

Torture and PTSD: Prevalence, Sequelae, Protective Factors, and Therapy

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Abstract

The chapter analyzes the prevalence and nature of torture and its psychological, somatic, and social sequelae, as well as factors that protect survivors and contribute to recovery and effective treatment. Further, effective ways of helping torture victims are reviewed. The findings show that physical, sexual, and psychological torture composes a severe risk for the survivors' mental health, as indicated by high levels of PTSD, somatic symptoms, and changes in cognitive and emotional processes, social relations, and personality. The protective mechanisms involve individual ways of processing the torture experience, such as coping strategies and cognitive-emotional reworking, and collective factors, such as social support, and ideological and religious commitment. The cognitive-behavioral therapies (CBT) are effective ways of helping torture survivors suffering of PTSD, while long-term, multidisciplinary, and comprehensive treatments may be beneficial for general adjustment.

List of Abbreviations

CBT	Cognitive-behavioral therapies
CPTSD	Cumulative Posttraumatic Stress Disorder
CTD	Cumulative Trauma Disorder
NET	Narrative Exposure Therapy
OHCHR UN	Office of the High Commissioner for Human Rights
PAM	Perpetual Avoidance Model
POW	Prisoner of War
PTG	Posttraumatic Growth
PTS	Posttraumatic Stress Symptoms
PTSD	Posttraumatic Stress Disorder
UN	United Nations

Introduction

The chapter focuses on posttraumatic stress reactions caused by torture, the deliberate infliction of pain by one person on another. First, a definition of torture is presented along with a discussion of the complexity and multidimensionality of the phenomenon, followed by examples of physical and psychological torture methods that are used in political conflicts. After presenting research on the prevalence of torture, PTSD and other psychological, physical, and somatic sequelae of torture will be discussed, followed by a presentation of buffering and protecting mechanisms. The chapter is concluded by a documentation of effective therapies for traumatized torture survivors.

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Nature, Methods, and Context of Torture

Torture is used as a tool to systematically punish, humiliate, and intimidate people. The ultimate goal is the exertion of absolute power over another human being. As such, torture constitutes a crime against humanity as defined by the Rome Statute of the International Criminal Court (1998). In article 1 of the United Nations Convention Against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment, torture is described as an intentional act that hurts a person or someone close to the person physically and mentally. The pain and the suffering are described as severe, and the purpose of torture is to obtain information or a confession or to inflict punishment. Excluded are pain and suffering arising solely from lawful sanctions (United Nations [UN] 1984).

Torture is not random, not an act by a cruel individual out of a sudden instantaneous impulse but by appointed official agents, who torture as a part of their duty in a political or military activity. The torturers are acting with the consent of a public official or other person acting in an official capacity. In many cases, health professionals, medical doctors, and psychologists have an active role in the infliction of torture (Pope 2011). Evidence has been found of the ongoing use of torture in over 140 countries all over the world (Amnesty International 2014). The innumerable methods used to torture people vary across countries and cultures, conjoined through the ultimate goal to break the victim. Table 1 provides examples of different torture methods used on three continents.

Typically, torture trauma does not consist of one single incident but of a series of events and processes with purposeful, severe, and comprehensive impacts. Torture can be described as a special kind of prolonged traumatizing activity, aiming at manipulating the victim in a captivity setting of utter powerlessness through arbitrary cruelties. The victim is at times forced to witness others being tortured, thus becoming aware of forthcoming torture with intensifying the fear. Waiting between multiple torture incidents and imagining the worst are the core experience in torture, and survivors perceive the waiting in between torture acts as most stressful (Basoglu 2009). The torture process causes a state of helplessness, marked by shame and an outlasting shattering of trust in oneself, others, and a just and secure world (Gurris and Wenk-Ansohn 2009).

Contemporary means of torture are highly sophisticated and scientifically calibrated, and they aim to punish, frighten, and obtain information from political opponents (Basoglu 2012; Quiroga and Jaranson 2008). Yet, torture-related pain and suffering cannot be used as a criterion for torture. Pain and suffering are subjective experiences, and the thresholds for endurance vary greatly. Every torture victim experiences pain in a different way, and even physical pain inflicted by torture will not produce the same psychological results in all. Psychological methods of torture, e.g., having to witness the torture of family members or standing naked in full view of others, produce no marks on the skin, but can produce severe and long-lasting mental suffering. The cultural, social, and political context influences the ways how victims make sense of and endure the torture. Generally, research shows that the impact of the perceived uncontrollability, humiliation, and arbitrary nature of torture can cause even more severe distress than the inflicted physical pain itself (Basoglu et al. 2007; Basoglu 2012). Lastly, torture is often only one of the many stressors in the lives of the survivors who either flee from their home countries or continue living under military repression and life-danger. Subsequently, helping torture survivors in a clinical context demands a wider conceptualization of torture and its impacts than in the context of human right advocacy (Quiroga and Jaranson 2008).

Table 1 Nature and prevalence of torture among Middle Eastern, African, and European samples

	Palestinian political prisoners ^c		South and East African refugees ^c		War survivors from Balkan countries ^c	
	%	N	%	N	%	N
Physical torture						
Falanga ^a	68.0	185	16.0	21	19.1	44
Beating by gun	24.3	66	89.3 ^d	117	89.1 ^c	205
Beating by sticks	12.2	33				
Jumping on the body	29.0	79				
Electrical torture	5.9	16	1.5	2	9.6	22
Burning parts of body	5.5	15	7.6	10	7.8	18
Spilling over acid	3.3	9				
Breaking bones	6.6	18				
Crucifixion ^b	28.1	76	3.8	5	7.8	18
Injection of chemicals	8.9	24				
Psychological torture						
Sham executions	36.8	98			35.2	81
Personal humiliation	56.6	154	58.8	77	92.6 ^f	213
Humiliation of family members	38.6	105	48.1	63		
National humiliation	45.2	123				
Religious humiliation	48.9	133				
Threats of death	37.5	102	44.3	58	90.9	201
Threats to family	31.6	86	18.3	24	52.6	121
False accusations	54.8	149				
Forcing to confess	32.0	87				
“Singing” of the friends	45.0	122				
Exposure to sensory discomfort						
Exposure to extreme hot/cold	38.1	103	8.4	11	41.7	96
Bright light	14.8	40	2.3	3	23.9	55
Cold showers	23.9	65	23.9	65	33.0	76
Deprivation of basic needs						
Isolation/solitary confinement	36.9	100	14.5	19	32.2	74
Blindfolding			2.3	3	27.5	63
Water deprivation	35.4	96	61.1 ^e	80	61.6	141
Food deprivation	38.2	104			76.1	175
Sleep deprivation			36.6	48	71.3	164
Sexual torture						
Rape			45.0	59	6.5	15
Threats of rape	2.2	6	15.3	20	17.4	40
Sexual advances	18.1	49	23.7	31	17.0	39
Beating of genitals	30.1	82				
Threats to rape sister/wife	9.9	27				

Punamäki et al. 2010; Leaman and Gee 2012; Basoglu 2009

^aFalanqa refers to beating the soles of the feet

^bCrucifixion includes also hanging by hand

^cPalestinian survivors in Israeli prisons reported the occurrences “sometimes” or “frequently”; the percentage here refer to those “frequently” reported. The prevalence in the African sample is based on interview data that was then categorized. The prevalence in the European sample is based on semistructured interview for survivors of torture.

^dIncludes all types of beatings

^eIncludes both food and water deprivation

^fIncludes all types of humiliation

Table 2 Prevalence of torture: type of study and sample characteristics

Authors	Type of the study and setting	Sample characteristics	Prevalence of torture	Assessment tools
Crescenzi et al. (2002)	Community sample on Tibetan refugees in India	150 refugees (45 % high Tibetan officials)	Almost all (95 %) had been exposed to torture	Interview and questionnaire
De Jong et al. (2001)	Randomized community samples in four postwar or acute military violence settings	Epidemiological study in Cambodia ($N = 610$), Ethiopia ($N = 1,200$), Algeria (653), and Palestine (Gaza, $N = 585$)	The reported lifetime torture experiences varied from 8.4 % (Algerian) to 25.5 % (Ethiopia). The rates were 9 % in Cambodia and 15 % in Palestine	Harvard Trauma Questionnaire (HTQ): one question accounting lifetime torture experience
Eisenman et al. (2000)	Convenience sample in general health care in the USA	121 patients of different cultural background	6.6 % reported a history of torture	Self-report questionnaire, one question asking lifetime torture experience
Heisler et al. (2003)	Prisoner registry sample in Mexico	Health documents of 13,000 detainees	Forensic physicians estimated that 37.3 % had been tortured in prison Documented evidence of torture was 8.4 %	Medical records and estimation of forensic physicians of torture in prisons
Gäbel et al. (2006)	Convenience sample of asylum seekers in asylum interviews	76 asylum seekers in Austria with different cultural background	40 % reported exposure to torture and ill treatment	Posttraumatic diagnostic scale, M-CIDI
Hexom et al. (2012)	Patient sample in emergency health care in the USA	470 patients of different cultural background	11.5 % reported exposure to torture and ill treatment	Interview and questionnaire
Masmas et al. (2008)	Community sample of asylum-seeking adults in Denmark	142 asylum seekers from 33 different countries	Almost a half (45 %) had been subject to physical torture in their home countries. The highest prevalences were among Afghan (57 %) and Iranian (44 %) refugees	Structured medical interview with a questionnaire (11 items on physical, psychological, and sexual torture)
Onyut et al. (2009)	Randomized community sample in among African displaced and refuged people	1,440 refugees (519 Somalis and 906 Rwandese) in a refugee settlement	36.8 % of Somalian and 26 % of Rwandan refugees reported torture experiences (physical for lifetime) Percentages for witnessing torture were 56.8 % for Somalis and 60.5 % for Rwandese	Questionnaire (34 items for lifetime and past-year trauma, e.g., combat, assaultive violence, torture, sexual violence)
Silove et al. (2009)	Randomized community sample in Timor Leste	1,245 adults interviewed in population-based setting	11.2 % of respondents reported a history of torture	Harvard Trauma Questionnaire (HTQ): one question accounting lifetime prevalence of torture
Tang and Fox (2001)	Convenience sample of Senegalese refugees	80 Senegalese refugees settled in Gambia (41 men and 39 women)	16.3 % reported torture experiences	Harvard Trauma Questionnaire: one question accounting lifetime prevalence of torture

Prevalence of Torture

Most studies on torture prevalence comprise refugees who have fled from war zones to avoid political persecution. Examples of epidemiological, community, and patient studies in Table 2 show great differences in the prevalence of torture. The prevalence is relatively high (30–53 %) among refugees and asylum seekers in European countries (Gäbel et al. 2006; Masmias et al. 2008; Roth et al. 2006). A systematic review by Jaranson et al. (2004) showed that in the USA, the prevalence of torture experiences among refugees from Somalia and Ethiopia varied between 25 % and 69 %.

Research on refugees seeking safety in neighboring African countries showed a similar share of torture survivors. In a random sample ($N = 1,440$), the prevalence of torture was 37 % among Somalian and 26 % among Rwandese refugees (Onyut et al. 2009). The share of torture survivors was 16 % in a smaller sample ($N = 80$) of Senegalese refugees residing in Gambian refugee camps (Tang and Fox 2001). In non-asylum-seeking migrant populations internationally, the share of torture survivors was smaller, ranging between 1 % and 11.5 % (Crosby et al. 2006; Steel et al. 2002). In North American health-care patient groups, the torture prevalence varied between 7 % (Eisenman et al. 2000) and 11 % (Crosby et al. 2006).

An extensive multisite epidemiological study by De Jong et al. (2001) compared the occurrence of torture in four countries exposed to war, political violence, and military turmoil. Prevalence of torture was 25.5 % in Ethiopia, 15 % in Palestine (Gaza), 9 % in Algeria, and 8 % in Cambodia. In Timor Leste, a

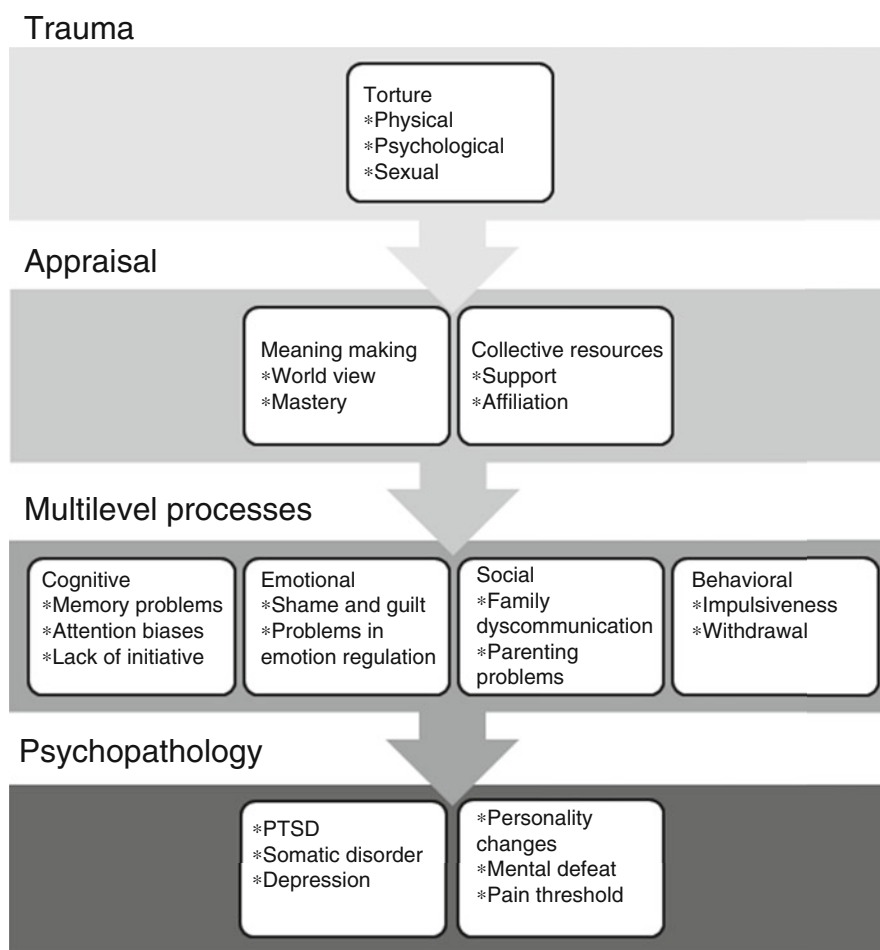


Fig. 1 Model of psychological processes of torture-related trauma (based on Nickerson et al. 2011 and Punamäki 2014)

former Portuguese colony with a history of extensive political repression and military conflict (1975–2000), a representative community sample revealed 10 % of torture experiences (Silove et al. 2009). Vulnerable groups such as detainees and political prisoners have understandably a higher prevalence of torture experiences than community-based random samples. In Mexico, forensic physicians estimated that 37 % of 13,000 detainees had experienced torture during imprisonment, yet clear evidence of torture was documented only in 8.4 % (Heisler et al. 2003).

The Mental Health Consequences of Torture

For the assessment and evaluation of torture sequelae in survivors, specific guidelines and standards have been developed and published for professionals, known by the name “Istanbul Protocol” (UN 2004). Figure 1 presents the process of multiple psychological reactions to torture trauma, evoked by strong fear and loss of control (based on Nickerson et al. 2011; Punamäki 2014). Torture has a substantial negative impact on psychological functioning through impairments in cognitive (memory, attention, and executive function), emotional (expression, regulation, and recognition), and social (family and other intimate relations) domains. PTSD and various somatic dysfunctions are the most common disorders among torture survivors.

PTSD Prevalence

Researchers agree that torture and ill treatment form a very severe risk for PTSD. A meta-analysis on PTSD among refugees and war-affected populations (181 epidemiological studies in 40 countries) confirmed torture to be the strongest single determinant for PTSD (Steel et al. 2009). The meta-analysis by Steel et al. (2009) found an average prevalence of 31 % of PTSD among survivors of torture and other evenly traumatic events in postwar context. A review by Johnson and Thompson (2007) specified that on average, the prevalence of PTSD was 87 % in help-seeking patient groups and 45 % in community samples of torture survivors. Few studies have analyzed the levels of PTSD between torture survivors, other trauma victims, and nonexposed groups. Van Ommeren et al. (2001) compared the mental health problems between torture survivors and other refugees in a sample of 1,228 Bhutanese living in Nepal. Torture survivors suffered significantly more of PTSD symptoms (43 %) than others (4 %). Also, an African study ($N = 3,323$) found a relatively high PTSD prevalence among Sudanese refugees, reaching 50.5 % (Karunakara et al. 2004). Migration also adds stress to the daily life of refugees. Typical postmigration stressors such as alienation, socioeconomic strain, and loss of identity seem to influence PTSD and other mental health sequelae of torture trauma (e.g., Lindencrona et al. 2008).

Research shows that torture and imprisonment can cause long-term consequences. Atwoli et al. (2006) studied the mental health of Mau Mau concentration camp survivors in Kenya and found 73 % of lifetime PTSD and 66 % current PTSD over 40 years after the trauma. In former political prisoners of the former German Democratic Republic, a 60 % lifetime PTSD was detected an average of 20 years after the torture exposure (Gaebler and Maercker 2011). The former prisoners with PTSD had not sought help for their disorder.

Physical and Somatic Sequelae of Torture

Physical injuries are common among torture survivors, resulting, for example, from cuttings, burns, hangings, or severe beatings. Injuries include amputated limbs, deafness, blindness, broken or extracted teeth, bone fractures, and musculoskeletal pain (OHCHR 2004). In some cases, torture leaves the survivors disabled, even with severe dysfunction. The common torture method of beating, involving blows and kicks to the head, can lead to a wide spectrum of neurologic impairments and changes in brain functioning in the frontal cortex and amygdala (Mollica et al. 2009), i.e., in brain areas critical for executive functions, problem-solving, planning, initiative-taking, and emotion regulation. There is evidence of torture specificity in some physical sequelae. In a study of 220 refugees, the torture survivors experienced chronic pain in the same bodily areas where specific torture methods had been targeted, i.e., headaches or musculoskeletal pains (Olsen et al. 2006). Pain in the feet was associated with *falanga* (or *falaka*), a method in which the soles of the bare feet of the victim are hit with a stick or a rope. Sexual torture – executed on both men and women – can lead to venereal disease, infertility, impotence, and urological complications (Oosterhoff et al. 2004), as well as pregnancy or mutilation of genital area (Kozaric-Kovacic et al. 1995).

The most common physical consequence of torture is long-lasting pain in different areas of the body (Carinci et al. 2010) or chronic injuries (Rasmussen et al. 2007). Typical complaints are headaches and musculoskeletal and abdominal pain (Williams et al. 2010). On the other hand, the pain after torture is often unspecific, and in many cases, torture is not traceable for medical professionals. Due to their unspecific nature, the association of the pain with a history of torture remains easily undetected in health care (e.g., Heisler et al. 2003). It is noteworthy that also psychological torture methods are associated with somatic symptoms and body pains (Punamäki et al. 2010).

Hondius et al. (2000) examined how exposure to torture is associated with somatic complaints among refugees and to what they themselves attribute their health complaints. Results confirmed the significant role of physical torture in contributing to somatic complaints, in addition to migration stress. About a third of the studied refugees perceived torture as a cause for their somatic complaints. Van Ommeren et al. (2001) studied 1,052 Bhutanese refugees in Nepal, half were tortured in their home country and another half had no history of torture. Among torture survivors, 56 % suffered of persistent somatoform pain disorder, while the share was 28 % among non-tortured. Torture-related chronic injuries make survivors vulnerable to psychological suffering, and, vice versa, mental health problems such as PTSD can intensify pain and predict somatic problems (Defrin et al. 2013; Rasmussen et al. 2007). Rasmussen showed that severe injuries mediated the impact of torture on PTSD and that the injuries increased the risk for major depression. Defrin et al. (2013) found a substantial level of long-lasting chronic pain among Israeli prisoners of war (POW) who were tortured and had suffered tissue damages 40 years earlier. Their pain threshold was also lower than among non-tortured POWs.

The relation of torture methods with subsequent somatic and psychological problems is complex, however. Some studies have compared the impact of physical and psychological torture on survivors' somatic and psychological symptoms. Severe exposure to psychological torture was associated with heightened levels of both somatic and mental health problems in Palestinian tortured ex-prisoners (Punamäki et al. 2010) and significantly associated with PTSD in contrast to physical torture in refugees in the USA (Kira et al. 2013). Among torture survivors from Ex-Yugoslavia, psychological ill treatment and physical torture had a similar influence on health and well-being (Basoglu et al. 2007). In a sample of help-seeking refugees in the USA ($N = 325$) however, sexual torture was associated with PTSD, depression, and anxiety, while psychological torture was not (Hooberman et al. 2007).

Cultural beliefs, norms, and traditions shape the ways torture survivors manifest their psychological and somatic symptoms and the meanings they give to their traumatic experiences. An interest in a cultural

understanding of torture and its consequences is pivotal when helping survivors to recover. Diagnostic criteria such as PTSD have been developed according to Western scientific traditions and may not capture the suffering in cultures where more metaphoric, collective, and spiritual ways are important in communicating distress (Wilson and Droždek 2007). Traditional African and Asian societies have a more holistic view of human life, in contrast to the Western dualistic conception of mental and physical health. Somatic manifestations of distress are considered typical in cultures that emphasize collective harmony as a core value and stigmatize mental illnesses and where individual thinking and emotions are of secondary importance (Draguns and Tanaka-Matsumi 2003). Somatization can, however, feature mental suffering also in Western patients, which speaks against the view of specific “somatizing cultures.”

Cross-cultural studies are rare among torture victims. Schubert and Punamäki (2011) confirmed that torture survivors with European background (from Ex-Yugoslavia) showed a higher level of PTSD than cultural groups from more traditional collective societies in the Middle East, Asia, and Africa. Yet, the European survivors reported also more somatic complaints than survivors with African background. Women torture survivors suffered more from PTSD and depressive symptoms than men in all cultural groups, which as a result concurs with other studies (Johnson and Thompson 2008).

Cognitive-Emotional and Social Consequences of Torture

The life-threatening and fear-inducing psychological and physical torture methods (Basoglu 2009) have a comprehensive impact on cognitive, emotional, and social functioning (see Fig. 1). Torture experience often means a dramatic loss of trust in other people’s benevolence and in one’s own worth, and subsequently personality traits of mistrust, paranoid, and withdrawal may emerge. Torture means systematic humiliation, and survivors therefore feel easily isolated from others and suffer from feelings of shame and guilt, the former being somewhat more common in collectivistic and the latter in individualistic cultures (Draguns and Tanaka-Matsumi 2003). Many report difficulties in regulating arousal of anger, rage, and fear and show impulsive behaviors (Näätänen et al. 2002).

Neuropsychiatric memory impairments are common consequences of beatings to the head but also of suffocation and near-drowning exposures (Moreno and Grodin 2002). Torture survivors suffer from attentional difficulties, recall problems, sleeping difficulties, and dissociative states that can severely harm their daily life functioning and adaptation to working life (Kendall-Tackett 2009; Kira et al. 2013).

Torture has a thorough impact on the survivors’ family and other social relations. Torture experiences are transmitted to intimate relationships directly, making family members also a target of torture, and indirectly, through changes in survivors’ communication, emotional intimacy, and behavior (Leen-Feldner et al. 2013). Two classic relational phenomena have been documented in the families of torture survivors: the conspiracy of silence (Danieli 1998) and the parentification or role reversal between parents and children (Field et al. 2011). Parents want to protect their children by not telling about their torture experiences, but the trauma can be transmitted to children through multiple ways in words, silences, gestures, and body language. Silence communicates the past traumas through forcing children to create fantasies about horrors that happened to their parents. Montgomery (2004) analyzed family relations and communication patterns in a qualitative study among families of torture survivors settled in Denmark. The results revealed that severe trauma hindered family members from sharing their memories, and there was no direct verbal communication of the torture and other painful events. Although parents kept silent, the children nonetheless developed their own imaginative narratives of horrors and threats based on scraps of information overheard in conversations and assumptions.

Research has documented instability and disharmony in the families of torture survivors, revealing changes in parenting practices, communication patterns, and marital intimacy. Traumatized parents can be

overprotective of their children or withdraw from the mutual interaction. A study among families of Cambodian torture survivors ($N = 200$) showed that parents with high levels of PTSD symptoms showed punitive or neglecting parenting style, and traumatized mothers were also overprotective of their children (Field et al. 2011). The children of torture survivors suffer from PTSD, depression, and other mental health problems. In the aforementioned study, both mothers and fathers PTSD symptoms were positively associated with the children's depression and anxiety levels. In another study of Cambodian families exposed to atrocities during the Pol Pot repression, the children showed high rates of PTSD if one or both parents had PTSD (Kinzie et al. 1998). Research on tortured refugees settled in Sweden confirmed that their children showed higher levels of PTSD, anxiety, and depression symptoms, as well as attention deficits and conduct disorders, as compared to children of non-tortured parents (Daud et al. 2008).

Torture survivors often face difficulties in regulating emotions and struggle with mood changes and impulsiveness (Näätänen et al. 2002). There is some evidence of family violence, deteriorated marital relations, and tense atmosphere in the families of torture survivors. A study on Israeli former prisoners of war (POW) specified that the husband's PTSD rather than the torture itself was associated with deteriorated marital relations (Dekel and Solomon 2006). Another Israeli study found lower levels of marital intimacy, dyadic adjustment, and sexual satisfaction among POWs than controls, and especially the POWs with PTSD showed lower levels of dyadic adjustment (Zerach et al. 2010). A study with North American POWs from World War II showed that those who were both exposed to torture and long-term captivity and suffered of PTSD showed severe verbal and physical aggression in their marital relations (O'Donnell et al. 2006).

Protective Factors and Processes in Torture Trauma

Researchers aim at understanding what protects the torture survivors' mental health. Findings involve beneficial individual ways of processing the traumatic experience, such as effective coping strategies, cognitive-emotional reworking, personality characteristics, and collective factors, such as social support, ideological and religious commitment, and cultural meaning-making efforts.

Individual Trauma Processing

Effective coping strategies are critical in facing trauma, contributing to adaptation and recovery. Survivors can cope by actively managing and changing their own emotions, thoughts, and behavior or/and through attempting to impact the source of trauma, the former indicating emotion-focused and the latter problem-focused coping strategies. Finding a positive meaning after trauma is an example of emotion-focused and political activity of the problem-focused coping.

Research among torture victims concurs with general findings by revealing that emotion-focused coping strategies are not beneficial for mental health. It also seems that individual attempts to cope seldom genuinely protect the mental health when the torture trauma is severe. Hooberman et al. (2010) analyzed the protective function of coping strategies among treatment-seeking torture survivors ($N = 75$). They found that those who relied on emotion-focused disengagement as their coping were at higher risk for PTSD. However, neither emotion- or problem-focused coping strategies could protect the survivors' mental health from severe trauma impacts. Similarly, none of the suggested coping strategies, e.g., active reconstruction, avoiding and distraction, or social affiliation, could protect the mental health of Palestinian political prisoners from severe torture impacts. Yet, high level of active and constructive coping and low level of avoiding and distracting coping were directly associated with good mental health,

including low level of PTSD (Punamaki et al. 2008). Another study among Palestinian ex-prisoners revealed that shortly after the release from prison, the more practical problem-focused coping strategies were effective, while emotion-focused strategies served the later adaptation (Kanninen et al. 2002). Finally, according to Emmelkamp et al. (2002), culturally salient positive coping (e.g., discussing the problem with family and friends, worshipping, visiting a traditional healer, involvement in a political movement, or singing empowering songs) could not decrease somatic and psychiatric symptoms among Nepalese torture survivors.

Beneficial changes in cognitive appraisal, making sense, and reworking the trauma are crucial elements in cognitive behavioral therapies (CBT), which are recommended for trauma treatment, also for torture survivors (McFarlane and Kaplan 2012). Research among torture survivors confirms, to some extent, the importance of generally found negative processes, such as guilt, blaming oneself, dysfunctional appraisal, and mental inflexibility. Yet, even more informative are the specific torture-salient positive cognitive-emotional processes. They include psychological preparedness, inoculation against mental defeat, empowerment, mastery, and meaningfulness that all contribute to decreased PTSD or/and increase of posttraumatic growth (PTG). The PTG involves social affiliation, awareness of graciousness of life, and meaningful self- and community realization (Tedeschi and Calhoun 2004). Mental flexibility is considered a key protective shield in trauma exposure, as it allows voluntary expression or suppression of emotions, enables goodness-of-fit with the situational demands, and boosts feelings of mastery (Bonanno 2005). Koso and Hansen (2006) confirmed among Bosnian war veterans and torture survivors ($N = 40$) that high performance in neurocognitive tasks involving mental flexibility predicted low levels of PTSD, whereas survivors with PTSD showed comprehensive cognitive impairments in attention, working memory, and executive function. In other words, they had difficulties in planning, initiative-taking, problem-solving, and thought and emotion regulation.

The way how survivors interpret life-threatening and uncontrollable events is dependent upon their personal and collective appraisals of the severity and consequences for themselves and significant others. There is evidence that ideological and political commitment is a core protective factor among torture survivors (Basoglu et al. 2007; Ehlers et al. 2000). Politically active persons may gain a “psychological preparedness” because they expect to be tortured when detained. They may even be trained for using effective coping strategies and specific methods to sustain torture thus enhancing the sense of mastery (Ehlers et al. 2000; El-Sarraj et al. 1996). Psychological preparedness for torture functions as a sort of immunization through increasing a sense of coherence, trust in benevolent outcomes, and maintaining meaningfulness of the political struggle (Basoglu et al. 2007; Ursano et al. 1987). Ehlers and colleagues (2000) revealed that tortured ex-prisoners from the German Democratic Republic ($N = 146$) who could maintain mental integrity suffered lower levels of PTSD than those prisoners who showed mental defeat, characterized by perceived loss of all autonomy and own humanity and identity and giving up and surrender to the torturer.

Personality characteristics are expected to function as protectors in severe trauma and torture but are seldom empirically studied. Among them are optimism, secure attachment style, and novelty-seeking temperament. Optimistic individuals trust in their ability to master stress and challenges, share a belief that life is good, and difficulties will turn out in a positive way. A study of American POWs ($N = 131$) with torture history in Vietnam showed that those with dispositional optimism were more resilient, i.e., did not develop PTSD despite severe torture exposure (Segovia et al. 2012). Studies among Israeli POWs with torture history also confirmed optimism to be a protective personality trait in the aftermath of trauma (Solomon and Ohry 2010). Personality factor such as optimism has not found as important in other cultural contexts. Optimism did not contribute to strengthening posttraumatic growth among Somali refugees (Kroo and Nagy 2011) or torture survivors from Balkan (Ai et al. 2003). An intervention study among Palestinian torture survivors revealed that secure attachment was associated with increased

posttraumatic growth. Secure attachment could also protect survivors' mental health from negative impacts of physical but not psychological torture (Kanninen et al. 2003).

Collective Support and Meaning

Ideological, religious, and cultural values form the context where torture survivors appraise, interpret, and cope with the trauma. Religious and spiritual beliefs can be of help to survivors and guide them to employ meaningful responses to trauma. Evidence is available on Buddhist beliefs in protecting torture survivors from PTSD, e.g., among Tibetans (Elsass and Phuntsok 2009). The acceptance of suffering as a necessary part of life enables these trauma survivors to keep positive mood and thrust in the future, as well as to seek comfort in the prospects of next reincarnation. Buddhist trauma survivors typically frame their life histories according to religious meanings that emphasize strong thrust in positive outcomes. Research confirms also Islamic belief system to be beneficial for trauma survivors. A study confirmed among refugees from Somalia that feelings of hope, strong religiosity, and praying as everyday religious expression contributed to posttraumatic growth (Kroo and Nagy 2011). Refugees from Somalia and Congo who settled in the USA perceived the support and guidance from their religious communities as highly important for their well-being especially in times of distress (Piwowarczyk et al. 2014).

A number of studies in the USA showed that religious commitment associates with good mental health among traumatized refugees. Jaranson et al. (2004) studied the role of religion in protecting mental health among Oromo and Somali young adults ($N = 338$) and confirmed an association between strong commitment to religious practices and low level of PTSD symptoms. Another study on African torture survivors in the USA ($N = 113$) found that engaging in religious services, appreciating spirituality, and praying were associated with low levels of PTSD and depressive symptoms. In a study with Croatian war veterans with PTSD, lack of religious commitment and spiritual values was associated with greater use of mental health services (Mihaljević et al. 2012). A study among Palestinian political ex-prisoners ($N = 275$) found that religious commitment was associated with secure attachment style, but could not protect torture survivors from PTSD or somatic symptoms (Salo et al. 2005).

Social support has many forms and functions among torture survivors. Through emotional affiliation and practical help, social support is considered as the main protection from PTSD in general (Brewin et al. 2000) and also among torture survivors (Carlsson et al. 2006). Some studies have documented only the direct link between adequate and sufficient social support and good mental health without analyzing its protective functions. In a study among traumatized Somali refugees, satisfaction with social support contributed to posttraumatic growth (Kroo and Nagy 2011). Another study found that Bosnian torture survivors were actively seeking social support and especially women highly valued its availability (Salcic et al. 2007). Somali and Congolese refugees, in accordance with their cultural ways, sought help for their mental health problems from their own exile community in the USA rather than from official health care providers (Piwowarczyk et al. 2014).

Unifying group identity is acknowledged to support healthy recovery from torture. Empirically, its role has been shown among aged Jewish survivors from the Holocaust and from Soviet labor camps (Bachner et al. 2007). The support from a larger community contributes to healthy group identity and well-being (Barel et al. 2010). Similarly, social acknowledgment of the injustice and suffering can serve as a protective factor. In a sample of Chechen refugees, Maercker et al. (2009) confirmed that social acknowledgment was associated with low levels of PTSD symptoms.

Table 3 Effectiveness of psychotherapies in reducing posttraumatic stress disorder (PTSD) among survivors of torture

Authors	Research task and therapy	Sample, referral setting, and treatment intensity	Research setting and outcome measure	Results: therapy effectiveness and sustainability
Bichescu et al. (2007)	<p>*Effectiveness of Narrative Exposure Therapy (NET) to reduce chronic PTSS and PTSD</p> <p>*Treatment elements include psychoeducation, narration of a testimony, imaginal trauma exposure</p>	<p>*$N = 18$</p> <p>Romanian political ex-prisoners</p> <p>*Eligible with PTSD diagnosis (CID-I)</p> <p>*5 sessions</p>	<p>*Randomized to NET ($n = 9$) or psychoeducation PE ($n = 9$)</p> <p>*Pre-posttreatment and 6 months follow-up</p> <p>*CID-I</p>	<p>*NET reduced PTSD significantly more than PE; remission 4 in NET and 1 in PE</p> <p>*Effect size (Cohen's d) = 3.15. in the follow-up</p> <p>*Avoidance and arousal symptoms significantly decrease in NET</p>
Birck (2001)	<p>*Effectiveness of the multidisciplinary treatment to reduce PTSD and depression and to increase psychosocial functioning</p> <p>*Treatment components involved various psychotherapies (psychodynamic, family systemic, and CBT) and supportive counseling</p>	<p>*$N = 30$ torture survivors and asylum seekers from Middle East and Africa</p> <p>*Mental health service for survivors of torture in Germany</p> <p>*Chronic PTSD diagnosis as well as comorbid somatoform and depressive disorders</p> <p>*Weekly psychotherapy for 2 years</p>	<p>*Single cohort no control group</p> <p>*Pre-posttreatment assessments</p>	<p>*Decrease in intrusive symptoms</p> <p>*About a half still had PTSD diagnosis after 2 years of treatment</p>
Carlsson et al. (2005)	<p>*Effectiveness of the multidisciplinary treatment to reduce PTSD and depression and to increase quality of life</p> <p>*Treatment components (1) different psychotherapies: family, CBT, and psychodynamic; (2) physiotherapy; (3) social support; (4) psychoeducation; (5) family approaches; and (6) psychoactive medication</p>	<p>*$N = 55$ torture survivors</p> <p>*Specialized rehabilitation center in Denmark</p> <p>*In average 7.5 months participation</p>	<p>*Single cohort no control group</p> <p>*Pre-posttreatment and 9 months follow-up</p> <p>*PTSD diagnosis</p> <p>*Hopkins Symptom Checklist-25 (HSCL)</p> <p>*Harvard Trauma Questionnaire (HTQ)</p>	<p>*PTSD symptoms did not reduce significantly across the assessment points</p> <p>*Effect size (Cohen's d) = 0.30</p>

(continued)

Table 3 (continued)

Authors	Research task and therapy	Sample, referral setting, and treatment intensity	Research setting and outcome measure	Results: therapy effectiveness and sustainability
Carlsson et al. (2010)	*Long-term effectiveness of the multidisciplinary treatment to reduce PTSD	* $N = 45$ torture survivors; follow-up study (Carlsson et al. 2005)	*Single cohort, no control group *10-year follow-up	*PTSD symptoms did not reduce significantly * Effect size (Cohen's d) = 0.45
Halvorsen and Stenmark (2010)	*The effectiveness of Narrative Exposure Therapy (NET) to reduce PTSD and depression among torture survivors *NET treatment elements include (1)	* $N = 16$ torture survivors *Specialized rehabilitation center in Norway *10 sessions	*Single cohort, no control group *Pre-posttreatment, 6 months follow-up *Clinician-administrated PTSD scale (CAPS)	NET decreased significantly PTSD scores at posttest assessments and further in 6 months *Effect size $d = 1.16$ at 6 months follow-up
Hensel-Dittman et al. (2011)	*To compare the effectiveness of two active therapies: NET vs. Stress Inoculation Training (SIT) among torture survivors	* $N = 28$ torture survivors, who were asylum seekers in Germany *Comorbidity PTSD and depression *10 sessions, 90 min in both NET and SIT	*RCT to NET ($n = 14$) and SIT ($n = 14$) *Pre-posttreatment, and 6 and 12 months follow-up *Clinician-administrated PTSD scale (CAPS)	*PTSD symptoms decreased significantly only in NET *Effect sizes for NET $d = 1.42$ for 6 months and $d = 1.59$ for 12 months and for SIT correspondingly $d = 0.12$ and $d = 0.19$
Hinton et al. (2005)	*To analyze the cultural-sensitive CBT to reduce PTSD, anxiety, and panic disorders *Six-step therapy: (1) culturally informed psychoeducation, visualization, and mindfulness; (2) emotional trauma processing; (3) muscle tension reduction; (4) cognitive restructuring and flexibility; (5) multimodal reexperiencing; and (6) breathing exercises	* $N = 20$ Cambodian refugees *Concentration camp experiences *PTSD diagnosis, resistant for earlier interventions *12 sessions	*RCT for culture-CBT ($n = 10$) and waiting list ($n = 10$) *Pre-posttreatment assessments * PTSD diagnosis (CAPS) *Symptom checklist-90	*PTSD significantly reduced in CBT group *Effect sizes for CAPS $d = 2.17$ and for self-reported symptom checklist $d = 2.77$

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Table 3 (continued)

Authors	Research task and therapy	Sample, referral setting, and treatment intensity	Research setting and outcome measure	Results: therapy effectiveness and sustainability
Hinton et al. (2004)	<ul style="list-style-type: none"> *To analyze cultural-sensitive CBT to reduce PTSD, anxiety, and panic disorders *Six-step therapy: (1) culturally informed psychoeducation, visualization, and mindfulness; (2) emotional trauma processing; (3) muscle reduction; (4) cognitive restructuring; (5) multimodal reexperiencing; and (6) breathing exercises 	<ul style="list-style-type: none"> *$N = 12$ Vietnamese refugees *PTSD diagnosis, resistant for earlier interventions *11 sessions 	<ul style="list-style-type: none"> *RCT for culture-CBT ($n = 6$) and waiting list ($n = 6$) *Pre-posttreatment assessments *PTSD diagnosis (SCID) *Hopkins Symptom Checklist-25 (HSCL) *Harvard Trauma Questionnaire (HTQ) 	<ul style="list-style-type: none"> *PTSD symptoms significantly reduced in the CBT group *Effect size to self-reported checklist $d = 2.5$
Hinton et al. (2009)	<ul style="list-style-type: none"> *Cultural-sensitive CBT to reduce PTSD symptoms *Psychophysiological mediating factors (optimal emotion regulation indicated by heart rate (vagus nerve) and blood pressure) 	<ul style="list-style-type: none"> *$N = 24$ Cambodian refugees resistance to medication *12 sessions 	<ul style="list-style-type: none"> *RCT for culture-CBT ($n = 12$) and waiting list ($n = 12$) *Pre-posttreatment assessments *PTSD diagnosis (CAPS) *Vagal nerve and blood pressure 	<ul style="list-style-type: none"> *PTSD reduced significantly in CBT group and later CBT exposed waiting list group *Effect sizes for CAPS $d = 1.2$ and $d = 2.9$ *Reduction in systolic blood pressure explained the PTSD recovery
Holmqvist et al. (2006)	<ul style="list-style-type: none"> *Short-term psychodynamic therapy to reduce PTSD and other psychiatric symptoms and to increase psychosocial functioning *Treatment elements according to symptoms and recovery: supportive in intrusive phase, trauma exposure in denial phase, and understanding meaning and integration of the symptom expression 	<ul style="list-style-type: none"> $N = 15$ Bosnian refugees with concentration camp background *15 sessions in average 	<ul style="list-style-type: none"> *Single cohort, no control group *Pre-posttreatment assessments *Symptom checklist-90 *Posttraumatic stress scale-10 	<ul style="list-style-type: none"> *PTSD symptoms decreased significantly *Effect sizes to self-reported checklists $d = 1.1$ and $d = 3.0$ *No changes in other symptoms or psychosocial functioning

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Table 3 (continued)

Authors	Research task and therapy	Sample, referral setting, and treatment intensity	Research setting and outcome measure	Results: therapy effectiveness and sustainability
Kruse et al. (2009)	<ul style="list-style-type: none"> *The effectiveness of trauma-focused psychotherapy to decrease PTSD and somatoform disorders *Treatment elements included psychoeducation, therapeutic alliance, cognitive restructuring, affect regulation, and muscle relaxation 	<ul style="list-style-type: none"> *N = 64 Bosnian refugees with torture experiences *25 sessions, 50 min 	<ul style="list-style-type: none"> *TF therapy treatment and treatment as usual (TAU: counseling and medical treatment) *Pre-posttreatment, 12 months follow-up *Harvard Trauma Questionnaire (HTQ) *Symptom checklist-90R 	<ul style="list-style-type: none"> *PTSD symptoms decreased significantly at 12 months *Effect sizes 2.7 PTSD symptom reduction *82.4 % in FT therapy no PTSD diagnosis
Livanou et al. (2002)	<ul style="list-style-type: none"> *To analyze the role of therapy elements (trauma exposure, cognitive reconstruction, and relaxation) in reducing PTSD, anxiety, and depressive symptoms *Treatment elements included 	<ul style="list-style-type: none"> N = 89 torture survivor from Ex-Yugoslavia *Concentration camp and war experiences *Eligible with PTSD diagnosis 	<ul style="list-style-type: none"> *Randomized and controlled *Exposure therapy vs. cognitive framing vs. both vs. solely relaxation *Pre- and post-therapy assessments as well as middle of the therapy and follow-up 	<ul style="list-style-type: none"> *PTSD decreased in all therapy groups *Beneficial changes in cognitive appraisals contributed to the treatment effectiveness
MacColl et al. (2010)	<ul style="list-style-type: none"> *Effectiveness of the multidisciplinary treatment protocol (International Rehabilitation Council for Torture Victims, IRCT) to reduce PTSD and depression and to increase quality of life *Treatment components included different psychotherapies, physiotherapy, practical and social support, counseling, and psychoeducation 	<ul style="list-style-type: none"> *N = 97 torture survivors *Multisite setting of specialized rehabilitation centers in 5 developing countries *In average 6 months treatment 	<ul style="list-style-type: none"> *Single cohort no control group *Pretreatment and 6 months assessments *Hopkins Symptom Checklist-25 (HSCL) *Harvard Trauma Questionnaire (HTQ) 	<ul style="list-style-type: none"> *PTSD symptoms reduced at 6 months (for change, $p < 0.02$ in average)
Neuner et al. (2004)	<ul style="list-style-type: none"> *To compare the effectiveness of three therapy forms in PTSD treatment among refugees *Manualized therapies: Narrative Exposure Therapy (NET), psychoeducation, and supportive consultation 	<ul style="list-style-type: none"> *N = 77 Sudanese refugees *43 (56 %) PTSD diagnosis 	<ul style="list-style-type: none"> *Randomized and controlled *NET ($n = 17$) vs. supportive ($n = 14$) vs. psychoeducation ($n = 12$) *Pre- and posttreatment assessments and 1-year follow-up 	<ul style="list-style-type: none"> *NET reduced PTSD symptoms more significantly than supportive consultation in the follow-up (size effect $d = 1.16$) *NET group had no PTSD diagnosis in the follow-up; the difference is statistically significant

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Table 3 (continued)

Authors	Research task and therapy	Sample, referral setting, and treatment intensity	Research setting and outcome measure	Results: therapy effectiveness and sustainability
Neuner et al. (2008)	<ul style="list-style-type: none"> *To compare two types of therapies in PTSD treatment among refugees *Manualized therapies: Narrative Exposure Therapy (NET) and trauma consultation 	<ul style="list-style-type: none"> *277 Rwandan refugees in the camp in Uganda *PTSD diagnosis 	<ul style="list-style-type: none"> *Randomized to NET vs. consultation and control groups *Pre- and posttreatment assessments and 1-year follow-up 	<ul style="list-style-type: none"> *PTSD symptoms decreased significantly more in both active therapy groups (NET vs. trauma consultation) than in the control group *In the follow-up, 70 % of the NET vs. 65 % of the consultation group did not have PTSD diagnosis, whereas in the control group only 37 % were without PTSD
Neuner et al. (2010)	<ul style="list-style-type: none"> *Effectiveness of NET in treating PTSD among torture victims *Treatment elements include psychoeducation, narration of trauma, testimony, imaginal trauma exposure 	<ul style="list-style-type: none"> *$N = 32$ torture survivors and asylum seekers in Germany *9 sessions 	<ul style="list-style-type: none"> *RCT to NET ($n = 16$) or treatment as usual (TAU $n = 16$ medication and stabilizing) *Pre-posttreatment and 6 months follow-up *PTSD diagnosis (CIDI) 	<ul style="list-style-type: none"> *Significant decrease of PTSD only in the NET group at 6 months *Effect size $d = 1.60$
Palic and Elklit (2009)	<ul style="list-style-type: none"> *Effectiveness of multidisciplinary CBT-based treatment among traumatized refugees with torture experiences *Treatment elements included CBT-based psychotherapy, physiotherapy, social support, and medication 	<ul style="list-style-type: none"> *$N = 26$ refugees with PTSD diagnosis referred from Danish Clinic for Traumatized Refugees (CTR) *16–18 sessions in 4 months 	<ul style="list-style-type: none"> *Single cohort no control group *Pre-posttreatment and 6 months follow-up *Trauma Symptom Checklist-35 	<ul style="list-style-type: none"> *Significant reduction in PTSD symptoms *No change in PTSD diagnosis *Effect sizes 0.30–0.60

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Table 3 (continued)

Authors	Research task and therapy	Sample, referral setting, and treatment intensity	Research setting and outcome measure	Results: therapy effectiveness and sustainability
Paunovic and Ost (2001)	<ul style="list-style-type: none"> *To compare the effectiveness of CBT and trauma exposure therapies in reducing PTSD, anxiety, and depressive symptoms *Treatment elements in CBT included psychoeducation, cognitive restructuring, imaginal and in vivo exposure, and relaxation. The trauma exposure therapy involved imaginal and in vivo exposure and psychoeducation 	<ul style="list-style-type: none"> *N = 16 tortured refugees from different countries *16–20 weekly sessions *Duration 60–120 min 	<ul style="list-style-type: none"> *Randomized to two treatment conditions: CBT <i>n</i> = 8 vs. trauma exposure therapies (<i>n</i> = 8) *Pre- posttreatment assessments *PTSD Symptom Scale (Impact of Event Scale-Revised (IES-R)) 	<ul style="list-style-type: none"> *PTSD symptoms significantly reduced in both therapy groups *PTSD diagnosis reduced in half of participants: 48 % in the CBT and 53 % in trauma exposure therapies were without diagnosis at posttreatment
Priebe et al. (2010a, b)	<ul style="list-style-type: none"> *Observational study on mental health outcomes of multidisciplinary treatment protocol to reduce PTSD and to increase quality of life *Treatment components included different psychotherapies (EMDR, CBT, psychodynamic), physiotherapy, practical and social support, medication, and psychoeducation 	<ul style="list-style-type: none"> *N = 463 war and torture survivors in 5 Balkan countries *Multisite (4) setting of specialized rehabilitation *Eligible with PTSD; 70 % had not responded to earlier treatment *In average 6 months treatment 	<ul style="list-style-type: none"> *Single cohort, no control group *12 months outcomes (nonexperimental setting) *PTSD diagnosis (CAPS) *PTSD Symptom Scale (Impact of Event Scale-Revised (IES-R)) 	<ul style="list-style-type: none"> *Treatment was not effective in reducing PTSD diagnosis: 86 % still had the PTSD diagnosis at 12 months *PTSD symptoms reduced moderately but statistically significantly at 12 months follow-up
Salo et al. (2008)	<ul style="list-style-type: none"> *Compare the effectiveness of individual and group therapies in reducing PTSD and increasing posttraumatic growth among torture victims *Individual therapy involved stress management, coping skill training, emotion regulation, and desensitization *Group therapy focused on sharing experiences, psychoeducation, and social support 	<ul style="list-style-type: none"> *N = 115 ex-prisoners with torture experiences *Referred to a Palestinian mental health clinic 	<ul style="list-style-type: none"> *Allocated to individual (<i>n</i> = 19) and group (<i>n</i> = 20) therapies and control group (<i>n</i> = 76 from community sample) *Harvard Trauma Questionnaire (HTQ) 	<ul style="list-style-type: none"> *In individual therapy, the PTSD symptoms decreased significantly more than the control group (<i>p</i> < 0.05) *In group therapy, the intrusive symptoms decreased more than the control group (<i>p</i> < 0.01)

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Table 3 (continued)

Authors	Research task and therapy	Sample, referral setting, and treatment intensity	Research setting and outcome measure	Results: therapy effectiveness and sustainability
Stenmarket et al. (2013)	*The effectiveness of Narrative Exposure Therapy (NET) in PTSD treatment among torture survivors	* <i>N</i> = 81 torture survivors as asylum seekers in Norway *Clients in psychiatric open clinics *10 sessions	*Randomized to NET (<i>n</i> = 51) and treatment as usual (TAU: <i>n</i> = 30) *Pre- and posttreatment assessments and 6 month follow-up *PTSD diagnosis (CAPS)	*Both NET and TAU decreased clinically significantly the PTSD symptoms *Yet the change was larger in NET than in TAU
Tol et al. (2009)	*Effectiveness of brief multidisciplinary treatment to reduce PTSD *Treatment involved psychosocial services (problem-focused client-centered approach with nonspecific therapeutic elements (empathy, emotional support, intercultural sensitivity, basic communication skills), counseling, physiotherapy, legal assistance, and medication	* <i>N</i> = 192 treatment-seeking Bhutanese torture survivors in Nepal	*Allocated to treatment (<i>n</i> = 111) and control (<i>n</i> = 81) groups (psychoeducation for controls) *Pretreatment and 5 months follow-up assessments * PTSD Checklist-Civilian Version (PCL-C) *Symptom checklist-90-R (SCL-90-R)	*PTSD symptoms decreased significantly in both treatment and control groups *Effect sizes in within group changes <i>d</i> = 0.30–0.60 *The improvement of somatic symptoms, subjective well-being, disability, and general functioning was more significant in the treatment group

Practice and Procedures

How to Help: Effectiveness of Therapy Among Torture Survivors

Table 3 summarizes the research on the effectiveness of therapies in treating PTSD among torture survivors. The selection of studies is based on data from Ovid, EBSCO, PsycINFO, and Medline and systematic reviews on refugees including torture victims (Crumlish and O'Rourke 2010; Palic and Elklit 2011) and torture victims in particular (McFarlane and Kaplan 2012). The results suggest that the trauma-focused CBT-based interventions are most successful in reducing both symptoms and diagnoses of PTSD. Especially the NET (Narrative Exposure Therapy) seems promising (Bichescu et al. 2007; Neuner et al. 2004, 2008, 2010). The results do not suggest substantial differences between specific therapy elements such as trauma consultation, psychoeducation, or trauma exposure. It is noteworthy that the comprehensive, multidisciplinary, time-lengthy (months–years), and torture-specific treatment programs seem not to be effective in reducing PTSD or its symptom. Yet, they improve the survivors' quality of life and more comprehensive well-being.

Apart from therapy models based on Western biomedical knowledge, torture victims should be provided therapy options based on elements of traditional and indigenous healing practices relevant to their own cultural heritage (Wilson and Droždek 2007). Western models of treatment differ strongly from



Fig. 2 Cultural variations in seeking help for torture sequelae

traditional treatments in non-Western cultures and run the risk of appearing strange, non-comprehensible, or even frightening for tortured patients in new context. Treatment options that are culturally sensitive and incorporate alternative and traditional healing methods are a promising addition to treatment based on Western psychiatric knowledge (see Fig. 2). Using professional interpreters in therapy is at times a prerogative with refugee clients suffering of torture trauma. This alteration of traditional dyadic psychotherapy influences the therapy process and requires additional skills from the interpreter as well as the psychotherapist (Miller et al. 2005).

Conclusion

Torture, as a systematic policy to inflict pain, forms a high risk for victims' psychological and somatic health. Torture involves multiple forms of abuse and ill treatment with an ultimate aim to break the victim's integrity and frighten the community. Subsequently, the consequences are extensive on cognitive, emotional, neurophysiological, and social domains of life. Yet, it is important to learn about individual and collective protective factors that help torture survivors to maintain their health and mental integrity. The effective therapies for torture victims are based on these beneficial cognitive-emotional and social processes to decrease PTSD and restore growth and resilience.

Key Facts of the Istanbul Protocol

- The Manual on the Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, also known as the "Istanbul Protocol," is an internationally recognized guideline for health-care professionals and legal experts for assessing victims who are suspected of having undergone torture and ill treatment.
- Obtaining medical evidence is often necessary to prove that torture has occurred.
- The protocol was developed by an international group of forensic physicians, psychologists, lawyers, and human rights monitors.

- The guidelines cover a range of topics to give medical professionals as well as human rights lawyers working with torture survivors an insight in the complexity of torture and present information how torture can be medically documented.
- The Manual helps medical and legal professionals to understand the situation of tortured clients.
- The Istanbul Protocol became an official document of the United Nations in 1999 and is available for free download through the UN Office of the High Commissioner for Human Rights.

Key Facts of Human Rights

- The Universal Declaration of Human Rights (UDHR) was adopted by the UN General Assembly in 1948.
- The Declaration of Human Rights consists of a preamble and 30 Articles.
- The use of torture in all its forms was banned in Article 5 of the Universal Declaration of Human Rights: “No one shall be subjected to torture or to cruel, inhuman or degrading treatment.” Torture is prohibited absolutely, even during armed conflicts.
- Article 5 has been ratified by 156 countries in 2014. These countries are obligated to submit periodic reports about the implementation of the treaty to the Committee Against Torture (CAT).
- The CAT consists of ten experts of high moral standing and competence in human rights. They are elected by State Parties for a term of 4 years. The members of the CAT gather information and make inquiries concerning the existence of the practice of torture.
- Despite the ratification of Article 5 in a large part of the Worlds’ countries, torture still has a prominent role in modern global warfare.
- Amnesty International has presented evidence in 2014 of the ongoing use of torture in over 140 countries all over the world.

Summary Points

- Definition of torture is a complex matter.
- Torture experiences remain often unidentified because of shame, guilt, and fear of stigmatization of the survivor or/and lack of knowledge among professionals working with refugees.
- Torture prevalence varies according to populations. Prevalences in refugee populations are between 14 % and 45 % and in non-asylum-seeking migrant populations 1–11.5 %.
- PTSD prevalences in tortured refugees are between 18% and 73 % for lifetime PTSD.
- A row of other long-term mental health consequences in addition to PTSD are found in torture survivors.
- Sequelae of torture are prone to cultural variation.
- The impact of torture on family and social relationships is significant and should be considered in treatments.
- Multiple individual and collective processes, such as beneficial appraisals, apt emotion regulation, shared meaningfulness, commitment and support can have a protective role in recovery from torture.
- Cognitive-Behavioral Therapies (CBT) provide treatment option with strongest research evidence.

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