

The complex care of a torture survivor in the United States: The case of “Joshua”

S. Megan Berthold¹, Peter Polatin², Richard Mollica³, Craig Higson-Smith⁴, Frederick J. Streets⁵, Caitrin M. Kelly⁶, and James Lavelle⁷

Key points of interest

- To effectively treat torture survivors, providers must understand and address multiple and complexly related factors.
- A Complex Care Approach (CCA), an adaptation of the Chronic Care Model, is presented. The CCA includes five-domains, including the Trauma Story, Bio-medical, Psychological, Social, and Spiritual domains.

Abstract

Introduction: Torture is an assault on the physical and mental health of an individual, impacting the lives of survivors and their families. The survivor’s interpersonal relationships,

social life, and vocational functioning may be affected, and spiritual and other existential questions may intrude. Cultural and historical context will shape the meaning of torture experiences and the aftermath. To effectively treat torture survivors, providers must understand and address these factors. The Complex Care Model (CCM) aims to transform daily care for those with chronic illnesses and improve health outcomes through effective team care.

Methods: We conduct a literature review of the CCM and present an adapted Complex Care Approach (CCA) that draws on the Harvard Program in Refugee Trauma’s five-domain model covering the Trauma Story, Bio-medical, Psychological, Social, and Spiritual domains. We apply the CCA to the case of “Joshua,” a former tortured child soldier, and

- 1) S. Megan Berthold, PhD, LCSW, Associate Professor and Director of Field Education, University of Connecticut School of Social Work (and Co-Chair of the NCTTP Research and Data Project)
Correspondence to: megan.berthold@uconn.edu
- 2) Peter Polatin, M.D., MPH, Faculty, HPRT; Psychiatric consultant, IRC/Dallas; Adjunct Associate Professor of global mental health, George Washington University; Associate Professor of anesthesia/pain and psychiatry (retired) UTSW; health program consultant, Dignity Institute Against Torture (retired).
Correspondence to: peter.polatin@gmail.com

- 3) Richard Mollica, MD, MAR, Director of Harvard Program in Refugee Trauma, Massachusetts General Hospital Professor of Psychiatry, Harvard Medical School
Correspondence to: Rmollica@partners.org
- 4) Craig Higson-Smith, MA, Director of Research, Center for Victims of Torture
Correspondence to: chigsonsmith@CVT.ORG
- 5) Frederick J. Streets, M.Div., DSW, LCSW, Associate Professor (Adjunct) Pastoral Theology, Yale University Divinity School
- 6) Caitrin M. Kelly, MD, Massachusetts General Hospital
- 7) James Lavelle, LICSW, Co-Founder of Harvard Program in Refugee Trauma (HPRT)

discuss the diagnosis and treatment across the five domains of care.

Findings: The CCA is described as an effective approach for working with torture survivors. We articulate how a CCA can be adapted to the unique historical and cultural contexts experienced by torture survivors and how its five domains serve to integrate the approach to diagnosis and treatment. The benefits of communication and coordination of care among treatment providers is emphasized.

Discussion / Conclusions: Torture survivors' needs are well suited to the application of a CCA delivered by a team of providers who effectively communicate and integrate care holistically across all domains of the survivor's life.

Keywords: complex care approach, five-domain model, torture survivors.

Introduction

Torture is an assault on the physical and mental health of an individual, typically having an impact on multiple domains of the lives of survivors and their families. The survivor's interpersonal relationships, social life, and vocational functioning may be affected, and spiritual and other existential questions may intrude. His or her cultural and historical context will shape the meaning of their torture experiences and the aftermath. Furthermore, torture impacts larger social and/or political networks and the community (Mollica, 2006; National Partnership for Community Training, 2011).

To effectively treat torture survivors, providers must understand and address these multiple and complexly related factors. Treatment approaches developed in Western countries to attend to the psychological domain of care typically focus on post-traumatic stress

disorder (PTSD), failing to address the full range of impacts of torture (Bandeira, 2013). Interdisciplinary care can be expensive and many treatment centers are doing what they can with limited resources, recognizing that rehabilitation services are very often incomplete (Jorgensen et al., 2015; Quiroga & Jarranson, 2005).

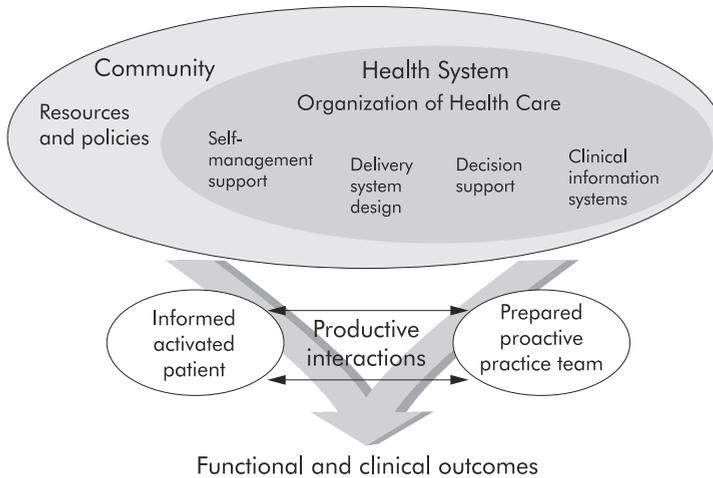
Methods

The Complex Care Approach (CCA) with five domains (i.e., trauma story, bio-medical, psychological, social, and spiritual) is described as an adaptation to the Chronic Care Model (CCM) that has been used in many countries to treat individuals with chronic health conditions. The CCA is an effective approach to treat torture survivors with complex presentations in contexts that are rich in resources. In other contexts that do not have access to such services as primary care and extensive psychological and social services, a different approach is needed. A de-identified fictional composite case is presented of "Joshua," a former child soldier who has experienced torture, adapted from real life experiences of multiple survivors in order to protect their confidentiality and identities. The CCA is applied to discuss the diagnosis and treatment of Joshua across each of the five domains of care. The severity of Joshua's depression and post-traumatic stress symptoms are assessed using the Hopkins Symptom Checklist-25 and Harvard Trauma Questionnaire (Mollica, McDonald, Massagli & Silove, 2004). Emphasis is given to the need to prioritize interventions, establishing safety first, and to the importance of integration across all domains of care.

The Chronic Care Model (CCM)

Practitioners and researchers in the United States have been among the leaders in the field of complex care of chronic health con-

Figure 1. *The Chronic Care Model (CCM)*



Reproduced from Epping-Jordan, Pruitt, Bengoa & Wagner, 2004, *with permission from BMJ Publishing Group Ltd.*

ditions, perhaps in part due to an influential report issued by the Institute of Medicine (IOM) in 2001 that called for far reaching changes to the U.S. health system (Institute of Medicine Committee on Quality of Health Care in America, 2001). This IOM (2001) report noted, in part, major shortcomings in care coordination and problems when treatment focuses narrowly on only one disorder in those who have multiple diagnostic conditions. Despite advances in the effectiveness of treatment, a random survey of patients with chronic conditions in the United States found that only 56.1% received the recommended care (McGlynn et al., 2003). Less than half of U.S. patients with asthma, depression, hypertension, or diabetes were receiving appropriate medical care (Clark et al., 2000; Joint National Committee on Prevention, 1997; Legoretta et al., 2000; Young et al., 2001). Given the additional barriers that refugees and torture survivors often face in accessing treatment (e.g.,

language and cultural barriers, trauma history, provider knowledge gaps, lack of health insurance [Esala et al., 2018]), it is likely that these populations are even less likely to receive appropriate care in the United States.

The Chronic Care Model (CCM) was developed to improve health outcomes and promote effective delivery of evidence-based and patient-centered care. Its aim is to transform daily care for patients with chronic illnesses from acute and reactive to proactive, planned, and population-based. It is designed to accomplish these goals through a combination of effective team care and planned interactions; self-management support bolstered by more effective use of community resources; integrated decision support; and patient registries and other supportive information technology (see Figure 1). These elements are designed to work together to strengthen the provider-patient relationship and improve health outcomes (Coleman et al., 2009, p. 75).

Practitioners have applied the CCM to a wide range of chronic health and mental health conditions and diverse populations in high-income and low and middle-income countries (LMICs). Successful implementation of integrated care models require that health systems are strengthened (Thornicroft et al., 2018). Budget constraints and increased volumes of referrals of refugees or other traditionally underserved individuals pose challenges to care in high-income countries. Innovations made in LMICs such as task-sharing and the growth in services provided by non-specialists may be beneficially applied in these high-income settings (Thornicroft et al., 2018).

Adaptation of the CCM for treatment of refugees and torture survivors: A complex care approach

Refugees and torture survivors commonly experience multiple traumas that add complexity to their treatment. Psychiatric practitioners working transculturally and in war zones with refugee families have long recognized that the appropriate care of refugees requires complex care approaches and systems that address not only individual, family, and interactional psychological factors, but also attend to culture, social, and political domains (Rezzoug et al., 2008). Many torture treatment specialty clinics provide interdisciplinary care (Vukovich & Esala, 2016). Research on collaborative care for complex conditions experienced by refugees and torture survivors is sparse but promising, warranting further study (Esala et al., 2018).

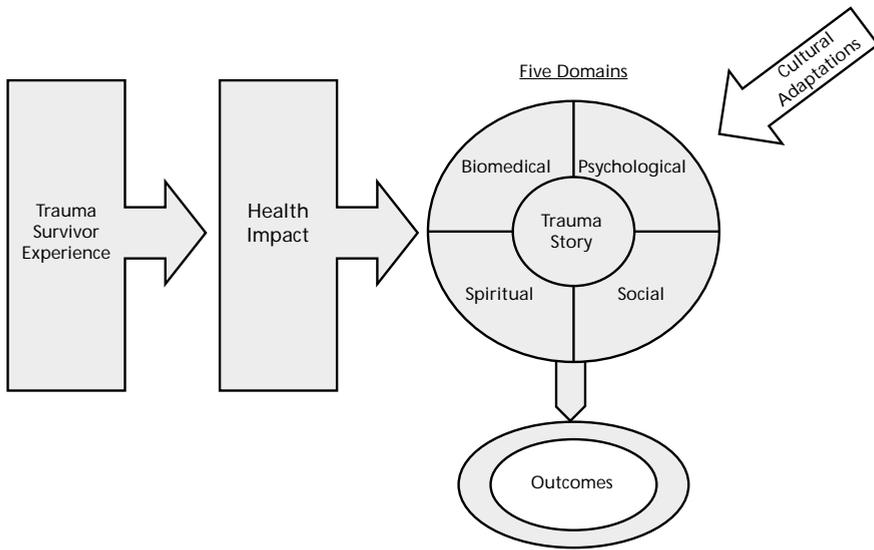
Torture survivors differ from other patients in some key respects that have implications for the adaptation of the CCM. Torture survivors as a group have been victims of serious violent crime that is intentional, targeted, human-perpetrated, and planned. These crimes are often implemented by institutions and systems of

the state including, in some cases, health care institutions and personnel (Boyd, 2016; McCarthy, 2013). Therefore, establishing trust and addressing perceived issues of impotence and helplessness are often more critical when working with torture survivors compared to other patients. Some torture survivors are displaced from their communities of origin and separated from traditional family and communal systems of support and affiliation. Therefore, for these survivors, establishing new systems of support and connection can be vital. Survivors often come from cultures with which providers in countries of exile are less familiar and cultural competency is essential so that these providers have a better understanding of these patients and do not react with xenophobia and bias. For those who flee to other countries from very different societies and cultures, the health care system may be very unfamiliar and even frightening. Certain procedures used in medical assessment or treatment for various conditions such as phlebotomy, the use of electrical stimulation, or even noises or close confinement in enclosed spaces for MRI or CT imaging may serve as retraumatizing triggers.

Five domains of the complex care approach (CCA)

The CCM is quite biomedical in nature. Therefore, four additional domains that emerged out of work at the Harvard Program in Refugee Trauma (Mollica et al., 2017) have been added to compliment the biomedical domain. These five domains of care (i.e., trauma story, bio-medical, psychological, social, and spiritual) comprise a Complex Care Approach (CCA) to the care of torture survivors. Of particular note, the trauma story was added as an important domain for assessment and treatment with torture survivors. A key emphasis of the approach is that interdisciplinary treatment team members must work

Figure 1. *Complex Care Approach with Torture Survivors*



collaboratively, such that the assessment and intervention plan must be integrated in nature across all domains of care (Mollica, 2006; Mollica et al., 2017). In addition, the approach is participatory, with the survivor fully engaged in and driving treatment directions and decisions. Cultural adaptations must be made to the CCA in all domains to match the culture and worldview of each torture survivor. All of these components work together to shape the approach with torture survivors (National Partnership for Community Training, 2011), and influence the outcomes and quality of life of survivors.

Practitioners should begin with establishing intervention priorities, foremost of which is stabilizing and attending to safety and other survivor-identified concerns first, an approach common to many trauma-specific treatments (Mollica, 2006; National Partnership for Community Training, 2011). We recommend

starting with the social domain, identifying and building on existing social support in a manner that is non-stigmatizing and promotes the establishment of an empathic and trusting relationship with the treatment team. In the early phase of treatment, coping and affect-regulation skills training will likely be a focus (Mollica, 2006). Only after the survivor is stabilized and if it is determined that they can tolerate it (e.g., they have sufficient affect regulation strategies), an in-depth trauma history (Mollica, 2006) can be conducted to fully assess the impact of the trauma(s) on the physical and mental health of the survivor across five key domains, making cultural adaptations as appropriate (see Figure 2).

A deidentified fictitious composite case of torture survivor “Joshua” is presented below, followed by application of the CCA, used to design an assessment and treatment plan.

Joshua: Clinical case of a torture survivor

Joshua is a 32-year-old Liberian male, unmarried, who lives with his mother, sister, niece and nephew in Dallas, Texas in the United States.

Referral: by a Dallas refugee agency case worker because of perceived difficulties functioning and inability to hold a job.

Source of information: personal interview as well as collateral information from family and case worker.

Chief complaint: "I am hot over my body and I feel weak a lot. It feels like ants crawling over me. My head hurts so, so much. There is a soft spot in my head, and I am afraid that it will get worse."

Present illness: Joshua arrived in Dallas 12 years ago in 2006 after his mother, herself an asylee, successfully petitioned for him to join her. Joshua's mother had come to the United States before he did. She had applied for and been granted asylum, therefore becoming an "asylee." A year later, she petitioned for Joshua to join her in the United States as a derivative asylee. Joshua later adjusted his status and became a Lawful Permanent Resident. At the time that Joshua's mother submitted her petition, asylees were eligible to sponsor unmarried children who were under the age of 21 at the time of their own original asylum application as derivative asylees. Joshua did not disclose his history as a former child soldier in his application. He fears that his legal status in the United States as a Lawful Permanent Resident may be in jeopardy as a result.

His family reports that he secludes himself in his room and at times talks to himself or shouts. His sister says that she has heard him crying and praying to die. He hardly sleeps and has disturbing nightmares when he does. Joshua expresses suspicion of

others, including his family, suggesting that people are spying on him or following him. When he does go out, he often becomes extremely agitated, demanding to return home. He is fearful of utilizing public transportation. His family says that when he first arrived in Dallas, he seemed normal. But, over a six-month period, his symptoms worsened. The family has no idea what triggered his symptoms. Joshua complains of intermittent severe headaches but refuses to see a doctor. He also complains of some discomfort when moving his bowels and pain in his lower back, neck, and shoulders. He has mild systolic hypertension and smokes 2 packs a day.

He has made several attempts to seek employment, but because of his extreme discomfort and limited education, he is limited in his job skills. He has made no attempt to reach out to anyone for support, either within his family or to others in the Liberian community. His family attends a United Methodist church with a number of Liberian refugees in the congregation. At the request of his family, the local pastor visited him at home and tried to engage him, but Joshua became agitated, accused the pastor of spying on him, and asked him to leave the house, much to the embarrassment of his family. In spite of a number of invitations, he has refused to attend services at this church.

Psychosocial history

Joshua is functionally illiterate with almost no formal education. He was born during the war years in Liberia, in a small village outside of Gbargna, a large town about 100 miles from the capital, Monrovia. His family are members of the Kpelle tribe. He did not attend school, because there were no teachers available during the war years of his youth. When he was 7 years old,

Charles Taylor's rebels, who had been active for several years in this part of the country, destroyed his village. He witnessed the rape of his mother and sister. He was captured by a warlord, given a gun and was forced to shoot and kill his father. He remembers that he was unfamiliar with the gun, and was shaking so much that he took multiple shots, and watched as his father slowly died. That memory has stayed with him. Thereafter, he fought for Taylor as a child soldier. During this time, he was given "brown" (heroin), cocaine, marijuana, and sleeping pills, while he and the group of child soldiers to whom he had been assigned systematically attacked villages, torturing, killing, and raping the population. He suffered two gunshot wounds, but fortunately they were superficial and were treated with herbal poultices, with which he healed uneventfully. During one occasion, toward the end of this period and just before Taylor was elected president, Joshua was captured by a rival group. He was beaten severely, tortured with cigarette burns, and knocked out. He was rescued after a few days by his compatriots.

After the war, he lived on the streets of Monrovia. He did not know whether his mother and sister were alive, or where to look for them. He was arrested several times, but released each time after a few months. Finally, however, he was given a longer sentence in a prison where many of the other prisoners came from opposing sides of the war. He had been using opioids, and went through opioid withdrawal "cold turkey" during each of his imprisonments. Although it was available, "for a price" in prison, he finally decided not to use it anymore, even though he continued to sell it.

There was much conflict within the prison and the guards did not do much to control the violence. Joshua allied himself with others

of his tribe, and had no choice but to participate in the fights which occurred daily. Joshua was placed on the list for family reunification to the United States although he remained in prison initially to finish the last few months of his sentence. Eighteen months later he was granted a visa and joined his family in Dallas. At that time, he was 20.

Joshua lives with his mother, sister, niece, and nephew. His mother and sister are both working as nurses in a local health center. His sister is divorced with two teenage children. Before Joshua joined the family, his mother and sister had many friends, including people in the Liberian-American community. Now that Joshua is with them, many friends avoid contact with them knowing his history as a child soldier and expressing anger towards him. Joshua is alienated in the United States because of his history as a perpetrator. He does not understand why his family remains distant from him and blames him for his past. Overall, Joshua's quality of life is poor.

Screening Instruments:

1. Hopkins Symptom Checklist 25 (HSCL-25)
Depression Score 3.2; 1.75 = Cut off point; possible range 1-4
2. Harvard Trauma Questionnaire (HTQ)
Score 3.48; 2.5 = Cut off point; possible range 1-4

Findings

Five domains of the CCA applied to the case of Joshua

The work with Joshua is discussed from the perspective of each of the five domains of the CCA. Clinical teams may want to start with the social domain to facilitate engagement with Joshua and establish a foundation of support and safety to promote his health and wellbeing across the realms of his life. Throughout, emphasis is placed on evidence-based treatment options. While psychiatric diagnoses are utilized in this case example, it is understood that there may be limitations to this in the care of survivors. Team members are encouraged to interact with Joshua from a person-centered approach, avoiding medical jargon and labels and framing his condition and situation in a non-stigmatizing manner. It would be vital for the treatment team members, in consultation with Joshua, to make an integrated treatment plan that accounts for the timing and sequencing of each component.

1. Trauma story: The trauma story domain is envisioned as the central domain that affects all others, although it is generally not recommended to begin treatment by gathering a detailed trauma history until the person is stabilized and safety has been established. The enormity of the horror and scale of Joshua's abuse over time is almost unimaginable. It is clear that his personality, including trust in others and his ability to form relationships with loved ones, was severely disturbed due to the extreme forms of interpersonal violence he has experienced. The therapist must consider that the major research on child soldiers reveals that the developmental trajectories of child soldiers are severely and chronically impacted, leading to inappropriate social and defensive behaviors (D'Alessandra, n.d.; Umiltà

et al., 2013). Trust must be built with Joshua over multiple sessions so that he becomes more comfortable talking about his trauma story.

Before working with Joshua, it is important that his therapist understands that storytelling plays an important role in Liberian society and culture. The therapist must be very careful that the repetition by Joshua of his dehumanizing early traumatic life experiences (e.g., being made to kill his father), which by their very nature are difficult to share, do not lead to his increased lack of social connection and that he is able to tolerate engaging in this work. Prior to initiating work with his trauma story, Joshua may benefit from psychotropic medication to diminish his dissociation and hyperarousal and better regulate his affects, thus enabling him to talk about his traumatic narrative. In addition, if there is cognitive impairment from a TBI, it should be determined to what extent this may interfere, if at all, with being able to cognitively process his trauma story. Justice and potentially, forgiveness may play a role in the therapy. While the therapist cannot bring the rebels to justice, the need for justice can be discussed fully in therapy. In some cases, a survivor may have the opportunity to engage in a court or other formal process that seeks to bring the truth of their torture to light and pursue forms of redress. In these situations, the team may refer the survivor to an attorney and work closely with the survivor (and sometimes their legal team) to provide psychosocial support before, during, and after the proceedings.

2. Biomedical: Torture survivors frequently present with multiple medical complaints or conditions which must be carefully assessed (Mollica, 2011). Joshua has several medical issues that are chronic and non-urgent (i.e., mildly elevated blood pressure, active or

past Hepatitis C infection, mildly elevated liver enzymes, current smoking, and chronic pain). It is recommended to address these in a time appropriate manner in conjunction with his psychiatric treatment plan and in a patient-centered approach.

Joshua's chronic pain complaints, including headaches, cervical and lumbar pain, and bilateral shoulder pain, are consistent with those seen in many survivors of torture (Quiroga & Jaranson, 2005), and it cannot be assumed that the etiology is psychological. Although there is a certain amount of comorbidity between physical and psychological symptoms of pain (Defrin et al., 2017), Williams and colleagues (2010) found a physical etiology to the pain complaints in 78% of a random sample of survivors of torture. Regardless of whether the etiology of the pain is primarily physical or psychological, it is beneficial to address it within the context of a holistic, interdisciplinary program. This would ideally include education ("pain school"), physiotherapy, and a cognitive behavioral restructuring of the patient's pain perception.

3. Psychological: There are five broad areas of psychological concern in Joshua's case, including Complex PTSD with dissociation, depression with paranoid delusions, suicidal ideation, substance use, and the need to rule out a possible Traumatic Brain Injury (TBI). It is recommended that the therapist utilize a consultative approach with Joshua and, given his agitated state of presentation, an initial priority would be to stabilize Joshua. Engaging familial and other supports would be vital to this effort. While some mental health teams may seek to admit Joshua to a psychiatric inpatient unit where he can be fully evaluated within an atmosphere of relative safety, this is not initially recommended given how stigmatizing, frightening, potentially re-traumatizing,

and culturally dystonic a psychiatric hospitalization would likely be for him. Instead, efforts to engage Joshua in treatment might begin with home visits from a social worker or visiting nurse. Such an approach would be more likely, compared to hospitalization, to reduce the chance of Joshua's experiencing stigma or ostracization. Suicidality should be assessed and, if he becomes at high risk for attempting or completing suicide, despite the implementation of prevention efforts including a safety plan (Stanley & Brown, 2012), then a psychiatric hospitalization would be indicated.

An introduction to a therapist and a Kreyol¹ interpreter for further assessment and treatment are recommended to address his extreme fear and paranoia, and to establish, for him, a safe and trusting therapeutic relationship. Many clinicians avoid trauma-focused treatment for patients with psychosis for fear of symptom exacerbation and relapse. However, this has not been found to be the case, and it is recommended that trauma-focused therapies be initiated early on (van den Berg et al., 2016). There is significant evidence that the reprocessing of traumatic memories is fundamental to treatment for PTSD (Schnyder et al., 2015). A number of studies as well as systematic reviews and meta-analyses have concluded that both Trauma-Focused Cognitive Behavior Therapy (TF-CBT) and Narrative Exposure Therapy (NET) are most efficacious in treating PTSD in adult survivors of war and torture (McPherson, 2012; Robjant & Fazel, 2010; Weiss et al., 2016), including former child soldiers (Onyut et al., 2005; McMullen et al., 2013). Eye Movement Desensitization

¹ Liberian English is a derivative of English, but has its own idiosyncratic expressions and words.

and Reprocessing (EMDR) may also be valuable (Schnyder et al., 2015).

The process of re-exposing Joshua to his traumatic memories should be titrated as he is helped to differentiate his experiences in time and space. The therapist may strive to locate Joshua's traumas in a Liberia of the past, thereby releasing him to live more confidently in his adopted country in the present. In order to learn how to control his emotional reactions to his traumatic experiences, Joshua would likely benefit from understanding where they are coming from (through psychoeducation) and how to control them (through relaxation training, cognitive restructuring). Using approaches aligned with Joshua's own body-oriented description of his suffering, the therapist may assist Joshua to increase his awareness of his physiological arousal and affective state from moment to moment, and to increase his ability to modulate his baseline arousal and his reactivity to distressing triggers. The inclusion of body-oriented approaches to arousal regulation (including muscle relaxation, stretching, and diaphragmatic breathing) in CBT have been shown to be effective for the management of persistent arousal related symptoms with people from various cultural backgrounds (Hinton et al., 2012). Joshua's therapist can also start to tackle some of his more delusional and paranoid beliefs and attributions, determining whether they are rational fears given his torture experiences. Research in multiple contexts has demonstrated the benefits of assisting war survivors to dispute unhealthy thought beliefs and thought patterns (Schulz et al., 2006; Kaysen et al., 2013).

Many torture survivors are resistant to the use of medications in treatment, particularly if this was used as part of the torture as in the case of Joshua (e.g., Joshua was often drugged as a child soldier). Psychiatric consultation may be considered to assess whether Joshua would

benefit from pharmacotherapy aimed at reducing his most debilitating symptoms in consultation with him. This may allow Joshua to more easily engage in evaluation and therapy earlier on and with less disruptive anxiety. Further medication might be indicated at a later stage if Joshua's progress in psychotherapy is modest because of disruptive symptoms of emotional traumatization.

A neuropsychological assessment may be beneficial due to Joshua's history of concussions and loss of consciousness, as well as his difficulties with memory and emotional lability. This assessment would identify the likelihood of Joshua having suffered a TBI. Symptoms of even minor TBI may be long lasting and are easily confused with those of PTSD and depression. The presence of comorbid TBI is typically associated with poorer therapeutic outcomes (Iverson, 2005) but may benefit from cognitive therapy.

As Joshua gains greater control over his symptoms through symptom management and through the integration of traumatic memories, and as he replaces the defensive schemas that kept him alive as a child soldier with beliefs and thought patterns that allow him to thrive as an adult in a more peaceful world, his relationships at home and in the community will hopefully improve.

4. Social: The team's social worker or related staff might initially engage Joshua through the social domain, identifying and building on his existing social supports in a manner that is non-stigmatizing and promotes the establishment of an empathic and trusting relationship. The most pressing immediate intervention recommended in the social domain is to assist Joshua and his family members in the United States to collaborate in formulating a viable therapeutic plan, one that is person-centered and prioritizes Joshua's concerns and goals.

Engaging the support of Joshua's mother and sister in encouraging him to seek treatment may be valuable and would provide an opportunity for them to express care and concern for him and strengthen their relationship. If Joshua begins to experience a reduction of symptoms, he may be more receptive to psychotherapy, a healing modality which is probably quite foreign to him.

It is likely that his mother decided to sponsor Joshua as a derivative asylee to promote family reconnection and healing. His case is complex. Although his experiences meet the U.S. definition for torture (18 U.S.C. § 2340[1]), he would also be considered a perpetrator, which led him to not disclose his history as a former child soldier. He has experienced stigma as a former child soldier from most fellow-Liberians. His main problem in this domain is one of tension and strained relationships within his family as a result of him being forced to murder his father and other experiences as a child soldier, exacerbated by his own internal world that is full of feelings of suspicion, anxiety, guilt, and fear. Joshua is particularly fearful that he will be harmed because of his past perpetrator behavior, either by losing his legal status in the United States or by other Liberians seeking retaliation.

Joshua's treatment should extend beyond individual therapy to include family therapy as "[d]uring post-conflict reintegration, child soldiers with self-reports of supportive families and communities endorse better mental health and psycho-social functioning than those reporting discrimination" (Kohrt, 2013, p. 165). Family therapy should start at a point at which Joshua feels ready (in individual therapy) to include his family in his recovery, and from that point individual and family work should continue in parallel. Using a narrative/trauma story approach with the family will help both Joshua and his immediate family to fill in the blanks regarding what happened to each of

their family members during the war and their years of disconnection and disrupted attachment. After some stability is achieved by Joshua and his family, a larger engagement plan might explore how to connect him with the Liberian-American community in Dallas.

It remains to be seen if his current struggle to trust others will be more complicated as a result of his legal concerns, including fear of possible deportation. Referral to an immigration attorney is recommended. It may be valuable for Joshua to consider longer-term skill-based education for his future and a referral for vocational training could be made. Gaining acceptance from his family and community may, if successful, take time and eventually may benefit from participating in a community support group. A first step may be for Joshua to forgive himself. The work in the social domain would build on the work Joshua does in psychotherapy.

Some former child soldiers from Liberia have engaged in altruistic or other communal healing endeavors through which to demonstrate to themselves and the community a commitment and desire to redress the effects of their violent actions in the past. Joshua may or may not choose to (or be psychologically prepared to) engage in such actions now or in the future.

5. *Spiritual*: A person's religious or spiritual life is often significantly disrupted and sometimes completely destroyed by torture. A survivor's core beliefs, values, and sense of self may be greatly damaged whether or not they were ever part of a religion. Religion, spirituality, and faith may provide context and meaning to suffering, serve as a framework for many forms of traditional healing, and be significant factors in one's physical and mental health. These factors may not be central or even present for everyone and it is important to not assume that they are.

Some survivors may reject spirituality and/or any religious or faith tradition. Spirituality for some may well encompass much more than organized religion, and could include such things as the survivor's customary beliefs, their core beliefs about the self, and their understanding of what it means to take a life and suffer the consequences of such actions. For those torture survivors who are religious or spiritual, the cultural role of religion and spirituality, the resources of religious institutions, and an understanding of their spiritual worldview is crucial to consider when planning and providing them with mental health services (McKinney, 2011; Piwowarczyk, 2005).

A spiritual needs assessment will enable the care team to better evaluate Joshua's views and feelings about religion and spirituality (Tuskin et al., 2011) and whether being a part of a faith community may be a source of strength for him or not. The symbolic representation of religion in the person of a clergy may be too provocative for him at this time, stimulating in him thoughts and feelings of guilt and shame.

If Joshua does have a religious or spiritual orientation to life, whether he shares his family's Methodist faith or not, this may make a positive contribution toward his feeling that his life is worth living and has a purpose, and possibly enhance his self-esteem, sustain him and give him hope. Joshua may find it helpful to participate in religious or spiritual rituals such as a traditional cleansing ritual. Such rituals have been found to be healing for some Liberian, Burundian, Northern Ugandan, and Sierra Leonean former child soldiers in dealing with their symptoms of posttraumatic stress (Babatunde, 2014; Schultz & Weisaeth, 2015; Stark, 2006).

Conclusion

The Complex Care Approach is well suited for the assessment and treatment of torture

survivors such as Joshua who present with multiple and complex needs in the United States or another high-resourced country. It is not feasible, however, to implement the CCA in lower resourced settings, particularly where there is limited or no access to primary care, psychological, or social services. This is a key limitation of the CCA. Another limitation is that outcome data using the CCA has not yet been collected.

The CCA is closely related to the biopsychosocial model of health and illness developed by George Engel (1977), adding additional components such as the trauma story and spirituality that are highly relevant for torture survivors. Like with the biopsychosocial model before it, care team members should be aware of the potential strengths and weaknesses of the CCA. Key strengths of both include: emphasis on a person-centered and empathic approach to care; the benefits of psychoeducation; and collaboration between multiple providers, patients and family members (Papadimitriou, 2017; Hong et al. 2014; Koponen et al., 2017). These characteristics are vital when serving individuals who have experienced human-perpetrated trauma such as torture, and who often have great difficulty initially trusting others and engaging in a therapeutic process.

Key weaknesses identified with the biopsychosocial approach include: challenges with coordinating the responsibilities and work of multiple providers; it is often not implemented in a fully integrated fashion; lack of guidance regarding how the various domains interact in the manifestation of the condition or health of the patient; and lack of clarity regarding when various interventions should be applied and in what order (Papadimitriou, 2017). Additional criticism from some includes, in part, promotion of eclecticism without ensuring balance across the different domains, as well as insuf-

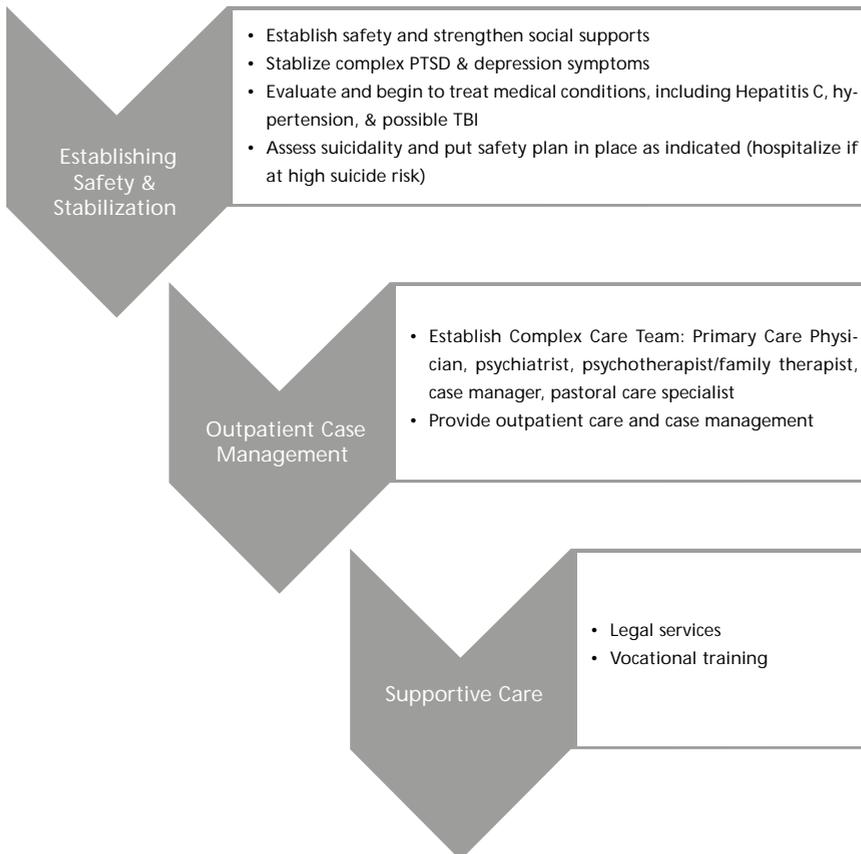
ficient attention and weight given to the subjective experience of patients (Benning, 2015).

When applying the CCA to the treatment of torture survivors, conscious attention to the risks of these weaknesses and implementation of strategies to prevent them from occurring are recommended. Establishing a team leader at the outset and regular team meetings held at least once per month would be important for coordinating and ensuring integration of care. In the absence of this, members of the complex care team may easily become overwhelmed, duplicate efforts, and work at cross purposes with

one another to the detriment of the torture survivor and their family. Figure 3 outlines a three-phased process of care for Joshua.

Establishing safety and stabilization at the outset are important foundational steps in the CCA. Ideally, once a therapeutic relationship is formed and Joshua has built some trust in his care team members and feels ready, referrals for additional adjunctive services (e.g., legal services and vocational training) would provide the opportunity to assess his legal options that may contribute to increased safety and to prepare him for vocational opportuni-

Figure 3. *Phased Process of Care for Joshua*



ties. Given his negative experiences with others who know about his history as a child soldier and his concerns about the possible impact of his past history as a child soldier on his legal status, Joshua may be reluctant or anxious about consulting with an immigration attorney. Joshua's derivative asylee status may be in jeopardy given the bar to asylum in the United States for those who perpetrate serious harm on others (with limited exceptions for acting under duress) (Board of Immigration Appeals, 2018). Support from his care team, as well as gaining understanding that his communication with an attorney would be privileged, may facilitate his seeking legal consultation. Care team members could also work with the attorney, as needed, to ensure that he or she is trauma-informed.

Providers require specialized knowledge of the history and culture of the survivor's country of origin, the impact of his or her torture experience(s), and his or her experiences before and after arrival in the new country of resettlement, including during transit. Assessment must be multi-dimensional and holistic, as well as ongoing. Treatment planning is informed by the specifics of client's historical and cultural background and intentional strategies are utilized to overcome barriers to entering and completing treatment. Given the impact of their human perpetrated traumas, torture survivors typically benefit from overt transparency and predictability in their relationships with providers (Mollica, 2006). Care should be given to the prioritizing, ordering, and spacing of interventions and efforts to secure early wins, no matter how small, and in multiple domains can promote continued motivation for engaging in treatment as well as opportunities to reinforce interventions across domains. Throughout, the CAA supports the mobilization of existing strengths and resources, in-

cluding family and community support, and the development of new ones.

It is important to recognize that not all torture treatment programs have access to an in-house primary care physician, psychiatrist, social worker, or other care team members and do not have existing linkages to a full range of services. In the case presented here, Joshua cannot be successfully treated without access to primary care and holistic services covered by the five domains. If a treatment program does not have access to essential resources within their center, linkages to primary care and other collaborative services are recommended given the promising outcomes of such care on health and mental health outcomes relevant to torture survivors from studies with other populations (Esala et al., 2018). The complex multiple trauma experiences and associated effects found in Joshua and other torture survivors requires an interdisciplinary and holistic approach such as that of the CCA. With holistic complex care it is likely that Joshua will experience significant and sustained relief from his distress and regain a positive quality of life.

For those torture survivors in the United States or other settings with major medical, social, and psychological problems, the CCA is a promising approach. Of course, the traumatic life experiences of the survivor affects all domains. In a resource poor setting where a multidisciplinary team is not available, the clinician can establish the diagnosis and treatment implication of each of the domains and set treatment priorities based upon the availability of resources.

References

- Babatunde, O. A. (2014). Harnessing traditional practices for use in the reintegration of child soldiers in Africa: Examples from Liberia and Burundi. *Intervention, 12*(3), 379-392. <https://doi.org/10.1097/wtf.0000000000000057>
- Bandeira, M. (2013). *Developing an African torture rehabilitation model: A contextually-informed,*

- evidence-based psychosocial model for the rehabilitation of victims of torture. Johannesburg, South Africa: The Centre for the Study of Violence and Reconciliation. http://www.csvr.org.za/images/docs/Other/developing_african_rehabilitation_model_part1_setting_foundations.pdf
- Berthold, S.M., Mollica, R.F., Silove, D., Tay, A.K., Lavelle, J., Lindert, J. (2019). The HTQ-5: revision of the Harvard Trauma Questionnaire for measuring torture, trauma and DSM-5 PTSD symptoms in refugee populations. *Eur J Public Health, 29*(3), 468-474. <https://doi.org/10.1093/eurpub/cky256>.
- Benning, T. B. (2015). Limitations of the biopsychosocial model in psychiatry. *Adv Med Educ Pract, 6*, 347-352. Doi: 10.2147/AMEP.S82937
- Board of Immigration Appeals (2018). 27 I&N Dec. 347. Interim Decision #3930. Retrieved from <https://www.justice.gov/eoir/page/file/1075801/download>
- Boyd, K. (2016). Medical involvement in torture today? *Journal of Medical Ethics, 42*(7), 411-412. <https://doi.org/10.1136/medethics-2016-103737>
- Clark, C. M., Fradkin, J. E., Hiss, R. G., Lorenz, R. A., Vinicor, F., & Warren-Boulton, E. (2000). Promoting early diagnosis and treatment of Type 2 diabetes. *JAMA, 284*(3), 363-365. <https://doi.org/10.1001/jama.284.3.363>
- Coleman, K., Austin, B. T., Brach, C., & Wagner, E. H. (2009). Evidence on the chronic care model in the new millennium. *Health Aff (Millwood), 28*(1), 75-85. <https://doi.org/10.1377/hlthaff.28.1.75>
- D'Alessandra, F. (n.d.). The psychological consequences of becoming a child soldiers: Post-traumatic stress disorder, major depression, and other forms of impairment. Harvard Carr Center. https://carcenter.hks.harvard.edu/files/cchr/files/dalessandra_pshycho1_cons_of_childsoldiers.pdf
- Defrin, R., Lahav, Y., & Solomon, Z. (2017). Dysfunctional pain modulation in torture survivors: The mediating effect of PTSD. *Journal of Pain, 18*(1), 1-10. <https://doi.org/10.1016/j.jpain.2016.09.005>
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science, 196*, 129-136.
- Epping-Jordan, J. E., Pruitt, S. D., Bengoa, R., & Wagner, E. H. (2004). Improving the quality of health care for chronic conditions. *Qual Saf Health Care, 13*(4), 299-305. <https://doi.org/10.1136/qshc.2004.010744>
- Esala, J. J., Vukovich, M. M., Hanbury, A., Kashyap, S., & Joscelyne A. (2018). Collaborative care for refugees and torture survivors: Key findings from the literature. *Traumatology, 24*(3), 168-185. <https://doi.org/10.1037/trm0000143>
- Hinton, D. E., Rivera, E. I., Hofmann, S. G., Barlow, D. H., & Otto, M. W. (2012). Adapting CBT for traumatized refugees and ethnic minority patients: Examples from culturally adapted CBT (CA-CBT). *Transcultural Psychiatry, 49*(2), 340-365. <https://doi.org/10.1177/1363461512441595>
- Hong, C. S., Siegel, A. L., & Ferris, T. G. (2014). *Caring for high-need, high-cost patients: What makes for a successful care management program?* Commonwealth Fund pub. 1764, Vol. 19. The Commonwealth Fund.
- Institute of Medicine Committee on Quality of Health Care in America (Eds.). [IOM] (2001). *Crossing the quality chasm: A new health system for the 21st century*. National Academies Press.
- Iverson, G. L. (2005). Outcome from mild traumatic brain injury. *Current Opinion in Psychiatry, 18*(3), 301-317. <https://doi.org/10.1097/01.yco.0000165601.29047.ae>
- Joint National Committee on Prevention (1997). Detection, evaluation, and treatment of high blood pressure, Sixth Report. *Archives of Internal Medicine, 157*(21), 2413-2446. <https://doi.org/10.1001/archinte.157.21.2413>
- Jorgensen, M. M., Modvig, J., Agger, I., Raghuvansh, L., Shabana Khan, S., & Polatin, P. (2015). Testimonial therapy: Impact on social participation and emotional wellbeing among Indian survivors of torture and organized violence. *Torture, 25*(2), 22-33.
- Kaysen, D., Lindgren, K., Zangana, G. A. S., Murray, L., Bass, J., & Bolton, P. (2013). Adaptation of cognitive processing therapy for treatment of torture victims: Experience in Kurdistan, Iraq. *Psychological Trauma: Theory, Research, Practice, and Policy, 5*(2), 184-192. <https://doi.org/10.1037/a0026053>
- Kohrt, B. (2013). Social ecology interventions for post-traumatic stress disorder: What can we learn from child soldiers? *The British Journal of Psychiatry, 203*, 165-167. <https://doi.org/10.1192/bjp.bp.112.124958>
- Koponen, A. M., Simonsen, N., & Suominen, S. (2017). Quality of primary health care and autonomous motivation for effective diabetes self-management among patients with type 2 diabetes. *Health Psychology Open, 4*(1), 1-7. <https://doi.org/10.1177/2055102917707181>
- Legoretta, A. P., Liu, X., Zaher, C. A., & Jatulis, D. E. (2000). Variation in managing asthma: Experience at the medical group level in California. *American Journal of Managed Care,*

- 6(4), 445–453.
- McCarthy, M. (2013). US health professionals aided detainees' torture. *BMJ*, *347*(7932), 1. <https://doi.org/10.1136/bmj.f6680>
- McGlynn, E. A., Asch, S. M., Adams, J., Keesey, J., Hicks, J., DeCristofaro, A., & Kerr, E. A. (2003). The quality of health care delivered to adults in the United States. *New England Journal of Medicine*, *348*(26), 2635–2645. <https://doi.org/10.1056/NEJMsa022615>
- McKinney, M. M. (2011). Treatment of survivors of torture: spiritual domain. *Torture*, *21*(1), 61–66.
- McMullen, J., O'Callaghan, P., Shannon, C., Black, A., & Eakin, J. (2013). Group trauma-focused cognitive-behavioural therapy with former child soldiers and other war-affected boys in the DR Congo: A randomised controlled trial. *Journal of Child Psychology & Psychiatry*, *54*(11), 1231–1241. <https://doi.org/10.1111/jcpp.12094>
- McPherson, J. (2012). Does narrative exposure therapy reduce PTSD in survivors of mass violence? *Research on Social Work Practice*, *22*(1), 29–42. Doi: 10.1177/10497315111414147
- Mollica, R. F. (2006). *Healing invisible wounds: Paths to hope and recovery in a violent world*. Harcourt.
- Mollica, R. F. (2011). Medical best practices for the treatment of torture survivors. *Torture*, *21*(1), 8–17.
- Mollica, R., Lavelle, J., Fors, U., Ekblad, S., & Wadler, B. (2017). Using the virtual patient to improve the primary care of traumatized refugees. *Journal of Medical Education*, *16*(1), 2–16.
- Mollica, R. F., McDonald, L. S., Massagli, M. P., & Silove, D. M. (2004). *Measuring trauma, measuring torture: Instructions and guidance on the utilization of the Harvard Program in Refugee Trauma's versions of the Hopkins Symptom Checklist-25 (HSCL-25) & the Harvard Trauma Questionnaire (HTQ) [Manual]*. Harvard Program in Refugee Trauma.
- National Partnership for Community Training (2011). Best, promising, and emerging practices: A compendium for providers working with survivors of torture. Thematic Issue of *Torture Journal*, *21*(1), 1–66.
- Onyut, L. P., Neuner, F., Schauer, E., Ertl, V., Odenwald, M., Schauer, M., & Elbert, T. (2005). Narrative Exposure Therapy as a treatment for child war survivors with posttraumatic stress disorder: Two case reports and a pilot study in an African refugee settlement. *BMC Psychiatry*, *5*(7), 1–9. <https://doi.org/10.1186/1471-244X-5-7>
- Papadimitriou, G. (2017). The “Biopsychosocial Model”: 40 years of application in psychiatry. *Psychiatriki*, *28*(2), 107–110. <https://doi.org/10.22365/jpsych.2017.282.107>
- Piwowarczyk, L. (2005). Torture and spirituality: Engaging the sacred in treatment. *Torture*, *15*(1), 1–8.
- Quiroga, J., & Jaranson, J. (2005). Politically motivated torture and its survivors. *Torture*, *16*(2-3), 1–111.
- Rezzoug, D., Baubet, T., Broder, G., Taïeb, O., & Moro, M. R. (2008). Addressing the mother-infant relationship in displaced communities. *Child and Adolescent Psychiatric Clinics of North America*, *17*(3), 551–568. <https://doi.org/10.1016/j.chc.2008.02.008>
- Robjant, K., & Fazel, M. (2010). The emerging evidence for Narrative Exposure Therapy: A review. *Clinical Psychology Review*, *30*(8), 1030–1039. <https://doi.org/10.1016/j.cpr.2010.07.004>
- Schnyder, U., Ehlers, A., Elbert, T., Foa, E. B., Gersons, B. P. R., Resick, P. A., ... Cloitre, M. (2015). Psychotherapies for PTSD: What do they have in common? *European Journal of Psychotraumatology*, *6*(1), 28186. <https://doi.org/10.3402/ejpt.v6.28186>
- Schulz, P. M., Resick, P. A., Huber, L. C., & Griffin, M. G. (2006). The effectiveness of Cognitive Processing Therapy for PTSD with refugees in a community setting. *Cognitive & Behavioral Practice*, *13*(4), 322–331. <https://doi.org/10.1016/j.cbpra.2006.04.011>
- Schultz, J.-H., & Weisaeth, L. (2015). The power of rituals in dealing with traumatic stress symptoms: cleansing rituals for former child soldiers in Northern Uganda. *Mental Health, Religion & Culture*, *18*(10), 822–837. <https://doi.org/10.1080/13674676.2015.1094780>
- Stanley, B., & Brown, G. K. (2012). Safety planning intervention: A brief intervention to mitigate suicide risk. *Cognitive and Behavioral Practice*, *19*(2), 256–264. <https://doi.org/10.1016/j.cbpra.2011.01.001>
- Stark, L. (2006). Cleansing the wounds of war: An examination of traditional healing, psychosocial health and reintegration in Sierra Leone. *Intervention*, *4*(3), 206–218. <https://doi.org/10.1097/WTF.0b013e328011a7d2>
- Thornicroft, G., Ahuja, S., Barber, S., Chisholm, D., Collins, P. Y., Docrat, S., . . . Zhang, S. (2018). Integrated care for people with long-term mental and physical health conditions in low-income and middle-income countries. *Lancet Psychiatry*, *6*(2), 174–186. [https://doi.org/10.1016/S2215-0366\(18\)30298-0](https://doi.org/10.1016/S2215-0366(18)30298-0)
- Tuskin, J. J., Streets, F. J., & Basit, A. (2011). Religion, spirituality and faith. In R. F. Mollica (Ed.), *Textbook of global mental health: Trauma and recovery, a companion guide for field and clinical care of traumatized people worldwide* (pp. 285–300). Harvard Program in Refugee Trauma.

- Umiltà, M. A., Wood, R., Loffredo, F., Ravera, R., & Gallese, V. (2013). Impact of civil war on emotion recognition: The denial of sadness in Sierra Leone. *Frontiers in Psychology, 4*, 523. <https://doi.org/10.3389/fpsyg.2013.00523>
- Van den Berg, D. P., de Bont, P. A., van der Bleugel, B. M., de Roos, C., de Jongh, A., van Minnen, A., & van der Gaag, M. (2016). Trauma-Focused Treatment in PTSD Patients With Psychosis: Symptom Exacerbation, Adverse Events, and Revictimization. *Schizophrenia Bulletin, 42*(3), 693-702. <https://doi.org/10.1093/schbul/sbv172>
- Vukovich, M., & Esala, J. (2016, September 12). *Integrated behavioral health care with survivors of torture: Learning from the data and from each other*. Measured Impact Webinar. Heal Torture. <http://www.healtorture.org/webinar/integratedbehavioral-health-care-survivors-torture-learningdata-and-each-other>
- Weiss, W. M., Ugueto, A. M., Mahmooth, Z., Murray, K., Hall, B. J., Nadison, M., ... Bass, J. (2016). Mental health interventions and priorities for research for adult survivors of torture and systematic violence: A review of the literature. *Torture, 26*(1), 17-44.
- Williams, A. C., Peña, C. R., & Rice, A. S. (2010). Persistent pain in survivors of torture: A cohort study. *J Pain and Symptom Management, 40*(5), 715-722. <https://doi.org/10.1016/j.jpainsymman.2010.02.018>
- Young, A. S., Klap, R., Sherbourne, C. D., & Wells, K. B. (2001). The quality of care for depressive and anxiety disorders in the United States. *Arch Genl Psychiatry, 58*(1), 55-61. <https://doi.org/10.1001/archpsyc.58.1.55>

Acknowledgements

The authors wish to thank the Bellevue/NYU Program for Survivors of Torture.

Funding

This literature review was developed under the National Capacity Building (NCB) technical assistance project funded by the U.S. Office of Refugee Resettlement (ORR) through cooperative agreement number 90ZT0142. The views expressed are those of the National Capacity Building Project and may not reflect the views of ORR.