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POSTTRAUMATIC STRESS DISORDER — CHALLENGING A MECHANISTIC NEUROPSYCHOLOGICAL AND MONOCAUSAL ETIOLOGICAL MODEL¹

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Посттравматичний стресовий розлад — виклик механістичної нейропсихологічної та однопричинної етіологічної моделі¹

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Посттравматическое стрессовое расстройство — вызов механистической нейропсихологической и однопричинной этиологической модели¹

As a consequence of a variety of violence, war, natural or man-made disasters and global migration movements, the need for treatment of trauma sequelae in culturally diverse populations arises. Cultural dimensions have long been ignored or treated inadequately in PTSD-based trauma research. Although epidemiological data support some arguments of its universal prevalence, the PTSD concept is itself not free of cultural bias and a fundamental theoretical exception within the descriptive DSM-classification. Unresolved problems of its diagnosis and etiopathology and controversies are described. PTSD seems to be a complex, partly culture-bound syndrome that should not be neuropsychologically oversimplified.

Keywords: Posttraumatic stress Disorder, PTSD, controversies, etiology, culture boundedness, culture bound syndrome

Внаслідок різних видів насильства, війн, природних і техногенних катастроф і глобальних міграцій населення збільшується потреба в лікуванні наслідків травм в різноманітних з культурної точки зору популяціях. У дослідженнях пов'язаної з посттравматичним стресовим розладом (ПТСР) травматизації культурний вимір довгий час ігнорувався або враховувався неадекватно своєму значенню. Хоча епідеміологічні дані і підтримують деякі аргументи на користь універсальної його поширеності, концепція ПТСР сама по собі не вільна від культуральної упередженості і є фундаментальним теоретичним винятком в описовій класифікації DSM. У статті описані невирішені проблеми діагностики та етіопатології ПТСР і деякі спірні моменти. На наш погляд, ПТСР є складним, частково культурно обумовленим синдромом, який не треба надмірно спрощувати з нейропсихологічної точки зору.

Ключові слова: посттравматичний стресовий розлад (ПТСР), суперечності, етіологія, культурна обумовленість, культурно обумовлений синдром

Вследствие различных видов насилия, войн, природных и техногенных катастроф и глобальных миграций населения возрастает потребность в лечении последствий травм в разнообразных с культурной точки зрения популяциях. В исследованиях связанной с посттравматическим стрессовым расстройством (ПТСР) травматизации культурное измерение долгое время игнорировалось или учитывалось неадекватно своему значению. Хотя эпидемиологические данные и поддерживают некоторые аргументы в пользу универсальности его распространенности, концепция ПТСР сама по себе не свободна от культуральной предвзятости и является фундаментальным теоретическим исключением в описательной классификации DSM. В статье описаны нерешённые проблемы диагностики и этиопатологии ПТСР и некоторые спорные моменты. На наш взгляд, ПТСР является сложным, частично культурно обусловленным синдромом, который не следует чрезмерно упрощать с нейропсихологической точки зрения.

Ключевые слова: посттравматическое стрессовое расстройство (ПТСР), противоречия, этиология, культурная обусловленность, культурно обусловленный синдром

Is there evidence of Posttraumatic stress Disorder in ancient cultures?

The need for treatment of trauma sequelae in culturally diverse populations has arisen as a consequence of a variety of natural disasters, violence and global migration movements. It has been argued that posttraumatic stress disorder (PTSD) is a timeless condition, which existed before it was codified in modern diagnostic classifications. It has been described by names such as “railway spine” and “shellshock”. Others have suggested that PTSD is a novel presentation that has resulted from a modern interaction between trauma and culture.

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Pro universal phenomenon

Many have argued that PTSD has always existed, and that it went unrecognized by contemporaries (Gersons and Carlier 1992). Shay (1991) suggested that elements of the disorder can be identified in Homer's Iliad. According to Shay, Achilles suffered from symptoms of PTSD.

The description of a PTSD-like syndrome is seen in the ancient Indian epic *Ramayana*, although it was not described as PTSD or by any other name. Ravana's brother Marrich displayed symptoms of PTSD after being grievously hurt by Lord Rama's arrow and nearly killed (Sheth et al. 2010).

The English author Samuel Pepys, who lived through the plague and Great Fire of London, is said to have recorded the features of PTSD in his diary (Daly 1983). And, the symptoms reported in a family trapped in the Italian Bergamotto avalanche on March 19th, 1755, have been frequently quoted as evidence for the disorder's existence in the mid-18th century (Parry-Jones and Parry-Jones 1994). Dean argued that the symptoms of PTSD (“shellshock”) (19th century), including flashbacks, can be identified in the accounts of veterans of the American Civil War (Dean 1997). Trimble concluded that “this relatively common human problem has been known for many hundreds of years, although under different names” (Trimble 1985).

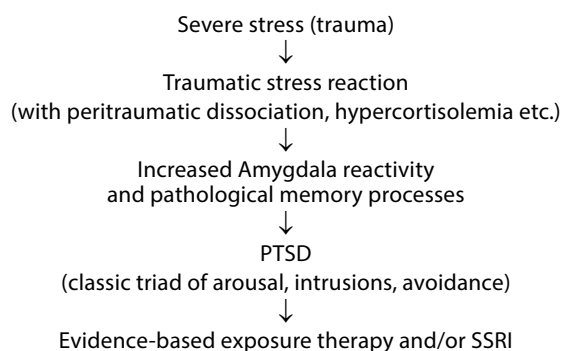
No differences concerning the phenomenological appearance were described when comparing 2157 adolescents in USA and Russia (Ruchkin 2005).

For Osterman and de Jong (2007) and Marsella et al. (1996), the scientific universality of PTSD is epidemiologically proven, although with highly variable population-based prevalence rates.

Miller et al. (2006, P. 409) mentioned a "trauma-focused psychiatric epidemiology". The universalistic direction of this approach is strongly influenced by biological research on PTSD. It assumes that the basal appearance is universal, but that cultural factors could influence the appearance of this disorder (see Berry 1992; Marsella 2010).

The essentialistic neuropsychological model of PTSD

Schematically, the dominating neuropsychological model of PTSD can be described as follows:



Contra universal phenomenon

History of Trauma

It was argued that mourning, dolor and grief are present in the classical early written works of humanity (Epic of Gilgamesh (2100 BC) or Homer's Iliad (700 BC)), but without descriptions of what is today called trauma, or traumatic stress.

Young (1995) too argues that PTSD is a culture-derived diagnosis and can only have existed in the late 20th century:

"The disorder is not timeless.... Rather, it is glued together by the practices, technologies, and narratives with which it is diagnosed, studied, treated and represented and by the various interests, institutions, and moral arguments that mobilised these efforts and resources" (Young 1995, P. 5).

In Young's (2000) view, PTSD is not a timeless or universal phenomenon newly discovered. Rather, it is a "harmony of illusions," an invented cultural product gradually put together by the practices, technologies, and narratives with which it is diagnosed, studied, and treated and by the various interests, institutions, and moral arguments mobilizing these efforts. Mumford's analysis of the Iliad showed that the *heart* alone (and not the head or the abdominal organs) was associated with emotional distress (Mumford 1996). In the Hebrew Bible too, he found that the heart was interpreted as the seat of the emotions, will and intellect (Mumford 1992); this is a significantly different somatic vocabulary from that of today and the one reflected by PTSD.

It was also argued that "shell-shock" and "combat exhaustion" are expressions of male hysteria (Showalter 1997).

Bracken (2001, P. 742) argued that because PTSD should be seen as *"the product not of trauma in itself but of trauma and culture acting together"*, it cannot be a timeless phenomenon, and that earlier responses to extreme stress, such as shellshock, are not the same.

Flashbacks in the past?

Using historical medical files of soldiers who served in the Boer War and in the First and Second World Wars, Jones et al. (2003) have attempted to test the hypothesis that the symptom clustering associated with PTSD existed before psychiatrists recognized it as a formal disorder.

One crucial question is if the pathognomonic symptoms of intrusion were evident in the past. Here is the analysis of Jones et al. (2003) concerning flashbacks and posttraumatic stress disorder:

The incidence of flashbacks in post-combat syndromes

Conflict (cases)	Cases reporting flashbacks, n (%)	
Victorian campaign (n = 28)	0	(0)
Boer War (n = 400)	0	(0)
First World War (n = 640)	3	(0.5)
Second World War (n = 367)	5	(1.4)
Malaya and Korea (n = 21)	0	(0)
Persian Gulf War (n = 400)	36	(9.0)

Jones et al. (2003) found that the incidence of flashbacks was significantly greater in the most recent cohort: veterans of the 1991 Persian Gulf War; flashbacks were conspicuous by their absence in ex-servicemen from the Boer War (1899—1902) and the First and Second World Wars. They found anxiety, and problems of sleep and concentration; but not an increased nervousness or avoidance of social activities.

An analysis of the 1856 cases revealed that flashbacks were virtually non-existent before the First World War and were still rare during the Second World War. This indicates that the psychopathology of trauma is not static, and that distressing memories are not conveyed in a universal manner across time.

Flashback itself is a visual device, used in cinematography to introduce immediate dramatic tension. Several authors have argued that there is a direct association between flashback and films (Blank 1985). Leys wrote: "the term flashback implies the cinematic possibility of literally reproducing or cutting back to a scene from the past and hence expresses the idea that the trauma victim's experiences are exact 'reruns' or 'replays' of the traumatic incident" (Leys 2000; P. 241).

Global Variations

Findings of substantial cross-cultural variation of incidence are described (Hinton and Lewis-Fernandez 2011; Rasmussen et al. 2014).

Hinton and Lewis-Fernández (2010) examined the five validity categories of this diagnostic construct. Avoidance and numbing-items seemed to be overemphasized, while somatic symptoms were considered inadequately.

The emphasis on somatic symptoms in trauma-related disorders appears to have lessened in the post-Vietnam period, whereas neuropsychiatric symptoms have become more prominent. Generally authors are emphasizing the necessary inclusion of somatic symptoms in posttraumatic symptomatology. These results disagree with authors arguing that the evidence supports the conclusion that "classical PTSD" (intrusion, avoidance, arousal) constitutes a coherent group of symptoms and is thus valid cross-culturally. In Miller et al.'s (2009) study examining the validity and utility

of PTSD among 320 adults in Afghanistan, other types of psychiatric symptomatology, including depression or sadness and a culturally specific measure of general distress, correlated more highly with traumatic stress than did PTSD.

The dimension of time of a trauma within the PTSD construct is also culturally determined (Lemelson et al. 2007).

PTSD — a classificatory exception

The introduction of the PTSD concept in the DSM-III classification is an extraordinary exception. DSM-III returned to a phenomenological, descriptive and atheoretical view, the so-called "Neo-Kraepelinian turn" (Bracken 2001). Whereas clear etiological models were used to describe depression (endogenous depression, reactive depression, neurotic depression) in ICD-9, the description in ICD-10 avoids etiological hypotheses: for example, recurrent depressive disorder, current episode mild; without somatic syndrome (F 33.00). Of course the notion of Posttraumatic (!) Stress Disorder (F 43.1) includes an etiological model (trauma)!

PTSD is the only psychiatric diagnosis in which the cause is described in the classification system (Summerfield 2001), and the only one in which the cause is outside the individual (Konner 2007).

Stressful event causing distress in almost anyone?

One necessary diagnostic criterion for the classification of ICD-10 (Nr. F43.1) posttraumatic stress disorder is "exposure to a stressful event or situation (either short or long lasting) of exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone." 160 findings in the MEDLINE bibliographic database of life sciences and biomedical information (May 2015) make a connection between PTSD and childbirth. The prevalence of postpartum PTSD in community samples was estimated to be 3.1 % and in at-risk samples at 15.7 % (Grekin and O'Hara 2014) although delivery is not a stressful event that cause pervasive distress in almost anyone.

Exposure to trauma?

One necessary diagnostic criterion for the classification of PTSD is the exposure to trauma. The DSM-5 criteria for Posttraumatic stress Disorder (309.81) now include an significant expansion. An "exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways: ... 3. Learning that the traumatic event(s) occurred to a close family member or close friend" is necessary for the diagnosis. (In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental.)

Cultural manifestations

Although epidemiological data support the argument of its universal prevalence, the simplistic PTSD-concept fails to address the multiple parameters of culture, conceptualized as lived praxis. Cultural dimensions have long been ignored or treated inadequately in PTSD-based trauma research.

For example, Renner et al. (2006) analyzed characteristics of PTSD-symptoms in three different groups of refugees in Austria with quantitative and qualitative research methods. No homogenous PTSD-symptom cluster could be found within these three groups (Chechnya, Afghanistan and West-Africa).

Epidemiological studies have revealed different rates of PTSD among different ethnic groups after disasters (Osterman and De Jong 2007; Norris and Alegria 2005).

Long-term psychological effects of the Chernobyl disaster in a sample of 295 male clean-up workers in Ukraine (between 1986 and 1990) interviewed 18 years after the accident revealed a PTSD rate of 4.1 % (compared to a control group with 1.0 %) (Loganovsky et al. 2008).

Summerfield (2001) and Shepard (2001) argue that the PTSD-discussion is embedded into a discourse of victimhood in western society. Being a victim may be one of few diagnoses that seem to be desirable. Shepard (2001, P. 96) used the term "trauma-industry" (with experts, lawyers, hospitals etc.). Traumatized persons are influenced by the "Zeitgeist" and influencing themselves this cultural paradigm.

The influence of everyday life stressor

Trauma and everyday life stressors are inseparably related. Working in Afghanistan's capital city of Kabul, Miller et al. (2008) assessed the relative contribution of daily stressors and war-related experiences of violence and loss to levels of depression, PTSD, impaired functioning, and a culturally-specific measure of general psychological distress. For women, daily stressors were a better predictor than war experiences of all mental health outcomes except PTSD; for men, daily stressors were a better predictor of depression and functional impairment, while war experiences and daily stressors were similarly predictive of general distress. For men in this study, daily stressors moderated the relationship between war experiences and PTSD, which was significant only under conditions of low daily stress.

Victim or perpetrator?

Evans et al. (2007) investigated factors that may determine whether perpetrators of violent crime develop intrusive memories of their offense. Of 105 young offenders who were convicted of killing or seriously harming others, 46 % reported distressing intrusive memories, and 6 % had posttraumatic stress disorder.

Intrusions were associated with lower antisocial beliefs before the assault, greater helplessness, fear, dissociation, greater negative view of the self, negative interpretations of intrusive memories, perceived permanent change, and self-blame.

Cognitive and emotional variables explained substantial variance over demographic factors. The results suggest that cognitive factors predicting reexperiencing symptoms in victims of crime generalize to perpetrators.

One study (Schaal et al. 2012) compared rates of mental health disorders in Rwandan genocide perpetrators with those of genocide survivors, investigating potential predictors of symptoms of posttraumatic stress disorder. Structured clinical interviews were carried out with 269 imprisoned perpetrators (66 % men) and 114 survivors (64 % women). Significantly more survivors than perpetrators met symptom criteria for PTSD (46 % vs. 14 %) and suffered from anxiety symptoms (59 % vs. 36 %). Nevertheless, the rates for perpetrators seem high. PTSD severity in perpetrators was associated with trauma exposure, high levels of agreement to reconciliation, and no participation in killing.

Objective severity of the trauma?

A new study (Leraya et al. 2015) has demonstrated that childhood bullying has worse effects on mental health in young adulthood than being maltreated does. The findings of this study show that individuals who are bullied in childhood are around five times more likely to experience anxiety

(odds ratio 4.9) and are nearly twice as likely to report more depression and self-harm at age 18 (odds ratio 1.7) than children who are maltreated.

Being bullied by peers in childhood had generally worse long-term adverse effects on young adults' mental health. These effects could not be explained by poly-victimization.

Among Tibetan refugees in India, Terheggen et al. (2001) found that demolitions of religious symbols were more often indicated as traumatic experiences than personal life-threatening situations or torture of relatives or friends.

Narcissism and PTSD

Bachar et al. (2005) assessed 144 survivors of a traumatic event 1 week, 1 month, and 4 months following the event using the "Narcissistic Vulnerability Scale" and self-reported rating scale to assess event severity and symptoms ensuing from the impact of the traumatic event: depression, intrusions, avoidance, and arousal. In the follow-up assessments, subjects were interviewed on the "Clinician-Administered PTSD Scale" and were readministered the self-rating symptoms scale.

Survivors who developed acute (1 month) and chronic (4 months) PTSD had significantly higher levels of narcissistic vulnerability in the first-week assessment. Narcissistic Vulnerability Scale scores predicted PTSD status with sensitivity of 81.6 % and 85.1 % and specificity of 40.4 % and 38.6 % at the 1-month and 4-month assessments, respectively. Narcissistic vulnerabilities contribute to the occurrence of PTSD.

A case history of a patient with both narcissistic personality disorder and PTSD is presented by Johnson (1995) as a means of illustrating this phenomenon in military medicine. This case report serves to highlight the manner in which premorbid narcissistic personality adjustment may exacerbate the clinical expression of posttraumatic stress disorder. Narcissistic personality may enhance vulnerability to distress at lower levels of trauma (Shaw 2013).

In addition, narcissistic needs for esteem may produce atypical presentations of PTSD.

PTSD — a culture-bound syndrome?

Burri and Maercker (2014) describe important differences in prevalence rates of PTSD in various European countries explained by war exposure, other trauma and cultural value orientation:

Country	PTSD Prevalence (%)	Rates of traumatic events			
		War victims	Crime victims	Natural disasters	Road fatalities
Belgium	0.76	.007	9.6	4.4	10.1
France	2.32	.013	5.7	7.8	6.9
Germany	2.31	.009	7.5	5.5	4.5
Italy	0.73	.009	4.5	7.8	8.7
Netherlands	3.30	.014	2.5	3.9	4.1
Croatia	6.67	.100	14.2	—	10.4
Spain	0.56	.000	5.1	2.9	6.9
Switzerland	0.70	.000	4.2	2.4	4.7
UK	3.00	.009	7.7	3.7	3.6
Bulgaria	0.94	.002	1.7	1.3	13.5
Romania	0.38	.012	1.4	5.1	12.7

Values and social characteristics

Overall, findings revealed a significant predictive effect of value orientation on PTSD prevalence in a sample of 11 European countries. In particular, low crime rates and high modern value orientation predicted higher PTSD prevalence (Burri and Maercker 2014). This could be interpreted such that that higher experience of crime within a society "immunizes" against PTSD.

PTSD rates in US versus UK Iraq war veterans

The point prevalence of combat-related PTSD in US military veterans since the Vietnam War ranged from approximately 2 % to 17 %. Studies of recent conflicts suggest that combat-related PTSD afflicts between 4 % and 17 % of American (US) Iraq War veterans, but only 3—6 % of returning British (UK) Iraq War veterans (Richardson et al. 2010). One possible reason for the disparity between US and UK samples lies with differences in the frequency, duration and intensity of combat exposure during deployment. Variability in prevalence is likely due to differences in sampling strategies, measurement strategies, etc.

Prevalence rates are also likely affected by issues related to PTSD course, chronicity, and comorbidity; symptom overlap with other psychiatric disorders; childhood experiences, and sociopolitical and cultural factors that may vary over time and by nation.

Vietnam Veteran Debate

In 1988, the National Vietnam Veterans Readjustment Study (NVVRS) (Kulka et al. 1990a;b) — using a representative sample of 1200 veterans — estimated that 30.9 % had developed posttraumatic stress disorder during their lifetimes, and that 15.2 % were currently suffering from PTSD.

Dohrenwend et al. (2006) reevaluated military records to construct a new exposure measure, and to cross-check exposure reports in diagnoses of 260 NVVRS veterans. Now, only 18.7 % of the veterans were identified as having developed war-related PTSD during their lifetimes; 9.1 % were currently suffering from PTSD 11—12 years after war.

Data from this one study have been interpreted to indicate a 15.2 % (NVVRS), 9.1 % (Dohrenwend et al. 2006), and 5.4 % (McNally 2007) point prevalence of PTSD among Vietnam veterans when measured in the late 1980s — a potential overestimation of nearly 300 %.

PTSD Research and Vietnam Veterans

Trauma research is conceptually strongly influenced by one group of patients: veterans who served during the Vietnam and Gulf Wars. It is unclear if this group represents a mentally normal population. Antisocial personality disorders, lower social groups, etc. may be overrepresented and influencing PTSD epidemiology by underestimating prior trauma with impact for later development of PTSD.

Man-made trauma

Man-made traumas tend to have more a serious and longer-lasting psychological impact than natural disasters. If a person receives the same injury from a falling branch or from an intentional blow from another person, the latter has more psychotraumatological impact, even if the severity of the damage is lesser. The reasons for this difference are not clear. One reason could be that man-made trauma destroys people's trust in their fellow human beings and induces shame.

There is now some evidence that different neurobiological circuits are involved if an interactional or interpersonal dimension is activated (Landa et al. 2013).

Another relevant psychotraumatological issue seems to be the physical integrity or injury of the skin following an accident. A damage of this physical external barrier has a more negative impact compared with objectively more severe or even life-threatening injuries without skin damage (i. e. fracture) (Lin et al. 2012).

Borderline Personality Disorder — Chronic complex PTSD?

Early traumatizations are common in the history of patients with Borderline Personality Disorder. Some authors (Herman 1992) argue that BPD should be understood as a chronic complex PTSD.

In a study by Golier et al. (2003), the "Trauma History Questionnaire" and the PTSD module of the Structured Clinical Interview for DSM-III-R were administered to 180 male and female outpatients with a diagnosis of one or more DSM-III-R personality disorders. Path analysis was used to evaluate the relationship between borderline personality disorder and PTSD. In this analysis of the relationship between borderline personality disorder and PTSD, none of the different types of paths (direct path, indirect paths through adulthood traumas, paths sharing the antecedent of childhood abuse) was significant. The associations with both trauma and PTSD were not unique to borderline personality disorder.

Posttraumatic Hippocampal Shrinkage?

A significant subgroup of individuals with posttraumatic stress disorder exhibits chronic, unremitting symptomatology that has also been associated with smaller hippocampal volume. The hippocampus plays a significant role in configural processing of contextual cues that facilitate context-appropriate extinction of conditioned fear. Participants in a study of Gilbertson et al. (2007) included male monozygotic twin pairs who were discordant for combat trauma. In 18 twin pairs, the combat-exposed brother developed unremitting PTSD, whereas in 23 pairs, the combat-exposed brother never developed PTSD. Participants were compared in the capacity to solve allocentric spatial processing tasks, and this performance was examined for its relationship to the severity of PTSD symptomatology and hippocampal volume. Although not completely differentiated from overall IQ, PTSD combat veterans demonstrated significantly impaired performance in configural processing relative to non-PTSD combat veterans. Despite having neither combat-exposure nor PTSD, the unexposed co-twins of combat veterans with PTSD displayed the same decrements as their brothers indicating a pre-existing vulnerability.

Neurobiology of Transgenerational Transmission of Trauma

While the neurobiology of posttraumatic stress disorder has been extensively researched, much less attention has been paid to the neural mechanisms underlying more covert but pervasive types of trauma (e.g., those involving disrupted relationships and insecure attachment). Kim et al. (2014) examined the amygdala blood oxygenation level-dependent response in 42 first-time mothers as they underwent functional magnetic resonance imaging scanning, viewing happy- and sad-face images of their own infant, along with those of a matched unknown infant. Whereas mothers with no trauma demonstrated greater amygdala responses to the sad faces of their own infant as compared to their happy faces, mothers who were classi-

fied as having unresolved trauma in the Adult Attachment Interview (Dynamic Maturational Model) displayed blunted amygdala responses when cued by their own infants' sadness as compared to happiness. Unknown infant faces did not elicit differential amygdala responses between the mother groups. The blunting ("deadening") of the amygdala response in traumatized mothers is discussed as a neural indication of mothers' possible disengagement from infant distress, which may be part of a process linking maternal unresolved trauma and disrupted maternal caregiving.

This is empirical evidence for the transgenerational transmission of PTSD risk. Of course, these results indicate that the impact of individuals' own trauma experience and trauma experiences their mothers suffered earlier are difficult to separate.

Complex interactions

In a prospective investigation of 51 burn patients (Perry et al. 1992), PTSD was paradoxically predicted by smaller burns, by less perceived emotional support, and by greater emotional distress. More severe or extensive injury did not predict posttraumatic symptoms. PTSD is perhaps more dependent on individuals' subjective factors than on the severity of the stressor alone. Patients with more severe burns might have been psychologically occupied with questions around pure survival.

In the Detroit study (Breslau et al. 1991), it was determined that the risk for developing PTSD could be linked to early separation from parents, neuroticism, family history of anxiety, and preexisting anxiety or depression.

Brewin (2007) has analyzed how trauma affects memory and identity. Overwhelming stress can lead to a condition in which survivors are lost for words to describe what has happened to them but still experience vivid and inescapable images. Trauma also has the ability to bring about profound changes in identity and block normal mechanisms for correcting abnormal memory.

Psychodynamics and Trauma

Trauma has important affective, cognitive, physiological consequences, and also has an impact on patients' psychodynamics, including the following aspects (Horowitz 1976):

1. Grief or sadness
2. Guilt about one's angry or destructive impulses
3. Fear that one will become destructive
4. Guilt about surviving
5. Fear that one will identify with the victims
6. Shame about feeling helpless and empty
7. Fear that one will repeat the trauma
8. Intense anger directed toward the source of the trauma.

By destroying the certainties that pattern psychological life, trauma plunges a relational system into chaos and exposes its victims to experiences of unbearable uncertainty (Brothers 2009).

Important psychodynamic issues for treatment are:

- The notion of cumulative trauma (Khan 1963)
- "addiction to trauma" (repetition compulsion)
- Global identification of the child with the mother even if she is traumatizing or neglecting
- Identification with the aggressor (love for the traumatic object)
 - Stockholm syndrome (pathological bonding)
 - Self-Hate and Guilt
 - Lack of the positive object cathexis of one's own self.

DSM-5 (APA 2013) has added as a new criterion (with exposure to a traumatic event, intrusion symptoms, avoidance and arousal): "Negative alterations in cognitions and mood associated with the traumatic event(s)". (i. e., negative beliefs or expectations about oneself, others, or the world; feelings of detachment, etc.). Dissociative symptoms are now aspects of a facultative subtype and no longer obligate.

Conceptual Unresolved Aspects

Peritraumatic dissociation (dissociative state of consciousness within the traumatic event) is one of the strongest predictors for PTSD. Interestingly peritraumatic dissociation is a situational adaptive and a (prognostic relevant) pathogenetic factor. Is peritraumatic dissociation a first symptom or a predictor? The predictive power is unclear. Holmes et al. (2005) have differentiated "detachment" (emergency reaction) and "compartmentalization" (non-integrated memory information system) to clarify this conceptual problem.

Higher prevalence of posttraumatic stress disorder in women than in men can be found. Findings (Tolin and Foa 2006) indicate that women are at greater risk for developing PTSD than men, even when they are exposed to similar types of trauma.

Therapeutic Debates

Therapeutic strategies, as well as diagnosis, nosological and etiopathological aspects of PTSD, have also been discussed.

Trauma-specific treatments, balancing confrontational and supportive elements, are superior to general treatment approaches (Nickerson et al. 2011). But it is not clear if exposure is necessary. Exposure to trauma reminders has been considered imperative in psychotherapy for post-traumatic stress disorder. Markowitz et al. (2015) tested interpersonal psychotherapy (IPT), which has demonstrated antidepressant efficacy and shown promise in pilot PTSD research as a non-exposure-based noncognitive-behavioral PTSD treatment. This study demonstrated noninferiority of individual IPT for PTSD compared with the gold-standard treatment. IPT had (nonsignificantly) lower attrition and higher response rates than prolonged exposure. Contrary to widespread clinical belief, PTSD treatment may not require cognitive behavioral exposure to trauma reminders. Moreover, patients with comorbid major depression may fare better with IPT than with prolonged exposure. When is the "reenactment" or reexposure (reconstruction of traumatic memories) of the trauma harmful or helpful?

It is now clear that the one-time "psychological debriefing" (Critical Incident Stress Debriefing, following the Mitchell model) after trauma could be harmful, as studies suggest.

Multimodal psychosocial interventions are recommended (Kirmayer et al. 2007; Jobson and O'Keane 2008; Kira 2010; Miller et al. 2008; Bracken et al. 1995; Bracken 2001; Nickerson et al. 2011; Bigfoot and Schmidt 2010).

Sedation

The first study (Kress et al. 2003) to examine the relationship between sedation and PTSD was a follow-up to the findings of a landmark RCT published in 2000 (Kress et al. 2000) on the impact of daily interruptions in sedation on the duration of mechanical ventilation and Intensive Care Unit stay. The results showed a surprising trend toward increased incidence of PTSD in the control group (less interruption of

the standard sedation). PTSD was diagnosed in 6 patients in the control group and in none in the intervention group. In our study, long-acting sedation at illness onset significantly predicted a favorable outcome (Ladwig, Schoefinius, Dammann et al. 1999). There is still a debate (Rock 2014) over whether sedation is helpful or harmful for the development of PTSD.

Conclusions

The fact that PTSD fundamentally exists is not even questioned by critical researchers (Marsella 2010). Bracken et al. (1995) as well as Kleinman (1995) admit the therapeutic effects of this concept. What is criticized is rather a reductionist or simplistic view.

Posttraumatic stress disorder should not be reduced to a simple neuropsychological dysfunction, but has important cognitive, psychodynamic, social and cultural aspects and differing expressions.

According to Tick (2005), PTSD has had more than 80 names over the years (Nostalgia, Homesickness, Soldier's Heart, Neurasthenia/Hysteria, Compensation Sickness or Railway Spine, Shell Shock; Combat Exhaustion; Stress Response Syndrome).

PTSD can be understood as a complex interaction of:

- genetic vulnerability
- resilience or lack of resilience
- recent life stressors
- adverse experiences in childhood
- self-esteem
- external locus of control
- suggestibility
- personality characteristics
- traumatic event
- postincident environment (support)
- cultural interpretations.

Overemphasizing individual aspects can contribute to a medicalized and deficit-orientated view of the concerned person (Shephard 2001). Authors like Kleinman (1995) and Gaines (1998) have criticized the reduction of the social or political context of traumatization to individual pathology or "deficient neurochemistry" (Gaines 1998, p. 194).

These interactions should be taken into account when implementing necessary trauma-specific treatment programs in Ukraine.

Traumatic events are only one condition for the development of posttraumatic stress disorders. The intense controversies and polemics around trauma and PTSD may be themselves manifestations of the psychodynamics of psychotraumatological processes like splitting, victim-perpetrator duality and aggression.

References

1. Narcissistic vulnerability and the development of PTSD: a prospective study / [Bachar E., Hadar H., Shalev A. Y. et al.] // *J Nerv Ment Dis.* — 2005. — Vol. 193. — P. 762—5.
2. *Cross-Cultural Psychology, Research and Applications* / Ed. Berry J. — Cambridge: Cambridge University Press, 1992. — 646 p.
3. Bigfoot D. S. Honoring Children, Mending the Circle: Cultural Adaptation of Trauma-Focused Cognitive-Behavioral Therapy for American Indian and Alaska Native Children / D. S. Bigfoot, S. R. Schmidt // *J Clin Psychology.* — 2010. — Vol. 66. — P. 847—56.
4. Blank A. S. The unconscious flashback to the war in Viet Nam veterans: clinical mystery, legal defense and community problem / A. S. Blank // In: *The Trauma of War: Stress and Recovery in Vietnam Veterans.* — Washington DC: American Psychiatric Press, 1985. — P. 293—308.

5. Bracken P. J. Post Modernity and post-traumatic stress disorder / P. J. Bracken // *Social Science and Medicine*. — 2001. — Vol. 53. — P. 733—43.
6. Bracken P. J. Psychological Responses to War an Atrocity: The Limitations of Current Concepts / Bracken P. J., Giller J. E., Summerfield D. // *Social Science and Medicine*. — 1995. — Vol. 40. — P. 1073—82.
7. Traumatic events and PTSD in an urban population of young adults / [Breslau N., Davis G. C., Andreski P. et al.] // *Archives of General Psychiatry*. — 1991. — Vol. 48. — P. 216—22.
8. Posttraumatic stress Disorder. Malady or Myth? / Ed. Brewin C. R. — Yale CT: Yale University Press, 2007. — 288 p.
9. Brothers D. Trauma-centered psychoanalysis: transforming experiences of unbearable uncertainty / D. Brothers // *Ann N Y Acad Sci*. — 2009. — Vol. 1159. — P. 51—62.
10. Burri A. Differences in prevalence rates of PTSD in various European countries explained by war exposure, other trauma and cultural value orientation / A. Burri, A. Maercker // *BMC Res Notes*. — 2014. — Vol. 7. — P. 407.
11. Daly R. J. Samuel Pepys and post-traumatic stress disorder / R. J. Daly // *Br J Psychiatry*. — 1983. — Vol. 143. — P. 64—8.
12. Shook over Hell: Post-Traumatic Stress, Vietnam, and the Civil War / Ed. Dean E. T. — Harvard, MA : Harvard University Press, 1997. — 352 p.
13. The psychological risks of Vietnam for U.S. veterans: A revisit with new data and methods / [Dohrenwend B. P., Turner J. B., Turse N. A. et al.] // *Science*. — 2006. — Vol. 313. — P. 979—82.
14. Intrusive memories in perpetrators of violent crime: emotions and cognitions / [Evans C., Ehlers A., Mezey G. et al.] // *J Consult Clin Psychol*. — 2007. — Vol. 75. — P. 134—44.
15. Gaines A. From Margin to Center, From Medical Anthropology to Cultural Studies of Science / A. Gaines // *American Anthropologist*. — 1998. — Vol. 100. — P. 191—4.
16. Gersons BPR. Posttraumatic stress disorder: The history of a recent concept / BPR. Gersons, IVE. Carlier // *British Journal of Psychiatry*. — 1992. — Vol. 161. — P. 742—8.
17. Configural cue performance in identical twins discordant for posttraumatic stress disorder: theoretical implications for the role of hippocampal function / [Gilbertson M. W., Williston S. K., Paulus L. A. et al.] // *Biol Psychiatry*. — 2007. — Vol. 62. — P. 513—20.
18. The relationship of borderline personality disorder to posttraumatic stress disorder and traumatic events / [Golier J. A., Yehuda R., Bierer L. M. et al.] // *Am J Psychiatry*. — 2003. — Vol. 160. — P. 2018—24.
19. Grekin R. Prevalence and risk factors of postpartum post-traumatic stress disorder: a meta-analysis / R. Grekin, M. W. O'Hara // *Clin Psychol Rev*. — 2014. — Vol. 34. — P. 389—401.
20. Trauma and recovery: The aftermath of violence from domestic abuse to political terror / Ed. Herman J. L. — Basic Books, NY, 1992. — 304 p.
21. Hinton D. E. The cross-cultural validity of posttraumatic stress disorder: Implications for DSM-5 / D. E. Hinton, R. Lewis-Fernandez // *Depression and Anxiety*. — 2011. — Vol. 28. — P. 783—801.
22. Are there two qualitatively distinct forms of dissociation? A review and some clinical implications / [Holmes E. A., Brown R. J., Mansell W. et al.] // *Clinical Psychology Review*. — 2005. — Vol. 25. — P. 1—23.
23. Stress Response Syndromes / Ed. Horowitz M. L. — NY. : Aronson, 1976. — 358 p.
24. Jobson L. Cultural Differences in Personal Identity in Post-traumatic stress Disorder / L. Jobson, R. O'Kearney // *British Journal of Clinical Psychology*. — 2008. — Vol. 47. — P. 95—109.
25. Johnson W. B. Narcissistic personality as a mediating variable in manifestations of post-traumatic stress disorder / W. B. Johnson // *Mil Med*. — 1995. — Vol. 160. — P. 40—1.
26. Flashbacks and post-traumatic stress disorder: the genesis of a 20th-century diagnosis / [Jones E., Vermaas R. H., McCartney H. et al.] // *Br J Psychiatry*. — 2003. — Vol. 182. — P. 158—63.
27. Khan M. M. The concept of cumulative trauma / M. M. Khan // *Psychoanal Study Child*. — 1963. — Vol. 18. — P. 286—306.
28. Mothers' unresolved trauma blunts amygdala response to infant distress / [Kim S., Fonagy P., Allen J. et al.] // *Soc Neurosci*. — 2014. — Vol. 9. — P. 352—63.
29. Kira I. A. Etiology and Treatment of Post-Cumulative Traumatic Stress Disorders in Different Cultures / I. A. Kira // *Traumatology*. — 2010. — Vol. 16. — P. 128—141.
30. Kirmayer L. J. Epilogue: Trauma and the Vicissitudes of Interdisciplinary Integration / L. J. Kirmayer // In : Kirmayer L. J. Understanding Trauma, Integrating Biological, Clinical and Cultural Perspectives / Kirmayer L. J., Lemelson R. & Barad M. — NY. : Cambridge University Press, 2007. — P. 475—89.
31. Writing at the Margin. Discourse Between Anthropology and Medicine / Ed. Kleinman A. — Berkeley and Los Angeles : University of California Press, 1995. — 427 p.
32. Konner M. Epilogue: Trauma, Adaptation and Resilience: A Cross-Cultural and Evolutionary Perspective / M. Konner // In : Understanding Trauma, Integrating Biological, Clinical and Cultural Perspectives (Eds. Kirmayer L. J., Lemelson R. & Barad M.). — NY. : Cambridge University Press, 2007. — P. 300—38.
33. Kress J. P. Daily interruption of sedative infusions in critically ill patients undergoing mechanical ventilation / Kress J. P., Pohlman A., O'Connor M. // *N Engl J Med*. — 2000. — Vol. 342. — P. 1471—7.
34. The long-term psychological effects of daily sedative interruption on critically ill patients / [Kress J. P., Gehlbach B., Lacy M. et al.] // *Am J Respir Crit Care Med*. — 2003. — Vol. 168. — P. 1457—61.
35. The National Vietnam Veterans Readjustment Study: Tables of findings and technical appendices / Ed. Kulka R. A., Schlenger W. E., Fairbank J. A. [et al.]. — NY. : Brunner/Mazel, 1990a. — 1000 p.
36. Trauma and the Vietnam War generation: Report of findings from the National Vietnam Veterans Readjustment Study / Ed. Kulka R. A., Schlenger W. E., Fairbank J. A. [et al.]. — NY. : Brunner/Mazel, 1990b. — 322 p.
37. Long-Acting Psychotraumatic Properties of a Cardiac Arrest Experience / [Ladwig K. H., Schoefinius A., Dammann G. et al.] // *American Journal of Psychiatry*. — 1999. — Vol. 156. — P. 912—9.
38. Distinct neural circuits subserve interpersonal and non-interpersonal emotions / [Landa A., Wang Z., Russell J. A. et al.] // *Soc Neurosci*. — 2013. — Vol. 8. — P. 474—88.
39. Lemelson, R. Trauma in Context: Integrating Biological, Clinical and Cultural Perspectives / Lemelson, R., Kirmayer L. J. & Barad M. // In : Understanding Trauma, Integrating Biological, Clinical and Cultural Perspectives (Eds. Kirmayer L. J., Lemelson R. & Barad M.). — NY. : Cambridge University Press, 2007. — P. 451—74.
40. Adult mental health consequences of peer bullying and maltreatment in childhood: two cohorts in two countries / [Lereya S. T., Copeland W. E., Costello E. J. et al.] // *Lancet Psychiatry*. — 2015. — Vol. 2. — P. 524—31.
41. Trauma. A Genealogy / Ed. Leys R. — Chicago, IL : University of Chicago Press, 2000. — 336 p.
42. Psychological outcome of injured workers at 3 months after occupational injury requiring hospitalization in Taiwan / [Lin K. H., Guo N. W., Liao S. C. et al.] // *J Occup Health*. — 2012. — Vol. 54. — P. 289—98.
43. The mental health of clean-up workers 18 years after the Chernobyl accident / [Loganovsky K., Havenaar J. M., Tintle N. L. et al.] // *Psychol Med*. — 2008. — Vol. 38. — P. 481—8.
44. Is Exposure Necessary? A Randomized Clinical Trial of Interpersonal Psychotherapy for PTSD / [Markowitz J. C., Petkova E., Yuval Neria Y. et al.] // *Am J Psychiatry*. — 2015. — Vol. 172. — P. 430—40.
45. Marsella A. J. Ethnocultural Aspects of PTSD: An Overview of Concepts, Issues, and Treatments / A. J. Marsella // *Traumatology*. — 2010. — Vol. 16. — P. 17—26.
46. McNally R. J. Can we solve the mysteries of the National Vietnam Veterans Readjustment Study? / R. J. McNally // *J Anxiety Disord*. — 2007. — Vol. 21. — P. 192—200.
47. Miller K. Beyond Trauma-Focused Psychiatric Epidemiology: Bridging Research and Practice With War-Affected Populations / Miller K., Kulkarni M., Kushner H. // *American Journal of Orthopsychiatry*. — 2006. — Vol. 76. — P. 409—22.
48. Daily Stressors, War Experiences and Mental Health in Afghanistan. / [Miller K., Omidian P., Rasmussen A. et al.] // *Trans-cultural Psychiatry*. — 2008. — Vol. 45. — P. 611—38.
49. Mumford D. B. Emotional distress in the Hebrew Bible. Somatic or psychological? / D. B. Mumford // *British Journal of Psychiatry*. — 1992. — Vol. 160. — P. 92—7.

50. Mumford D. B. Somatic symptoms and psychological distress in the Iliad of Homer / D. B. Mumford // *Journal of Psychosomatic Research*. — 1996. — Vol. 41. — P. 144.
51. A Critical Review of Psychological Treatments of Posttraumatic stress Disorder in Refugees. / [Nickerson A., Bryant R. A., Solove D. et al.] // *Clinical Psychology Review*. — 2011. — Vol. 31. — P. 399—417.
52. Norris F. H. Mental Health Care for Ethnic Minority Individuals and Communities in the Aftermath of Disasters and Mass Violence / F. H. Norris, M. Alegria // *CMS Spectrums*. — 2005. — Vol. 10. — P. 132—40.
53. Osterman J. E., de Jong J. Cultural Issues and Trauma / J. E. Osterman, J. de Jong // In : Friedman M. J., Keane T. M. & Resick P. A. *Handbook of PTSD, Science and Praxis*. — NY : The Guilford Press, 2007. — P. 425—46.
54. Parry-Jones B. Post-traumatic stress disorder: supportive evidence from an eighteenth century natural disaster / B. Parry-Jones, W. L. Parry-Jones // *Psychol Med*. — 1994. — Vol. 24. — P. 15—27.
55. Predictors of posttraumatic stress disorder after burn injury / [Perry S., Difede J., Musngi G. et al.] // *American Journal of Psychiatry*. — 1992. — Vol. 149. — P. 931—5.
56. Rasmussen A. Posttraumatic stress in emergency settings outside North America and Europe: A review of the emic literature / A. Rasmussen, E. Keatley, A. Joscelyne // *Soc Sci Med*. — 2014. — Vol. 109. — P. 44—54.
57. Renner W. Posttraumatic stress in Asylum Seekers from Chechnya, Afghanistan and West-Africa: Differential Findings Obtained by Qualitative and Quantitative Methods in Three Austrian Samples / Renner W., Salem I., Ottomeyer K. // In : Wilson J. P. *Cross-Cultural Assessment of Psychological Trauma and PTSD* / J. P. Wilson & C. S. Tang. — NY : Springer, 2006. — P. 239—78.
58. Richardson L. K. Prevalence estimates of combat-related post-traumatic stress disorder: critical review / Richardson L. K., Frueh B. C., Acierno R. // *Aust N Z J Psychiatry*. — 2010. — Vol. 44. — P. 4—19.
59. Rock L. F. Sedation and Its Association With Posttraumatic stress Disorder After Intensive Care / L. F. Rock // *Critical Care Nurse*. — 2014. — Vol. 34. — P. 30—39.
60. Is posttraumatic stress in youth a culture-bound phenomenon? A comparison of symptom trends in selected U.S. and Russian communities / [Ruchkin V., Schwab-Stone M., Jones S. et al.] // *Am J Psychiatry*. — 2005. — Vol. 162. — P. 538—44.
61. Mental health 15 years after the killings in Rwanda: imprisoned perpetrators of the genocide against the Tutsi versus a community sample of survivors / [Schaal S., Weierstall R., Dusingizemungu P. et al.] // *J Trauma Stress*. — 2012. — Vol. 25. — P. 446—53.
62. Traumatic Narcissism: Relational Systems of Subjugation / Ed. Shaw D. — London : Routledge, 2013. — 192 p.
63. Shay J. Learning about combat stress from Homer's Iliad / J. Shay // *Journal of Traumatic Stress*. — 1991. — Vol. 4. — P. 561—79.
64. A war of nerves: Soldiers and psychiatrists in the twentieth century / Ed. Shephard B. — Cambridge MA : Harvard University Press, 2001. — 487 p.
65. Sheth H. C. Anxiety disorders in ancient Indian literature / Sheth H. C., Gandhi Z., Vankar G. K. // *Indian J Psychiatry*. — 2010. — Vol. 52. — P. 289—91.
66. Hystories: Hysterical Epidemics and Modern Culture / Ed. Showalter E. — NY : Columbia University Press, 1997. — 224 p.
67. Summerfield D. The Invention of Post-traumatic stress Disorder and the Social Usefulness of a Psychiatric Category / D. Summerfield // *BMJ*. — 2001. — Vol. 322. — P. 95—8.
68. Terheggen M. A. Western Conceptualizations and Eastern Experience; A Cross-Cultural Study of Traumatic Stress Reactions Among Tibetan Refugees in India / Terheggen M. A., Stroebe M. S., Kleber R. J. // *Journal of Traumatic Stress*. — 2001. — Vol. 14. — P. 391—403.
69. War and the Soul: Healing our Nation's Veterans from Post-traumatic stress Disorder / Ed. Tick E. — Wheaton, Illinois : Theosophical Publishing House, 2005. — 341 p.
70. Tolin D. F. Sex differences in trauma and posttraumatic stress disorder: A quantitative review of 25 years of research / D. F. Tolin, E. B. Foa // *Psychological Bulletin*. — 2006. — Vol. 132. — P. 959—92.
71. Trimble M. R. Post-traumatic stress disorder: history of a concept / M. R. Trimble // In : Trauma and its Wake, The Study and Treatment of Post-traumatic stress Disorder (ed. C. R. Figley). — NY : Brunner/Mazel, 1985. — P. 5—14.
72. The harmony of illusions: Inventing posttraumatic stress disorder / Ed. Young A. — Princeton : Princeton University Press, 1995. — 340 p.
73. Young A. An alternative history of traumatic stress / A. Young // In : Shalev A. Y. *International handbook of human response to trauma* / Shalev A. Y., Yehuda R., & McFarlane A. C. — Dordrecht, Netherlands : Kluwer Academic Publishers, 2000. — P. 51—66.

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