Ezra M. (2023). Disability and post-traumatic stress symptoms in the Ukrainian General Population during the 2022 Russian Invasion. *Epidemiology and Psychiatric Sciences*, *32*, e21. https://doi.org/10.1017/S204579602300015X

Kazdin A. E. (Ed.). (2016). Methodological Issues and Strategies in Clinical Research (4th ed.). American Psychological Association. http://www.jstor.org/stable/j.ctv1chrzdj

Kessler R. C., Berglund P., Demler O., Jin R., Merikangas K. R., Walters E. E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, *62*(6), 593–602. https://doi.org/10.1001/archpsyc.62.6.593

Kuroń M: 2023, personal communication.

Kuroń M, Szymanik P, Tworus R. (2022). *Poprawa dostępu do usług społecznych w zakresie zdrowia psychicznego*. Warszawa: Wojskowy Instytut Medyczny – Państwowy Instytut Badawczy (workshop materials).

Mayou R. A., Ehlers A., Hobbs M. (2000). Psychological debriefing for road traffic accidents: Three-year follow-up of a randomized controlled trial. *British Journal of Psychiatry*, *176*, 589–593.

Mesa-Vieira C., Haas A. D., Buitrago-Garcia D., Roa-Diaz Z. M., Minder B., Gamba M., Salvador D., Jr, Gomez D., Lewis M., Gonzalez-Jaramillo W. C., Pahud de Mortanges A., Buttia C., Muka T., Trujillo N., Franco O. H. (2022). Mental health of migrants with pre-migration exposure

to armed conflict: a systematic review and meta-analysis. *The Lancet. Public Health*, *7*(5), e469–e481. https://doi.org/10.1016/S2468-2667(22)00061-5

Mitchell J. T., Everly G. S. Jr (1995). Critical Incident Stress Debriefing (CISD) and the prevention of work-related traumatic stress among high risk occupational groups. W: G. S. Everly Jr, J. M. Lating (red.), *Psychotraumatology. Key papers and core concepts in post-traumatic stress* (s. 267–280). New York: Plenum Press.

National Institute for Health and Care Excellence (NICE). (2005). *The treatment of post-traumatic stress disorder (PTSD). Understanding NICE guidance – information for people with PTSD, their advocates and carers, and the public*. London: NICE.

National Institute for Health and Care Excellence (NICE). (2018). *Post-traumatic stress disorder*. London: NICE.

Perkins J. D., Ajeeb M., Fadel L., Saleh G. (2018). Mental health in Syrian children with a focus on post-traumatic stress: A cross-sectional study from Syrian schools. *Social Psychiatry and Psychiatric Epidemiology*, 53(11), 1231–1239. doi: 10.1007/s00127-018-1573-3

Popiel A., Pragłowska E. (2009a). Psychopathology of reactions to traumatic events. In: J. Strelau, B. Zawadzki, M. Kaczmarek (eds.), *Psychological consequences of trauma: conditioning and therapy* (pp. 34–63). Warsaw: Wydawnictwo Naukowe Scholar.

Popiel A., Pragłowska E. (2009b). Therapy of posttraumatic disorders. In: J. Strelau, B. Zawadzki, M. Kaczmarek (eds.), *Psychological consequences of trauma: conditioning and therapy* (s. 343–370). Warsaw: Wydawnictwo Naukowe Scholar.

Popiel A., Zawadzki B. (2023). Psychoterapia-Quo vadis? *Nauka, 3, 61–85.* DOI: 10.24425/nauka.2023.147311

Popiel A., Zawadzki B., Pragłowska E., Habrat P., Gajda P. (2019a). Skuteczne działanie w stresie [*Effective performance under stress. PTSD prevention program for people at risk of occupational traumatization]*. Gdansk: GWP.

Popiel A., Zawadzki B., Pragłowska E.(2019b). Skuteczne działanie w stresie – osobisty niezbędnik [*Effective performance under stress a personal guide]*. Gdansk: GWP.

Popiel A., Zawadzki B., Pragłowska E., Teichman Y. (2015). Prolonged exposure, paroxetine and the combination in the treatment of PTSD following a motor vehicle accident. A randomized clinical trial – The "TRAKT" study. *Journal of Behavior Therapy and Experimental Psychiatry, 48*, 17–26.

Popiel A., Zawadzki B. (2021). From research to the implementation of methods for the treatment and prevention of PTSD. *Przegląd Psychologiczny*, *64*(1), 129–144. https://doi.org/10.31648/przegldpsychologiczny.7788

Porter M., Haslam N. (2005). Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons: a meta-analysis. *JAMA*, *294*(5), 602–612. https://doi.org/10.1001/jama.294.5.602

Ruzek J. I., Brymer M. J., Jacobs A. K., Layne C. M., Vernberg E. M., Watson P. J. (2007). Psychological first aid. *Journal of Mental Health Counseling, 29*(1), 17–49. https://doi.org/10.17744/mehc.29.1.5racqxjueafabgwp

Turrini G., Purgato M., Ballette F., Nosè M., Ostuzzi G., Barbui C. (2017). Common mental disorders in asylum seekers and refugees: umbrella review of prevalence and intervention studies. *International Journal of Mental Health Systems*, *11*, 51. https://doi.org/10.1186/s13033-017-0156-0

WHO (2018). *ICD-11. International Statistical Classification of Diseases and Related Health Problems. Eleventh Revision*. Geneva: World Health Organization.

Torchalla I., Strehlau V. (2018). The Evidence Base for Interventions Targeting Individuals With Work-Related PTSD: A Systematic Review and Recommendations. *Behavior Modification, 42*(2), 273–303. https://doi.org/10.1177/0145445517725048

von der Warth R., Dams J., Grochtdreis T., König H. H. (2020). Economic evaluations and cost analyses in posttraumatic stress disorder: a systematic review. *European Journal of Psychotraumatology*, *11*(1), 1753940. https://doi.org/10.1080/20008198.2020.1753940

Yousef L., Ebrahim O., AlNahr M. H., Mohsen F., Ibrahim N., Sawaf B. (2021). War-related trauma and post-traumatic stress disorder prevalence among Syrian university students. *European Journal of Psychotraumatology*, *12*(1), 1954774. https://doi.org/10.1080/20008198.2021.1954774

Zaliska O., Oleshchuk O., Forman R., Mossialos E. (2022). Health impacts of the Russian invasion in Ukraine: need for global health action. *Lancet (London, England)*, *399*(10334), 1450–1452. https://doi.org/10.1016/S0140-6736(22)00615-8

Zawadzki B., Popiel A. (2012). Temperamental traits and severity of PTSD symptoms: The data from longitudinal studies of motor vehicle accidents survivors. *Journal of Individual Differences, 33*, 257–267.

Zawadzki B., Strelau J. (2008). Post-traumatic disorders as a consequence of the disaster. *Science, 5*(2), 47–55.

https://www.who.int/europe/news/item/19-12-2022-new-research-reveals-how-war-related-distress-affects-mental-health-of-ukrainian-refugees-in-poland

https://stat.gov.pl/files/gfx/portalinformacyjny/pl/defaultaktualnosci/6377/7/1/1/raport__who_21.02.pdf

https://doi.org/10.1016/j.psychres.2022.115011