

UC Berkeley

UC Berkeley Previously Published Works

Title

Hidden scars: the persistent multifaceted health and psychosocial consequences for Syrian torture survivors.

Permalink

<https://escholarship.org/uc/item/5r63c5rc>

Journal

European Journal of Psychotraumatology, 15(1)

Authors

Rizkalla, Niveen

Alsamman, Sarah

Bakr, Oussama

et al.

Publication Date

2024

DOI

10.1080/20008066.2024.2400833

Peer reviewed



CLINICAL RESEARCH ARTICLE



Hidden scars: the persistent multifaceted health and psychosocial consequences for Syrian torture survivors

Niveen Rizkalla ^a, Sarah Alsamman ^b, Oussama Bakr ^c, Hana Masud ^d, Salaam Sbini ^e and Steven P. Segal ^f

^aMack Center on Mental Health & Social Conflict, School of Social Welfare, and & School of Public Health, University of California Berkeley, Berkeley, CA, USA; ^bSchool of Medicine, University of California San Diego, La Jolla, CA, USA; ^cSchool of Medicine, University of California Davis, Sacramento, CA, USA; ^dPsychology Department, University of Massachusetts Boston, Boston, MA, USA; ^eDivinity School, Harvard University, Cambridge, MA, USA; ^fProfessor of the Graduate Division and Chair Emeritus of the Mack Center on Mental Health & Social Conflict, School of Social Welfare, University of California, Berkeley, CA, USA

ABSTRACT

Background: The impact on the physical and mental health of those who survived torture and their close circles in the Syrian regime's detention facilities remains under-studied.

Objective: This qualitative study explored Syrian refugees' narrations of captivity and torture, and the consequences of such extreme traumatic events on their physical and psychosocial health.

Method: Thirteen audio-recorded interviews were conducted in Arabic with Syrian refugees. Study participants were at least 19 years of age, resided in diverse urban areas of Jordan, had experienced captivity and torture in Syrian detention facilities, and voluntarily agreed to participate in the study. Participation was anonymous, only oral consent was required, and no incentives were provided to participants. Interviews were transcribed and translated into English by a team of researchers, followed by analysis of repetitive themes according to the narrative paradigm.

Results: Analysis of interviews elicited three major themes: extreme traumatic experiences of torture, and its physical and psychosocial health consequences. The first major theme was divided into two sub-themes: torture experienced by the participants themselves, and torture experienced by participants' close circles. The second major theme, pertaining to physical health, was divided into two sub-themes: acute and chronic health sequelae. The third major theme, related to psychosocial health, was divided into four sub-themes: mental health symptomatology, impacts on professional life, impacts on interpersonal relationships, and social consequences.

Conclusions: Torture experiences of Syrian refugees had adverse consequences for the physical and psychosocial health, functioning, and the overall well-being of survivors and their close circles. Interventions may seek to improve both the acute and chronic health consequences, as well as the mental health symptoms and associated impacts on livelihood, professional, and relationship dynamics. They should span clinical, legal, and advocacy spheres, given that a holistic approach may contribute immensely to survivors' healing process.

Cicatrices oculatas: las persistentes y multifacéticas consecuencias para la salud y psicosociales para los sobrevivientes de la tortura sirios

Antecedentes: El impacto en la salud física y mental de las personas, y de sus círculos cercanos, que sobrevivieron a la tortura en los centros de detención del régimen sirio, sigue siendo poco estudiado.

Objetivo: Este estudio cualitativo exploró las narraciones de cautiverio y tortura de los refugiados sirios, y las consecuencias de estos eventos traumáticos extremos en su salud física y psicosocial.

Método: Se realizaron trece entrevistas grabadas en árabe con refugiados sirios. Los participantes del estudio tenían al menos 19 años, residían en diversas zonas urbanas de Jordania, habían experimentado el cautiverio y la tortura en centros de detención sirios y aceptaron voluntariamente participar en el estudio. La participación fue anónima, solo se requirió el consentimiento verbal y no se proporcionaron incentivos a los participantes. Las entrevistas fueron transcritas y traducidas al inglés por un equipo de investigadores, seguidas de un análisis de temas repetitivos según el paradigma narrativo.

Resultados: El análisis de las entrevistas arrojó tres temas principales: Experiencias traumáticas extremas de tortura y sus consecuencias para la salud física y psicosocial. El primer tema principal se dividió en dos subtemas; tortura experimentada por los propios participantes, y tortura experimentada por los círculos cercanos de los participantes. El segundo gran tema,

ARTICLE HISTORY

Received 11 April 2024

Revised 30 June 2024

Accepted 5 August 2024

KEYWORDS

Torture; trauma; physical health; mental health; Syria; refugees

PALABRAS CLAVE

Tortura; trauma; salud física; salud psicosocial; Siria; refugiados

HIGHLIGHTS

- The torture endured and witnessed by survivors and their close circles in the Syrian regime's detention facilities was severely traumatizing and had persistent, life-altering implications.
- Survivors suffered from both acute and chronic physical health consequences as a result of abuse inflicted during torture and detention facility conditions. The psychosocial health ramifications included mental health symptoms, impact on interpersonal relationships, professional challenges, and social difficulties, posing multifaceted barriers to healing.
- Survivors and their close circles would benefit from a holistic approach to trauma-informed interventions that may require a multidisciplinary network of services with specialized providers for extended periods.

CONTACT Niveen Rizkalla rizkalla555@berkeley.edu Mack Center on Mental Health & Social Conflict, School of Social Welfare, and & School of Public Health, University of California Berkeley, 2121 Berkeley Way, Berkeley, CA 94704, USA

© 2024 Berkeley Regional Services. Published by Informa UK Limited, trading as Taylor & Francis Group
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

relativo a la salud física, se dividió en dos subtemas: secuelas agudas y crónicas de salud. El tercer gran tema relacionado con la salud psicosocial se dividió en cuatro subtemas: sintomatología de la salud mental, impactos en la vida profesional, impactos en las relaciones interpersonales y consecuencias sociales.

Conclusiones: Las experiencias de tortura de los refugiados sirios tuvieron consecuencias adversas para la salud física y psicosocial, el funcionamiento y el bienestar general de los sobrevivientes y sus círculos cercanos. Las intervenciones pueden tratar de mejorar tanto las consecuencias agudas como las crónicas para la salud, así como los síntomas de salud mental y los impactos asociados en las dinámicas profesional, relacional y del sustento económico. Deben abarcar las esferas clínica, jurídica y de defensa, dado que un enfoque holístico puede contribuir enormemente al proceso de curación de los sobrevivientes.

1. Introduction

Captivity and torture inflict severe trauma on survivors and their families and loved ones, as they lead to persistent impacts on health and social functioning (Aloni et al., 2018). There is limited knowledge of the sequelae of torture experienced in Middle Eastern regions, particularly in Syria (Amawi et al., 2014). In light of the protracted Syrian conflict and its historic refugee crisis, addressing this knowledge gap is critical to understanding the debilitating impact of human rights violations experienced by many refugees. This study examined the lived experiences of torture endured in the Syrian regime's detention facilities, and its acute and chronic physical and psychosocial health sequelae. Participants in this study were survivors of torture who fled to Jordan shortly after they were released from detention in Syria.

Torture survivors may initially suffer from short-term, acute injuries involving bleeding, bruises, swelling, and fractures (Moisander & Edston, 2003; Wenzel et al., 2000). Among long-term physical consequences of torture, chronic pain and disability are the most well documented (Carinci et al., 2010; Kaur, 2017), with the sites of pain most often reported being the head, back, musculoskeletal system, and limbs (Williams & Hughes, 2020). Some may suffer from recurrent symptoms, as exemplified by head injuries (Weisleder & Rublee, 2018). Survivors of *falanga* (beating the soles of the feet) reported chronic leg pain, cramping, paraesthesia, and signs of peripheral neuropathy, all of which are known to impede mobility and lead to disability (Prip et al., 2011; Prip & Persson, 2008; Thomsen et al., 2000). Victims of rape and sexual violence experienced persistent pain to the back, abdomen, and pelvis, as well as urogenital complications (Amris et al., 2019; Kaur et al., 2020; Schubert & Punamäki, 2011); however, these cases are probably underreported (Williams & Hughes, 2020). Electric shock survivors reported muscle cramping; victims of head beatings reported chronic headaches, trigeminal neuralgia, and brain injury; and hanging victims suffered from disabling brachial plexus injuries (Amris et al., 2019; Thomsen et al., 2000).

In addition to somatic symptoms, torture has been found to increase psychiatric morbidity in a dose-response manner (Johnson & Thompson, 2008; Kira et al., 2021, 2022), since it is not considered as one traumatic event, but rather a cumulative complex trauma that includes diverse types and dynamics of trauma (Kira, 2017). Torture is associated with post-traumatic stress disorder (PTSD), complex PTSD, post-cumulative trauma-related disorders, hyperarousal, depression, anxiety, mood changes, insomnia, psychosis, emotional distress, dissociation, executive function deficits, self-control, severe individual and collective identity threats, acute stress disorders, aggression, shame, numbness, distrust, avoidant coping, and suicidality (Abu Suhaiban et al., 2019; Kira, 2017; Kira et al., 2021, 2022; McColl et al., 2010; Schippert et al., 2023a; Song et al., 2018; Tamblyn et al., 2011; Weisleder & Rublee, 2018). These mental health sequelae may contribute to interpersonal challenges, and survivors are at risk of impaired marital relations, sexual dysfunction, emotional dysregulation, anxious and avoidant attachments, and intimate partner violence (Abu Suhaiban et al., 2019; Kira, 2017; Lahav et al., 2015; Rees et al., 2018; Zerach, 2015). Furthermore, spouses of survivors may experience similar somatic and psychological symptoms, including decreased marital and sexual satisfaction, guilt, and low self-esteem, in addition to secondary trauma symptoms (Lahav et al., 2016, 2019). Children of torture survivors may be directly exposed to their parents' psychiatric morbidity and impacted by stressful interactions with them (including negative parental style, or lack of involvement). They may also indirectly experience the dynamics of intergenerational transmission of trauma and suffer from secondary trauma symptoms (Kira, 2017; Lahav et al., 2019; Zerach, 2015).

The distinction between physical and mental health consequences of torture is not rigid. Refugee survivors of torture are also likely to express mental health issues in the form of somatic complaints due to sociocultural stigma (Schubert & Punamäki, 2011; Tamblyn et al., 2011). Moreover, physical and psychological sequelae

of torture were found to be interrelated, with each amplifying the other in a ‘cycle of mutual maintenance’ (Amris & Williams, 2015; Kaur et al., 2020). Memories of torture were found to trigger pain, and conversely, pain may trigger recollection of trauma, consistent with a mind–body interaction (Dibaj et al., 2020; Taylor et al., 2013). In addition, cultural backgrounds of torture survivors were found to influence their expression of psychological and somatic symptoms (Schubert & Punamäki, 2011), as well as their description of emotions and pain (Williams & Hughes, 2020). However, social cohesion, collectivism, and group affiliation, which are immensely rooted and highly valued in Middle Eastern refugees, provided social support and assistance in coping with adversities (Khin et al., 2022; Kira et al., 2022).

These combined physical and psychological sequelae from torture can cause long-term disability and impede social functioning. The social and economic implications are detrimental, as survivors often struggle with employment, and they face social isolation (Schick et al., 2016; Wang et al., 2012). In addition to coping with the burden of caregiving, family members may have to forgo employment opportunities to fulfil caregiving responsibilities (Bager et al., 2018; Wang et al., 2009). It was found that Syrian refugee torture survivors suffered more physical health problems, mainly neurological and musculoskeletal, and demonstrated more symptoms of PTSD and post-cumulative trauma-related disorders than non-tortured refugees (Kira et al., 2021).

Despite the inhumane conditions endured by torture survivors, many studies have indicated that not all refugees who experience these traumatic events develop or exhibit mental health symptoms. Many refugees and survivors of torture demonstrated resilience in their ability to cope, adapt, and recover from their past traumas (Atari-Khan et al., 2021; Khin et al., 2022; Schippert et al., 2023a), and even experienced post-traumatic growth (Kira et al., 2021, 2022; Tedeschi & Calhoun, 1996). It was found that Syrian refugee torture survivors were more resilient than refugees who were not tortured. Survivors of torture perceived their torture as an act that targeted their group of belonging, rather than for personal reasons, which assisted in increasing their resilience (Kira et al., 2022). Factors such as employment, family and social networks, social/community engagement, psychological flexibility, and religious practices were found to promote resilience among survivors (Atari-Khan et al., 2021; Khin et al., 2022; Kira et al., 2022).

As torture practices under the Syrian government continue, it is essential that the health needs of refugees who survived torture are recognized, with the goal of improving post-displacement conditions and health outcomes. By exploring the subjective narratives of Syrian refugees, this study aimed to expand

understanding of the lived experiences during and after captivity, including the chronic effects on both survivors and their families. There are gaps in the current conceptual and empirical models related to limited psychological treatment effectiveness with torture survivors and their families (Kira, 2017; Morina et al., 2018), as well as chronic pain treatment (Williams & Hughes, 2020). The gaps are even greater when it comes to understanding the special needs of Syrian refugee torture survivors and other Middle Eastern torture survivors, at both the individual and collective levels (Kira et al., 2022). It is hoped that analysis of these narratives will contribute towards holistic trauma-informed decisions and interventions by international policy makers and humanitarian agencies, respectively, which may benefit the health and psychosocial health of survivors.

2. Method

This qualitative study derived from a larger research project on the physical and mental health of Syrian refugees in Jordan, and the humanitarian aid workers assisting them (Rizkalla & Segal, 2018, 2019a, 2019b, 2020). The study initially involved Syrian refugees and was later expanded to include torture survivors. Of the total participants interviewed in the study (tortured and non-tortured), torture survivors comprised 26%. This percentage did not include relatives and friends of participants who were reported during the interviews as torture survivors or still in captivity, indicating a greater prevalence of torture among the Syrian refugee population. Consistent with the study aims, the researchers examined torture experiences conveyed by survivors during captivity, and the adverse impacts of torture and captivity on their physical and mental health. Using the narrative approach, the researchers hoped to create a safe platform for survivors to voice their personal and collective narratives of torture (Chase, 2005; Creswell & Poth, 2018).

2.1. Recruitment

The first author recruited study participants by collaboration with frontline staff from humanitarian organizations serving Syrian refugees in Jordan. These organizations also offered their facilities for conducting interviews. The researcher is a Palestinian woman with an expertise in clinical mental health and has more than two decades of field work experience with traumatized populations. While interviewing refugees, the researcher identified that several participants or their relatives had survived torture, prompting further study. Thereafter, organization volunteers and study participants themselves referred the researcher to additional survivors of torture, leading to a snowball recruitment process. Although the

researcher was not Syrian and came from a western academic institution, participants felt that she could understand their suffering and vocalized their sense of solidarity and comfort in talking to her. The reflexivity related to the interactions between the researcher and participants was not detailed in this article in order to centre the voices of survivors and the only 'truth' of participants as the leaders of their stories. In embracing their experiences without questioning the extent of 'objectivity', the interview process permitted survivors to have ownership of the events that happened to them and the way they chose to present them, providing an opportunity for healing.

Participation criteria were as follows: a Syrian refugee survivor of torture, at least 19 years old, residing in an urban area in Jordan during the time of the interview, and willing to participate in the study. Interviews were held in public spaces (i.e. coffee shops or restaurants) or at participants' homes. The time and location of interviews were scheduled according to participants' preference and with the aim of accommodating participation by working refugees and refugee women with childcare and family obligations. Interviews in public places were conducted after a private room had been rented or when the time of interview was not within business hours, to allow privacy and a safe space for the conversation to flow, as well as a high quality of audio recording.

2.2. Data collection

Between May and June 2014, in-depth, in-person interviews were conducted in Arabic with Syrian refugee torture survivors. Most survivors were interviewed from 4 to 12 months after they had been tortured and fled Syria. Only one participant had been in Jordan, and was interviewed, 2 years after being tortured. The length of audio-recorded interviews ranged between 1.5 and 6.5 h. Participation did not include any incentives; however, all interviews were conducted in accordance with social and cultural practices, in which participants were offered beverages and food during the interviews in public spaces, or food baskets were brought by the researcher when the interviews took place at participants' homes. Home visits included sociocultural hospitality norms of meeting the children, parents, and spouses of survivors and interacting with them before the interview started in private. These interactions provided approval and encouragement for survivors to participate in the study, as well as giving the researcher a better understanding of survivors' current living circumstances.

The interview began with the collection of demographic information (e.g. age, marital status, number of children, religion, place of residence predisplacement), followed by a semi-structured format with open-ended questions (e.g. How was your life in

Syria before the war? What have you experienced during the war?). These questions gave rise to in-depth ethnographic descriptions, in which participants shared their personal narratives related to war events, detention, torture, release, escape from Syria, post-displacement challenges, and impacts on their physical and mental health. The researcher did not follow a specific protocol for assessment or evaluation, such as the Istanbul Protocol, but rather allowed for natural flow in narration as participants saw best to express their experiences after her initial enquiry: 'Tell me about your torture experience, with any information you feel comfortable in sharing.' The interview process mainly focused on listening to survivors without interruptions, which was clarified before the interview started: 'I would like to learn from you about your experience and what has happened to you and others, and I will be mainly listening to you.' During the narration, the researcher allowed herself to ask clarifying questions while using the words of participants: 'What do you mean by being done?' 'How did your family respond when they first saw you?' 'What do you mean by stomach issues/digestive issues?' 'What kind of sleeping issues?' Participants were receptive to the gradual interviewing process and responded with elaboration, appreciation, and gratitude.

During the interviews, the researcher responded to participants' narratives and emotions, and frequently validated her understanding of their expressions due to differences in spoken Arabic dialects (Clandinin & Connelly, 2000; De Fina, 2003; Lucius-Hoene & Depermann, 2000), which elicited humour and strengthened their rapport with the researcher. Despite the sensitive nature of this topic and the risk of re-traumatization (Luci & Di Rado, 2019), participants wished for their experiences to be heard and acknowledged by the public and divulged details to the researcher, with whom they established a trusting relationship (Josselson, 2004).

Upon termination of each interview, considering participants' emotional state, the researcher enquired about what helped participants to cope or feel supported when faced with their current challenges. Participants vocalized feeling relief at the end of the interview process.

2.3. Ethics

Prior to enrolment in this study, each participant was given a consent form and information sheet detailing the study's purposes and procedures. Only oral consent from participants was deemed necessary, to ensure their safety and anonymity. Participants were informed that they were free to withdraw their participation, stop the audio recording, and decline answering any question causing them discomfort at any time. Participants

were informed that if they disclosed harm to themselves or others, the researcher would be obligated to report the case to authorized organizations. An information sheet of organizations operating on the ground that treated torture survivors and included organizations' names, telephone numbers, and addresses was offered to all participants at the end of the interview (i.e. Center for Victims of Torture or CVT). Only one survivor was referred by the researcher to CVT after obtaining her consent, owing to recent lacerations on the survivor's wrists (Barrocas et al., 2012).

Interviews were audio recorded with participants' permission to utilize their quotes accurately and anonymously in future dissemination of this study. Only one participant preferred not to be recorded and instead notes of her narration were taken. To ensure anonymity, participants were asked not to provide identifying information during the interviews, and pseudonyms chosen by each participant were used to address them, and other individuals mentioned in their narrations. Audio recordings were computer password protected, and numbers were assigned to each interview for distinguishing purposes. This study was approved by the Committee for the Protection of Human Subjects at the University of California Berkeley (CPHS, February 2014). All names used in Section 3.2 are pseudonyms chosen by the authors for the purpose of presenting survivors' narrations and voices in a personal, subjective, and less objectifying manner.

2.4. Data analysis

Audio recordings of interviews were transcribed and translated by a team of five researchers fluent in Arabic and English. These researchers are of Syrian and

Palestinian ethnic backgrounds, and they specialize in public health, mental health, medicine, theology, and religious studies. The first author heard the original interviews in Arabic and edited the translated transcriptions into English line by line when there were inaccuracies in the translation. She also included non-verbal cues, such as participants' tone, volume, emotions (e.g. smile, laughter, crying, and pauses), and setting (e.g. family members' interruptions, breaks for ordering food/beverage, or personal hygiene) (Clandinin & Connelly, 2000). A sixth team member with a background in public health and medicine participated in data analysis and manuscript preparation, but as a precautionary measure wished to stay anonymous. The senior seventh researcher engaged in designing the study, managing funds, and manuscript preparation.

Initially, each researcher read the transcripts independently and identified repetitive themes. In group discussions, researchers compared themes that they identified and reached a consensus on major themes and sub-themes (Sanders & Cuneo, 2010). Themes were colour-coded in an index book, and each team member independently coded transcripts line by line following the index book. In group discussions, team members compared coded transcripts to reach a consensus of themes and sub-themes that best represented participants' narratives (Clandinin & Connelly, 2000). When discrepancies among researchers occurred, discussions took place until consensus was achieved. Only in rare cases of irresolvable disagreements were two codes accepted for the same line. The process of transcription, translation, editing, and analysis to produce fully coded transcripts lasted for approximately 2.5 years.

The researchers experienced secondary trauma after being exposed to participants' traumatizing

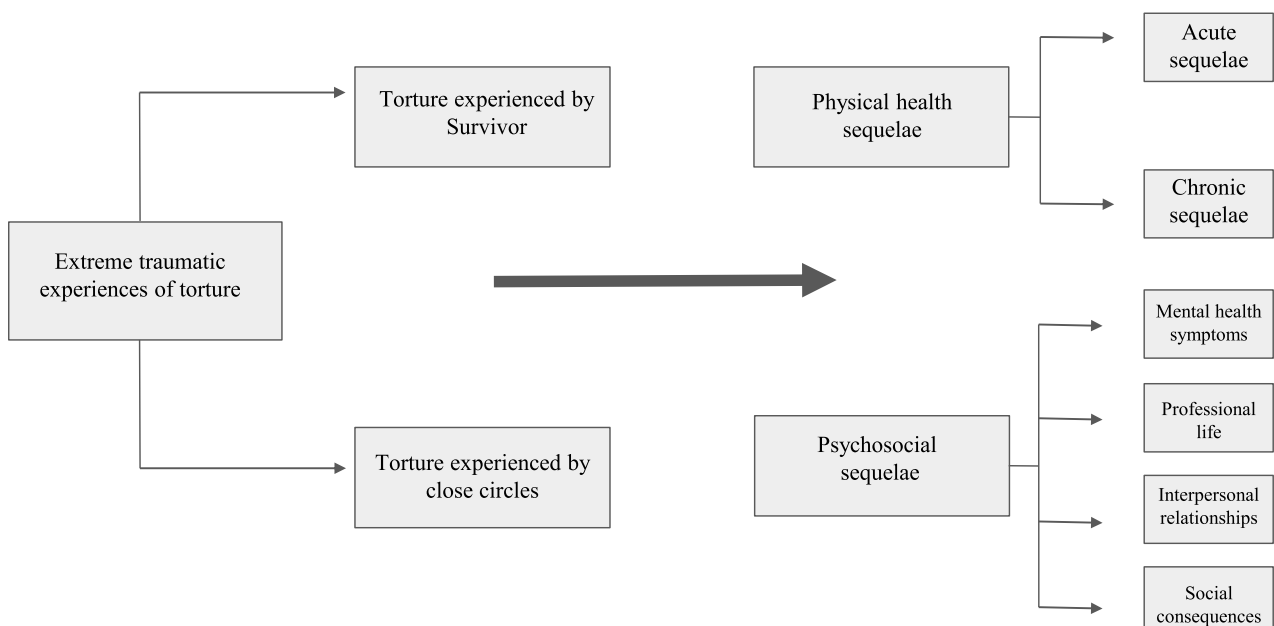


Figure 1. Major themes and sub-themes.

narrations of torture (Figley, 1995). Team members needed frequent and intermittent breaks from work on the materials. This process was further slowed by deliberations regarding whether to publish this work anonymously, taking into account the potential risks of state-sponsored retaliation.

Analysis of the interviews led to the extraction of three major themes (Figure 1). The first theme encompassed extreme traumatic experiences of torture during captivity. These events were divided into two sub-themes: torture experienced by the participants themselves, and torture experienced by participants' close circles. The particular torture methods that were inflicted on survivors have been detailed in a separate manuscript (Rizkalla et al., 2022) that focused on survivors' narratives of the Syrian regime's apparatus for systemic torture. This manuscript did not include the physical and psychosocial health sequelae of torture. Thus, in this article, Section 3.2 starts by addressing only the second sub-theme, relating to traumatic experiences of torture during captivity of participants' close circles. The second theme pertained to physical health sequelae of torture, and it encompassed two sub-themes: acute (short-term) and chronic (long-term) health consequences. The third major theme, psychosocial health sequelae of torture, included four sub-themes: mental health symptomatology, impact on professional life, impact on interpersonal relationships (negative and positive), and social consequences.

Note to readers: in respecting the wishes of survivors to convey their experiences to the public, and in alignment with the narrative approach, the survivors' words are maintained as they were originally phrased in the interviews. Readers must anticipate that these testimonies contain distressing content, including violent and traumatizing descriptions of torture.

3. Results

3.1. Sample characteristics

A total of 13 Syrians (10 men and three women) who had survived torture by the Syrian regime participated in this study. All participants had escaped from Syria during the war that erupted in 2011. The age range was 22–50 years ($M = 36.08$, $SD = 10.20$). The religion of participants was 85% Muslims (11 participants) and 15% Druze (two participants). At the time of the interviews, participants had resided in urban areas of Jordan such as Amman, Irbid, and Ar-Ramtha from 4 months to 2 years ($M = 13$ months, $SD = 5.67$ months). Participants originated from the Syrian cities of Daraa, Ar Ruhaybah, Homs, Damascus, Al Moadamyeh, and Idlib. Marital status was reported as seven married, four single, and two divorced. Participants who had

children ($N = 8$) had one to five children ($M = 3$, $SD = 1.31$). Educational level was reported as follows: one had some schooling, three had finished high school, five had some college education, and four had finished college or a higher level of education.

3.2. Thematic narratives

3.2.1. Extreme traumatic experiences of torture during captivity

Torture episodes of survivors were interwoven with torture experiences of their loved ones and other inmates with whom they had been imprisoned. Survivors recounted extreme traumatic events experienced by themselves and by others, which dictated some of their reactions, and left imprints on their memory and psyche. Many survivors described witnessing injured, mutilated, and dead bodies during detention.

Mona described witnessing the killing and genital mutilation of three inmates:

I would hear moaning, a painful moaning, not a clear voice, but mixed with pain ... The two men were dead, but the last one was slowly breathing out his last breaths, his soul was departing him, and this sight, even if I was buried underground, I won't forget it ... Because of the sight ... I couldn't control myself any more. (female, age 40)

Survivors also experienced constant sounds of other captives being tortured in adjacent cells, and these sounds were memorable even after captivity. Malak recalled 'I could hear them [detainees] screaming with pain and suffering throughout all the period that I was there. You can never forget such screams of agony' (female, age 24).

Many survivors reported that their family members were also imprisoned, either concurrently or at other periods of time. Mona had two brothers who defected from the Syrian army: 'One brother was in detention as soon as he defected ... He joined a demonstration with the guys [protesters], and they caught him. They caught him and kept him hanged [shabeh] to the wall for 17 days' (female, age 40). Nora, who was released from detention, described in tears the imprisonment and torture of her youngest son, and she expressed anguish at not being able to visit or contact him:

He has been imprisoned for three years – he stayed in the Air Force [branch of detention] for a year and a half ... Then they transferred him to Sednyah ... And now they are saying that he was sentenced for 10 years and that he was placed in Adra. (female, age 50)

Similarly to the reflections made about the suffering of other inmates, survivors especially described the heavier emotional burden and toll of bearing witness to the torture experiences of their loved ones. Wasfi

articulated the pain of hearing his brother's stories as a political prisoner for 20 years:

He was telling me stories sometimes, and I would say to him: 'stop, that's enough for today, enough, let me rest, we will continue tomorrow, enough.' He told me stories that make you feel that they're fiction, you wouldn't believe them. Of course you won't believe my brother if you see him now [recovered], but they broke his leg and hand [sighs], he reached death. (male, age 41)

Other survivors described the toll that torture took on their partners and relationships. Ahmad recounted his fiancée's torture experience:

Sawa went through a shocking experience. The detention for Sawa was very dangerous ... It changed the trajectory of her life. It was very difficult ... She was tortured, her nails were pulled off. For sure, she was exposed to sexual harassment. All the things that happened to Sawa changed her psyche ... They may have raped her without her knowledge. She was knocked out a lot and she was unconscious a lot, and when she woke up she found she had [vaginal] bleeding. Maybe anything could have happened to her. (male, age 26)

Saffi was detained with both his best friend and his brother. He witnessed their torture, as well as being forced to witness the death of his best friend during captivity. The emotional toll of such witnesses was insurmountable:

My brother was in the other single cell, I heard his voice. I would pray, 'Oh Lord, oh Lord, my brother, oh Lord' ... [Recalls brother's pain screaming] 'Ahhh' I would hear my brother's voice, 'Ahhh, ahhh' [screams]. There was no brain left in me [insanity]. I would hit the walls, I would hit my head on the wall ... I would yell, something. I wanted to do something, my brother was being beaten. They brought him exhausted [from beating], and two [guards] dragged him. Between me and him there was a wall. I would hit the wall like this, I would say [something] like this, and he would hear. (male, age 22)

Similarly, Nora, who was detained and tortured together with her daughter, narrated: 'They started to take us in for interrogation [at 3 a.m.], sometimes they would take me and my daughter together, and sometimes they would take each one of us separately'. The suffering Nora articulated from witnessing the rape of her daughter was unbearable and shocking.

Both the experiences of being tortured themselves, or witnessing others being tortured, especially loved ones, had long-lasting effects of traumatization on survivors. Some effects were physical, whereas others were psychological.

3.2.2. Physical health sequelae

Torture had a direct impact on the physical health of survivors. Survivors suffered from both acute injuries and chronic physical consequences.

3.2.2.1. Acute health sequelae. Acute health sequelae, including abrasions, lacerations, hematomas, fractures, and burns from cigarettes or electricity while imprisoned, were reported by many survivors. All survivors described experiences of acute pain during the investigations and afterwards.

After his release, Jameel described the condition of his back and feet due to whippings:

I had open wounds [skin] here and here [oedema in soles of the feet], everywhere, everywhere, everywhere. I was covered with open wounds [skin] everywhere ... The blood ran out of me. My skin was totally open and all of my flesh was exposed ... Whoever saw my body would go crazy. (male, age 35)

Many survivors described the longevity of the injuries sustained from physical assaults endured during detention. Waseem recounted: 'There were bruises that lasted a long time, bruises that stayed 3 years or 4 years, [areas] that were blue or black or darkness in the skin ... They might still be showing if examined closely' (male, age 42).

In addition to the acute injuries described above, there were consequences of food restriction, sensory deprivation, and limitation of physical activity. All survivors experienced marked weight loss during their detention, as well as other disturbing health issues, such as in the case of Mahdi:

I didn't see the sun for two months. I had muscle wasting, the size of the muscles was shrunk. I had zero power, I couldn't lift a cup of tea, my blood pressure was very low. Because there was no food, no salt, no sun, no activity, there was nothing ... I didn't use the restroom for two months [constipation] ... After I got out, I needed laxatives to be able to use the restroom ... Because I had this issue [during detention], I got scared [of gastrointestinal poisoning] so I limited my food consumption to a minimum ... Because the food was dry, basically bread and water ... I had abdominal cramps. (male, age 24)

Other survivors articulated health issues specific to the torture methods inflicted on them. Waseem, who was hung from one of his legs for a whole month, said:

The oesophagus was upended. I couldn't swallow upwards ... It would become impacted in the pharynx. Either I choke or the passageway to the nose opens – the one that is in the pharynx [nasopharynx] and opens to the nose and moves [the water] back ... You lose many senses. The tastes, I couldn't recognize them any more, I didn't even know if what they brought me was salty or not salty. I did not recognize anything, essentially. (male, age 42)

He was left with many chronic ailments, including pain with walking.

Wounds and injuries were exacerbated by infectious diseases due to the unsanitary detention environments. Saffi, who was captured with his friend after being trapped in an area under shelling, attested:

Cigarettes here, and torture marks and electric shocks [marks], injuries here, and there are injuries from shelling. There is a shrapnel [piece] here that is still there ... My weight was [initially] 105 kg, a body builder. My weight became 70 kg ... I contracted a bug, which was the scabies bug [mite]. This one sucks the blood, it's an insect ... You lose blood and become anaemic ... My blood [energy] was drained ... There was no blood left in me, it was all gone ... I would say I am not going to make it, I am going to die ... I wasn't able to stand. (male, age 22)

Illnesses and injuries could be especially dangerous for women such as Mona, who was in her fifth month of pregnancy during detention and torture and endured spinal injuries. She described the following symptoms 3 days after being released:

Contractions, because my body became cramping [spasticity], and my legs became like this, swollen, all of it became blue, and there was no sight of my toes, totally ... from the beating, and my hands the same, and my chest ... From the electricity ... When I coughed, I'd cough blood ... [The pain was] in my back and my entire body, I would feel it was abnormal ... The pregnancy ... I was 5 months pregnant and I miscarried, that's to double the pain, pain over pain. (female, age 40)

3.2.2.2. Chronic health sequelae. Many survivors suffered long-lasting symptoms or disabilities, and almost all suffered from some form of chronic pain. Some survivors required surgical interventions after their release, such as for fractures sustained during torture. There were numerous scars shown to the researcher during interviews. Urogenital, gastrointestinal, and musculoskeletal complications were also discussed during interviews, with some participants requiring frequent use of restrooms, reporting new food intolerances or chronic constipation, or suffering from pain during interviews. One participant required the interview to be conducted in their home because of their disability.

Mahdi described how chronic pain has manifested since his captivity:

My leg was so swollen when I was released, I could barely walk ... Until now I have issues in my back due to how long I stood in front of the air conditioner [during torture], in my joints, knees, and my teeth were broken ... When I sit, my back and body would be stretched, I cannot make my back and shoulders straight, if I do so like any other young person, after 15 minutes, I would feel like I need to lie down and sleep, as if there is a knife stabbed in my back ... But some of the pain is caused by psychological issues. (male, age 24)

Likewise, Saffi narrated gastrointestinal symptoms, which persisted after captivity:

[After being released] I couldn't eat, the sickness would prevent me from eating ... After two months

of not eating [in detention], [my father] came and fed me liver. And what? I lost consciousness ... I was done, I was throwing up and became yellow [jaundiced] and so forth. (male, age 22)

Survivors testified enduring diverse health issues due to captivity. Waseem experienced gastrointestinal illnesses:

When I got out I just wanted to eat. I ate, I ate, I ate in one hour three times, three meals ... Then I had abdominal distress, so they brought me a doctor. He washed my stomach out [gastric lavage], he gave me laxatives ... I had a lot of issues ... My eyesight was good [before] ... [But now] I cannot see 30 centimetres from my face ... Colon: the large intestine, it had Crohn's and colitis disease ... This disease includes infections and internal ulcers in the intestinal wall ... [After being released] I started to get sick, I started to get sick because the filth [unsanitary conditions] was gone from me. (male, age 42)

Jaber also suffered from diverse bodily illnesses: 'I have ulcerative colitis. I take medicine from the Ranitidine derivatives ... My left abdomen and my left kidney [flank], all of them are in [pain]' (male, age 49).

Many survivors required surgeries after captivity, and Ameer was one of them: 'I got hit on this one and another on that one [both hands were broken]. I had a tendon cut here ... and I had surgery for it because of the cut in the [wrist] tendon' (male, age 38). Nora explained the effects of her health issue on her functioning:

Because of the effects of the detention and the beatings on here [knee], they had to take out the cartilage ... Because my leg was swollen for a while and I couldn't even walk a single step on it ... Recently I haven't been able to walk on it at all ... It needs constant rest ... So the bones don't rub together, which would make me need a new joint. If I needed a new joint that would be a catastrophe. (female, age 50)

Women suffered from gendered health consequences, such as injuries from sexual violence, which led to irreversible reproductive harm. During beatings in detention, Malak had vaginal bleeding and required medical attention.

They took me to a doctor inside of the facility, their doctor, and she told me that I had severe damage to my uterus and abdominal organs. I would need some surgeries that might prevent me from having children [cried]. (female, age 24)

Mona's torture resulted in spinal fractures that paralysed her legs, and a pelvic fracture, which she was told would make future pregnancies dangerous.

I had impingement on my spine [spinal cord], and specifically at the seventh vertebra [C7] ... I had surgery, and they removed three masses [area of impingement] from my spine ... so I could walk. I would crawl on my knees, I couldn't stand with the support

of my legs, and I was crawling like a small child.
(female, age 40)

Injuries inflicted on women had contributed additional psychological detriment to social functioning. For example, Malak, whose fingers were mutilated by nail pulling, shared experiencing shame in social settings: 'That's why I keep covering my hands, they are distorted ... So that people are not shocked by the sight' (female, age 24). It was also observed that Malak had cuts on her arms, as commonly seen in cases of recurrent self-harm by young women (Barrocas et al., 2012).

3.2.3. Psychosocial health sequelae

Psychosocial ramifications of torture were divided into four sub-themes: mental health symptoms, impact on professional life, impact on interpersonal relationships, and social consequences.

3.2.3.1. Mental health symptomatology. All survivors experienced one or more mental health symptoms, with variance in onset time, severity, and comorbidity, which were more complex than PTSD or complex PTSD symptoms: rumination, perpetual fear, anxiety, depression, numbness, nightmares, flashbacks, sleep disturbances, hypervigilance, loss of appetite, trouble concentrating, irritability, anger outbursts, aggression, self-destructive behaviours, self-harm, substance abuse, eating disorders, exhaustion, suicidal ideation, avoidance of traumatizing memories or triggers, heightened reactions, unwanted memories, memory impairment, dissociation, suspicion, mistrust, and more.

Jaber expressed how torture changed him: 'I won't hide it from you. My psychological health, I feel that my morale became moderate. It used to be good and I was active, vigorous and confident' (male, age 49). Others specified feelings of numbness, such as Mahdi: 'After a while, I reached a stage of not crying any more. There was nothing left to hurt [to cause emotional pain]. As much as the problems got bigger, one would stop feeling, would become numb' (male, age 24). Bassam described a lack of concentration, stress, and depressive mood that led to suicidal ideation:

I ran out of patience. I couldn't handle any more pressure ... Five days ago, I was totally helpless [unable] to think ... I have to be balanced ... And not let them [people/parents] feel that I am ... collapsing. But in fact, the truth is that I'm collapsing. [Reading his Facebook post] 'The days of loneliness and hours of thinking are killing me, so I'm dying in slow boring motion. I used to feel despair and defeat [frustration], but now I feel that the time for leaving is due.' I thought of suicide ... [I was] not stable. (male, age 29)

Depression, avoidance, aggression, angry outbursts, and other comorbidities were common among many survivors. Nora portrayed her experience and her daughter's condition that led to suicide attempts:

She stayed in her room for six months, and wouldn't go outside. She attempted suicide twice ... I used to cry a lot, and I would break things a lot, I used to hit a lot of things ... We didn't pass the doorstep, even when someone came to our house, we wouldn't even dare to open the door, we were afraid that it would be someone sent from the regime to follow us. (female, age 50)

Anxiety, fear, panic, and hypervigilance took a heavy toll from survivors. Jameel recounted his experience at nights: 'I go crazy. It is a difficult thing. I swear I stay up all night worried [anxious]. It eats away at my body. I have become much thinner' (male, age 35). For Jameel, anxiety and panic manifested in insomnia, anorexia, unintentional weight loss, and excessive smoking. Most survivors (12 out of 13 participants) were heavy smokers who consumed at least two packs of cigarettes per day.

Sleep disturbances concerned all survivors, and many identified how they affected them. Mahdi explained:

I used to have hallucinations [during torture] ... Now I am unable to sleep ... I go to bed at midnight, but I can't sleep ... I keep moving in bed, I stay with my eyes closed but I can't sleep ... Then the morning comes [6 a.m.] and I fall asleep [exhausted]. But if I have work, I stay awake for two to three days in a row ... The issue of sleep is not new, but I used to be able to sleep after two hours in bed, but now no ... I continue ruminating all night long, trying to remember every detail. (male, age 24)

Saffi described how unwanted memories of torture would trigger night terrors, hallucinations, and even syncope:

I used to imagine something and I would get scared and startled ... I became ... In addition to shaking, I would stand up and get dizzy and immediately fall down ... I was hallucinating at night. I would wake up, try to stand, go to the door and open the door, and then I would collapse. (male, age 22)

In an attempt to avoid nightmares associated with traumatic memories, some survivors were trapped in vicious cycles of insomnia. Malak recounted:

There are things I will never forget, and I still have nightmares about, recollections from my time inside [detention], memories that haunt me. And all the scars that I have on my body [shows her belly] and hands [cuts of blades] ... These are physical, but the ones in the soul cannot be removed that easily. (female, age 24)

For Waseem, the anticipation of a nightmare was too threatening to bear:

The problem I'm left with is that I run away from sleeping. I run away from this nightmare. It's not a matter of, I don't want to have a phobia from anything. I see that running away from it is better for healing. Better than submitting to it, or start thinking about it. No, I stay up for a day or two, then I sleep deeply or I sleep like the dead. And if the nightmare comes, I won't sense it due to the fatigue. To weary myself is better than being regular and subordinate to a threat of this kind [nightmares], even if it was an internal threat, coming from within myself. (male, age 42)

Beyond nightmares, survivors also experienced flashbacks, avoidance of triggers, memory impairment, and dissociation. Mona described suffering from flashbacks and dissociation in comorbidity with somatic symptoms that hindered her function:

I started imagining that everything around me here was in the detention... I would feel suffocated... The nightmares, days over days would pass, and I wouldn't be able to sleep sometimes, I would have anxiety... I would tell them [her family] 'I can't eat, I feel like I am still in detention'... I would feel my vision was blurry, as if I was in detention and being tortured. I would be standing in the kitchen preparing food, and I would stop and I couldn't continue the chores any more... I can't. I feel that something is blocking me, psychologically I am tired. (female, age 40)

Waseem, who was detained multiple times, explained how distorted time perception and memory impairment presented as physical manifestations:

During my first time in prison, I used to have seizures, body convulsions... It was not a neurological illness... I was not electrocuted. They didn't slice [wound] my body. They didn't put out cigarettes on my body. But my psychological horror was the time. The time that I didn't know. My history that I forgot. (male, age 40)

Psychological repercussions were not limited to the presentation of mental health symptoms, but were also apparent in other domains of life, including professional function, interpersonal relationships, and social engagement.

3.2.3.2. Impact on professional life. Many survivors vocalized how challenging it was to be professionally active after being released from captivity. Health and mental health issues due to torture have further strained displacement challenges for survivors. Issam, who used to work in the Syrian military but chose to defect from his service after being detained, articulated facing new challenges:

I am unable to work in anything in Jordan related to my experience... Other than that, I don't have a profession, I don't have any manual skill or educational skill, all my life I worked in the military as an officer... I cannot work in trade, and I don't have material possibilities. (male, age 49)

Nora found a job in Jordan, but it presented some difficulties since she had a knee injury. She said: 'My work here is tiring, I must stand on my feet here for eight hours, but what can I do? I need to pay the rent, the electricity, the water, and for [family] expenses' (female, age 50).

Others, who had a profession, encountered many obstacles in the search of a country that allowed them to practise it. Wasfi faced hurdles in trying to practise medicine in one of the Gulf countries, and was unsuccessful, forcing him to leave for Jordan. He said:

You need a work permit and residency, a permission to reside, so I went to a friend there and I stayed for a period of time, and I did a licence [test]. I applied for a professional licence acknowledgement, and I passed the test. I had one of the highest grades in the test, but they didn't accept me to work there. (male, age 41)

Wasfi attempted to find work in several countries before landing in Jordan, where he found a creative solution of managing an organization in exchange for rent and food for himself and his family.

All survivors faced financial hardships that further stressed their psyche. Bassam described the financial pressure of providing for a large family, which caused his depression to deteriorate:

It's an economic burden... I'm obligated [responsible] for 15 persons... There were no more resources left. But, at the same time, there is no excuse. I cannot apologize and say, 'It's not my problem any more.' Ultimately, it's a responsibility... When a human loses but is able to maintain [manage] their affairs and support themselves [economically], then it's okay, no problem. But for a person to reach a stage wherein he used to be capable of providing [support to others] but now he is in need of other people. (male, age 29)

Some survivors voiced that torture and their mental health presented a barrier in committing to a job, whereas others perceived their torture experiences as encouraging activism for their country, resulting in de-prioritizing the search for work in Jordan. Mahdi expressed the struggle:

I am not able to work or continue a job that I have started. There is no work that is not related to the inside [Syria], and it is too painful. I tried to take a break. I cannot live without the inside [Syria], every detail is related to it. Coffee shop is the inside, going out is the inside, home is the inside, the phone is the inside, our whole lives are attached to the inside, our details and reactions are all related to what is happening inside [Syria]. (male, age 24)

3.2.3.3. Impact on interpersonal relationships. As a result of their torture experiences, survivors exhibited both positive and negative behavioural and emotional

changes regarding interpersonal relationships. Negative changes included aggression, domestic violence, suspicion/trust issues, obsession and possessiveness, fear of intimacy, and fear of commitment. Positive changes included reduction of symptoms severity, increased appreciation for the family unity, relating to others, and enhanced love and attachment.

Negative changes. Jameel testified that his relationship with his wife suffered from misunderstanding, frequent conflicts, and impaired sexual interaction. He often reacted with aggression and violence, resulting in a divorce.

I really tried with her. I didn't want things to linger. The more it lingered, the more I went crazy. She was my wife and I couldn't touch her and there was nothing [no sex] ... I [hit her]. She has a short temper and is provocative with her words. I would completely try not to hit her. I would tell her, 'Be quiet. Don't talk.' And she would talk with her short temper. She would provoke me and make me hit her. (male, age 35)

Jaber expressed paranoia of infidelity in his marriage, which also ended in a divorce.

My first wife ... I'm alienated from her, I couldn't be convinced of any incident if I didn't analyse it and didn't understand it. An ambiguous event has happened and maybe it played an unconscious role in my separation from her. In such situations [infidelity] with her cousin, there were suspicions, I can't say 'certainty', but it played a role in the unconscious, so I pushed towards divorcing her. (male, age 49)

Mistrust also affected women survivors, and in the case of Malak, it was driven by shattered femininity attributed to infertility loss caused by torture and sexual violence, which were projected on her romantic relationships. She described:

I have to admit that I have many issues with trusting others, especially men ... It has caused me some problems in my current relationship with my fiancé ... I even check his phone sometimes ... I've been betrayed so many times by others that I can't just start trusting again ... Sometimes I do [want to marry] and sometimes I don't, because ... I don't want to deny him the joy of having children just because he stays with me. He says he loves me now, but what if I can't have children after the surgeries I need? ... This love of his would become hatred and resentment at some point. I don't want to stay and watch it happen. (female, age 24)

Obsession, possessiveness, and controlling behaviours in relationships were expressed by some male participants. They faced conflicts and arguments with their partners who refused to become submissive to their controlling demands. Ahmad explained this dynamic in his relationship:

Me and [my fiancée] are suffering ... Every person started having psychological problems within them,

a lot, a lot, a lot. And this thing [psychological problems] where does it appear? In our relationship, me and her ... Most of our fights are specifically about clothes ... When I see the girl who belongs to me is being a target for every guy walking on the street, looking at her, and checking out her body. (male, age 26)

Other survivors expressed how captivity and torture led to a fear of intimacy in romantic and non-romantic relationships. Waseem detailed:

After failed experiences, a human is left without ... without feeling. He [human] convinces himself that he loves, but he does not know how to love ... From where would he have that [emotional capability]? From where would he have that energy to admit that he loves and to be able to give? To give for the [sake of] love, of giving ... It's not easy for me ... During the past three years I had one opportunity to make a friend. I can't, I have no space for it in my life ... I might love a person [male or female] and after all the torture I have experienced, I would ruin their life. Maybe ... I don't hate them, but this would be my touch in their life [to bring them bad luck] ... I don't like to bring anyone close to my pain ... That's how it is. That has become a barrier for me. I am no longer able to get close to anyone. I have become very thorny. I'm not easy now ... I am short tempered. I was not short tempered in the past. (male, age 42)

Survivors also expressed fear of commitment. Mahdi described:

I can't give a girl security. I can't think one month ahead and what I'm going to do, I don't have a clear future. My studies are not complete. I don't own anything. Everyone my age has started working. My dad's money will be over in six months if he doesn't guarantee an income ... There are some women who I feel are really sincere, and they want love, but I don't approach them. The one who wants you as a husband and more, I don't let her get attached to me and I don't get closer to her. Because I'm not ready, and I will not let her hang in there waiting for me for years ... The moment I feel that she's becoming more attached to me, or if I start becoming more attached to her, I run away. (male, age 24)

Positive changes. Despite the negative interpersonal consequences of torture, some survivors reported positive impacts on their relationships.

Ahmad articulated how his relationship with his fiancée had reduced the severity of his trauma symptoms and enhanced his professional functionality:

Sawa wiped everything for me. She was able to make me forget everything ... to take me away from this atmosphere. And when did I start my professional life here [Jordan]? When I met Sawa. We applied ... and were hired together, and we started together. Like that, I began my life with her. All these accumulations because of the war, went away.

When Ahmad was asked about his ability to ignore social stigma projected on female survivors, his love

for Sawa was very apparent: 'Because I love Sawa. That's it, because I love her, just like that ... I believe that my wife, or my fiancée is the purest person in the world, that's it. The subject is over [period].' (male, age 26).

Mona, a mother of four children, also experienced increased affection and attachment in her relationship, and an increased appreciation for the family unity after months in captivity:

He [husband] tells me 'what we have suffered from when you were in detention ... The kids and I will never forget [suffered a lot]. We couldn't believe the moment when we saw you, [wondering if] you were alive or not alive'. [Our relationship is] way better than before. My husband and I are in great agreement [get along very well]. Thank God [hamdullah] and nothing has changed the relationship, on the contrary, the love and connectedness in each other have grown deeper. (female, age 40)

Likewise, Mahdi and his family shared a greater sense of relatedness, appreciation, and trust for each other after his captivity and torture.

I felt [during torture] that there is no one in the whole world who could save me from this situation other than my father. I cannot trust anyone other than this human being. No one in the world had loved me as much as he loved me. No one would have wanted to help me as much as he wanted to help me ... After I was released, my brother bathed me with warm water, and he prepared the bed for me and started massaging my swollen leg until I fell asleep [smiles]. He continued massaging my leg till the morning ... He is very warm hearted ... We became closer after my detention and after he lost his leg [amputation] in a tank bombing, his sense of responsibility towards me has doubled. Because maybe he will receive the news of 'my brother was killed or injured', you know this condition of injured people who become worried that everyone is going to be injured like them ... We talk every day over the phone ... All of my family is close, from the grandfathers to the grandchildren. (male, age 24)

3.2.3.4. Social consequences. Torture had an impact on survivors' social functioning. Participants voiced anger, shame, guilt, self-blame, loneliness, and isolation. Many felt that others around them could not empathize with the trauma they had lived through or understand it. Despite their need to share, they struggled to find others willing to listen. Jameel described his anger and loneliness in the interactions with his wife, who ultimately left him after he was detained multiple times.

I would come back [from detention] suffocated. I just wanted her [wife] to have sympathy for me ... To sit together and talk and to share everything, just like we used to ... I just wanted my wife and I to be together laughing, eating, and drinking ... I just wanted to hear a [nice] word from her. But she

wasn't receptive to anything ... All I wanted was some mercy or compassion ... I wanted him [wife's father] to be sympathetic to me and convince her to come back to me ... And I thought, is this possible? I was in prison for five months, and I just got out and she wasn't sympathetic towards me. (male, age 35)

Some survivors did not want to share their suffering, and preferred to keep things to themselves, especially from their families, whom they needed to protect. Mahdi expressed his need not to shatter his image as a man in his father's eyes:

My father was proud of me ... We would talk about my detention with him, but I wouldn't talk much about the details, it's a matter of my own pride ... I want to keep it to myself, as my own experience. I only want them to understand that they [guards] didn't break me, and that's it. I don't want them to know how much I was tortured, I want them to know that I'm not broken and that I'm still walking on my feet [standing tall]. (male, age 24)

Other survivors were ostracized or socially judged for having been detained. Fearing accusations and criticism from his family, as well as loss of his privacy, Waseem kept his detention private, at the cost of estrangement from his family:

The pain I suffered, I didn't share with anyone. The years I was detained ... Were torture and psychological horror, and deportation and being threatened 24/7 ... All of this, I did not tell anyone about ... It is my own business ... [After being released] I stayed at my [friend's] place for 10 days. And afterwards I went to my family ... I told them I was in Lebanon. No, I did not tell them [about the torture] ... I was not attached/glued to them for 40 years, no. It has been a long time that I have been far from them, but for 40 years I am their son and they can't praise me with one word, sorry. It is right that they don't have many things to blame me for, or they don't have many accusations to accuse me of, but they have nothing to be proud of ... in me ... Our society has measures of success ... That is what they say about me. 'Why didn't he get married? He must have a problem ... He is either sick, or disabled, or gay, or something, like all of these' ... And everyone understands the problem based on projecting their own problems [laughs] ... I was subjected to harassment from my family and my maternal and paternal uncles, and ostracization ... There is ostracization. (male, age 42)

Some survivors were inclined to self-shame and self-blame. Women who internalized gendered torture experiences and shame were especially prone to cutting off ties with their social connections. Mahdi narrated his partner's experience, who was detained for one month:

They placed her in prison with women in prostitution. This has ruined her psychologically. It was the most painful thing she experienced in prison, to be placed with such women ... So she left [broke up with him] ... She wasn't tortured, but she was sexually

assaulted and forced to inform on her friends... Nobody blamed her, even her friends didn't blame her, she was the only one who blamed herself, and she reached a stage when she couldn't make peace with herself [forgive herself]. (male, age 24)

Survivors also endured criticism and gaslighting from loved ones, who at times blamed and stigmatized them for having been detained and tortured, demonstrating internalization of social construct oppression and the Syrian repressive apparatus. Such social interactions were especially witnessed among women whose torture experiences were gendered. Malak spoke with agony and tears:

The first thing my mother asked me about my detention was if they have raped me and if I have lost my virginity. I was so angry at her for asking me this question. I told my mother: 'if this is what worries you the most after your daughter was released from prison and had been tortured for six months, then discard your worries, they didn't rape me'. It was so humiliating and not sympathetic that this was the only thing that worried her the most. Like what people thought and how she was perceived in society when her daughter was incarcerated and tortured. (female, age 24)

Guilt was another strong feeling that survivors felt; while they were released, others were still detained, tortured, and killed. Mahdi described how this guilt has led him to socially isolate:

I get angry with myself ... Two months ago, I started not going out and meeting people ... I felt guilty for leaving my friends in Syria and being here with electricity, water, and internet, and without shelling and the war. (male, age 24)

One of the reasons for survivors' social isolation was the severity of trauma symptoms that prevented or limited their social interactions (e.g. insomnia prevented early gatherings). Another reason was their fear of social stigma related to mental health, as Wasfi discussed here:

The problem is that our eastern society thinks that psychiatry is for crazy people, the psychiatry particularly, they can't understand the idea that psychiatry is a society problem, it's not a doctor problem or an individual problem, but a societal problem, the family, the home, the school, the society, the institutions all have responsibility ... [But they think] that the psychiatrist is crazy and the patient is crazy. (male, age 41)

4. Discussion

The precise prevalence of torture is unknown, yet a considerable number of asylum seekers and refugees are torture survivors, particularly those originating from the Middle East and North Africa (Ostergaard et al., 2020). The acute and chronic physical and psychosocial effects of torture are not well studied

(Schipper et al., 2023a; Weisleder & Rublee, 2018). Survivors suffer from complex physical and psychosocial health issues that would benefit from trauma-informed interventions tailored with sensitivity to their special needs (Luci & Di Rado, 2019). Some survivors may find the pursuit of justice to be rewarding and empowering (Patel, 2019), whereas others may want to move forward and avoid recollecting their painful traumas (Dibaj et al., 2020).

Our findings indicate that in order to allow survivors to commence a safe journey of healing and recovery from the extreme traumas they have endured, providers need to embrace a holistic approach with humane, sensitive, affordable, and socioculturally adaptive interventions that may require a multidisciplinary network of services with specialized providers. Service agencies may consider providing primary, dental, nutrition, physiotherapy, women's health, legal, and mental health care within the same facility, where survivors can turn to receive integrative care (Abu Suhaiban et al., 2019), social, and recreational activities (e.g. yoga, meditation) (Keshk et al., 2021). Diverse treatment options for mental health disorders need to be offered to survivors (e.g. eye movement desensitization and reprocessing, narrative exposure therapy). Social activities such as music, dancing, singing, painting, writing poetry, and non-traditional therapy methods (e.g. acupuncture, martial arts, aromatherapy) (Keshk et al., 2021) may also be used for therapeutic purposes. Women survivors, particularly survivors of sexual violence, must be provided with trauma-informed gynaecological care (Cohen et al., 2023). Given the stigma associated with receiving mental health care, activities should include less stigmatized approaches that promote a sense of community, agency, self-efficacy, and trust among survivors, such as support groups, prayer, legal aid, and family counselling (Atari-Khan et al., 2021; Kira, 2017; Morina et al., 2018). These are recommended to be provided for free or at subsidized prices, in addition to vouchers for transportation to improve attendance.

Agencies may also offer survivors diverse activities or referrals to other agencies that offer specialized services, such as volunteering opportunities, assistance in finding new vacancies, scholarships for students to continue their education, childcare options for single parents or parents who seek work, educational and enrichment workshops, and more. Providers working in these settings must be trained in cultural humility and trauma-informed care. Beyond training, providers must consistently be aware of their own biases and prejudices, as some survivors may articulate thoughts or behaviours (e.g. suicidal ideation or attempts) that contradict the providers' traditional sociocultural norms and religious beliefs. In addition, our findings suggest that owing to the complexity of traumatic torture experiences and subsequent chronic health

ailments, many survivors will require lifelong comprehensive healthcare (Schipper et al., 2023a) and social services.

The ramifications of torture, which the study presented, are substantial in furthering our understanding of survivors' sensitivity to aversive and intrusive medical procedures. Physicians must be trained not only to anticipate the health issues that survivors often endure, but also to recognize and address the complex psychological challenges that might be triggered during medical encounters. Physicians may also consider complaints of physical issues and pain as part of trauma somatization that do not stem from a physical condition in their diagnoses (Rizkalla et al., 2020). In addition, Schipper et al. (2023b) argue that 'healthcare experts with training in refugee care are unaware of the health difficulties faced by torture survivors. Any medical evaluation or treatment has the potential to re-traumatize torture survivors, thereby reactivating trauma symptoms without applicable guidelines to prevent re-traumatization.' The need for trauma-informed care extends to dentists (Høyvik et al., 2021), who may encounter survivors after lengthy periods of avoidance. Understandably, some survivors may mistrust healthcare providers and refuse medical care, and it is important to remember that they may have experienced medical staff who were complicit with torture and abuse in Syria's dungeons (Rizkalla et al., 2022). Therefore, agencies that provide medical, dental, and mental health care need to be attentive to the setting and equipment in clinics, organizational culture related to waiting time before the appointments, environmental atmosphere, including colours, light, and design, and general hygiene within the facilities. These components have the potential to evoke re-traumatization or flashbacks of torture experiences (Dibaj et al., 2020; Høyvik et al., 2021; Schipper et al., 2023a). Agencies should aspire to achieve a balance between providing the needed care and services and creating emotional safety, stability, and warmth. Thus, individually tailored interventions are recommended to be carried out with sensitivity towards and awareness of each survivor's circumstances and traumas.

The findings of this study demonstrated the complex consequences of torture on survivors' mental health that often extends to their family members and close social circles. As part of the holistic approach recommended for torture survivors, mental health treatments may often include families of survivors. Family members may suffer from symptoms of both primary trauma and secondary trauma, similar to those of survivors (Lahav et al., 2015, 2019; Zerach, 2015). They may also suffer from survivors' physical and psychosocial health manifestations of torture, such as economic challenges and intimate partner violence. Family members have reported struggling with

survivors' frequent aggression and feeling trapped in cycles of violence (Abu Suhaiban et al., 2019; Lahav et al., 2015; Rees et al., 2018; Rizkalla & Segal, 2018, 2019a; Zerach, 2015). In the study of Ostergaard et al. (2020), torture survivors reported higher unemployment rates (63%) than participants who were exposed to non-torture traumatic events (43%). Torture survivors who encounter occupational challenges may benefit from tailored opportunities that promote self-efficiency and independence (Luci & Di Rado, 2019). Importantly, survivors' basic trust in others is lost after being subjected to brutal violence inflicted on them (Bell et al., 2019), thus impacting their professional, interpersonal, and social interactions. Survivors face interpersonal difficulties that may lead to the avoidance of public gatherings, leading to isolation and loneliness (Luci & Di Rado, 2019). Interestingly, in our study, survivors demonstrated both positive and negative impacts on their interpersonal relationships. Such a component of positive impact on interpersonal relationships could be attributed to post-traumatic growth, in which traumatic experiences might be perceived as contributing to 'relating to others' (Kira et al., 2021; Tedeschi & Calhoun, 1996) in some cases.

Refugees were reported to underutilize mental health clinics; and if they were obligated to use mental health services, they feared social stigma (Rizkalla, 2022; Rizkalla et al., 2020; Rizkalla & Segal, 2018). To overcome social stigma from seeking mental health care in Arab and Middle Eastern communities, we advise inviting families to therapy/interventions in inclusive health facilities, wherein families can obtain whole-person care for both their physical and mental health. We also recommend that recruitment of parents to the process is initiated by offering to help their children, and gradually, parents can be included in the therapeutic alliance. In cases of survivors who are single, living alone, or socially isolated, we suggest creating small mental health clinics within community centres or recreational facilities, where they can participate in social and cultural activities and obtain care. This approach may allow survivors who share similar experiences to meet and develop peer-support groups. Such clinics may also be offered within religious centres, with the collaboration of religious and community leaders, where survivors might seek spiritual guidance and community support, particularly when facing distress (Atari-Khan et al., 2021; Iacoviello & Charney, 2014). In addition, agencies that treat torture survivors and their families should provide trauma-specific self-care techniques for their staff who are exposed to the atrocities of survivors and may themselves suffer from secondary trauma (Rizkalla & Segal, 2019b, 2020).

It is crucial to hold the Syrian government accountable for the international crimes committed against

civilian survivors of torture. Considering the oppressive political environment in Syria, we expect that only torture survivors who escaped Syria have opportunities to voice their experiences and testify to the treatment inside Syrian dungeons. However, survivors providing testimonies may face intimidation even outside Syria, and there is always a perceived threat of being found, recaptured, and re-tortured, or having family members or friends captured as punishment. These threats rob survivors of feelings of safety and protection, thus limiting or preventing them from making the essential and therapeutic journey of recovery, which commences with narrating their lived experiences to others. Studies also suggest that the legal prosecution of culpable parties may be beneficial to survivors if rehabilitation and guarantees of non-repetition as forms of reparation are attained (Patel, 2019).

Delving into legal procedures can also be incredibly stressful for survivors owing to the gap between the legal and psychological framework that each discipline presents (Cohen et al., 2023). Eventually, it is hoped that survivors may benefit from pursuing justice, especially if ‘therapeutic jurisprudence’ (Wexler, 1990) is involved in the process, in which the individual’s well-being, needs, goals, moral concerns, and beliefs are valued while their legal rights are not impinged. It is a growing movement in scholarly law that strives for a more comprehensive, humane, and psychologically optimal way of handling legal matters (Daicoff, 2006). Attorneys who serve torture survivors should consider these recommendations.

5. Limitations

One of the limitations of this study is that the analysis did not reflect how the researcher’s presence affected the participants’ narratives. Gender dynamics between the researcher, who is a woman, and the majority of torture survivors interviewed, who were men, were not included in the analysis of this article. Furthermore, most participants had some college or higher education, which may have been the reason for their captivity and torture as political activists and thinkers. This may have also influenced their willingness to participate in the study. Gender dynamics and educational status may have increased or decreased participants’ ability to disclose sensitive experiences and may have affected the richness of narratives. The narratives of torture survivors with less education and subsequently fewer resources to advocate for their release may not be adequately captured in this study. In addition, the study only included survivors of torture who had fled to Jordan, and thus is it limited to the specific and unique post-torture coping experiences in Jordan and cannot be generalized to other geographic locations where refugees have fled and might have had different experiences. Another

limitation is that the analysis did not consider the group’s interpretive process and the richness of their perspectives, given that most of the team members are Syrians (Wasser & Bresler, 1996). Thus, in addition to content and form, it is recommended that future studies address the co-construction of narratives in torture studies. Mixed methods analyses would yield a more comprehensive understanding of the phenomenon and its diverse impacts.

Finally, this study is limited by its small and heterogeneous sample size. The recruitment of participants was short because of the limited duration of the trip to Jordan, and the inability to conduct more than two interviews per day because of the geographic distribution of participants and the secondary traumatization involved (Figley, 1995). Despite these limitations, this study fills an important gap in the research into the personal and collective experiences of Syrian survivors of torture, and the impact of such extreme suffering on their health and psychosocial health, as well as on their families and loved ones. Their experiences are crucial for the international community to acknowledge as international crimes, particularly because the Syrian repressive apparatus continues to commit mass human rights violations against its civilians.

Acknowledgments

We are forever indebted to all survivors of torture who opened their homes, their hearts and trusted the researcher in sharing their remarkable, courageous and excruciating narrations and experiences. We would like to thank the Jordanian Women’s Union and the Bader Center for hosting some of the interviews under their roofs. We would also like to thank Huda Tahboub and Nihaya Abu Rayyan for their contribution in transcribing some of the interviews and to Samrah Ali for organizing the demographics.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

The study was funded by the Mack Center on Mental Health and Social Conflict, School of Social Welfare at the University of California Berkeley, under grant SEGAL awarded to Steven P. Segal. This study was also partially funded by a grant from the Al-Falah Program of the Center for Middle Eastern Studies, the University of California Berkeley, awarded to Niveen Rizkalla. Publication was made possible in part by support from the Berkeley Research Impact Initiative (BRII) sponsored by the UC Berkeley Library.

Authors’ contributions

NR conceptualized and designed the study, interviewed participants, edited transcripts, analyzed the

data, wrote, and edited the manuscript, revised the manuscript, and supervised the project. SA translated and transcribed interviews, analyzed the data, wrote the results section, prepared figure 1, and wrote the highlights, as well as edited the revised version of the manuscript. OB translated and transcribed interviews, analyzed the data, and edited the final draft of the manuscript. HM translated and transcribed interviews and edited the final draft of the manuscript. SS translated and transcribed interviews, analyzed the data, and edited the final draft of the manuscript. SPS conceptualized and designed the study, sponsored the project, supervised the project, and edited the final draft of the manuscript. All authors reviewed the manuscript and approved it.

Data availability statement

The datasets analyzed during the study are confidential and are not available to the public due to containing sensitive information that could impose risk to participants' lives if their privacy would have been compromised.

Ethics approval

The Committee for the Protection of Human Subjects at University of California Berkeley has approved this study with all its procedures, including a waiver for a written informed consent (CPHS, February 2014), as well as approved verbal informed consent upon participation, which was obtained from all participants. The study was performed in adherence with the relevant ethical guidelines and regulations of the Belmont Report (CPHS, February 2014; Reference ID: 2014-01-5921).

ORCID

Niveen Rizkalla  <http://orcid.org/0000-0002-8237-2881>
 Sarah Alsamman  <http://orcid.org/0000-0002-9865-041X>
 Oussama Bakr  <http://orcid.org/0000-0003-0832-802X>
 Hana Masud  <http://orcid.org/0000-0002-3691-4854>
 Salaam Sbini  <http://orcid.org/0000-0001-8323-2947>
 Steven P. Segal  <http://orcid.org/0000-0001-6204-6950>

References

- Abu Suhaiban, H., Grasser, L. R., & Javanbakht, A. (2019). Mental health of refugees and torture survivors: A critical review of prevalence, predictors, and integrated care. *International Journal of Environmental Research and Public Health*, 16(13), 2309. <https://doi.org/10.3390/ijerph16132309>
- Aloni, R., Crompton, L., Levin, Y., & Solomon, Z. (2018). The impact of captivity and posttraumatic stress disorder on cognitive performance among former prisoners of war: A longitudinal study. *Journal of Clinical Psychiatry*, 79(3), 17m11577. <https://doi.org/10.4088/JCP.17m11577>
- Amawi, N., Mollica, R. F., Lavelle, J., Osman, O., & Nasir, L. (2014). Overview of research on the mental health impact of violence in the Middle East in light of the Arab Spring. *The Journal of Nervous and Mental Disease*, 202(9), 625–629. <https://doi.org/10.1097/NMD.0000000000000174>
- Amris, K., Jones, L. E., & Williams, A. C. (2019). Pain from torture: Assessment and management. *Pain Reports*, 4(6), e794. <https://doi.org/10.1097/pr9.0000000000000794>
- Amris, K., & Williams, A. C. (2015). Managing chronic pain in survivors of torture. *Pain Management*, 5(1), 5–12. <https://doi.org/10.2217/pmt.14.50>
- Atari-Khan, R., Covington, A. H., Gerstein, L. H., al Herz, H., Varner, B. R., Brasfield, C., Shurigar, B., Hinnenkamp, S. F., Devia, M., Barrera, S., & Deogracias-Schleich, A. (2021). Concepts of resilience among trauma-exposed Syrian refugees. *The Counseling Psychologist*, 49(2), 233–268. <https://doi.org/10.1177/0011000020970522>
- Bager, L., Schultz Hansen, K., Jacques Andersen, C., & Wang, S. J. (2018). Does multidisciplinary rehabilitation of tortured refugees represent “value-for-money”? A follow-up of a Danish case-study. *BMC Health Services Research*, 18(365), 1–14. <https://doi.org/10.1186/s12913-018-3145-3>
- Barrocas, A. L., Hankin, B. L., Young, J. F., & Abela, J. R. (2012). Rates of nonsuicidal self-injury in youth: Age, sex, and behavioral methods in a community sample. *Pediatrics*, 130(1), 39–45. <https://doi.org/10.1542/peds.2011-2094>
- Bell, V., Robinson, B., Katona, C., Fett, A.-K., & Shergill, S. (2019). When trust is lost: The impact of interpersonal trauma on social interactions. *Psychological Medicine*, 49(6), 1041–1046. <https://doi.org/10.1017/s0033291718001800>
- Carinci, A. J., Mehta, P., & Christo, P. J. (2010). Chronic pain in torture victims. *Current Pain and Headache Reports*, 14(2), 73–79. <https://doi.org/10.1007/s11916-010-0101-2>
- Chase, S. E. (2005). Narrative inquiry: Multiple lenses, approaches, voices. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook of Qualitative Research* (3rd ed., pp. 651–679). Sage Publications.
- Clandinin, D. J., & Connelly, F. (2000). *Narrative inquiry: Experience and story in qualitative research*. Jossey-Bass.
- Cohen, I., Gal, T., & Enosh, G. (2023). Two roads converge: The interchange between the mental health and legal discourses in sexual assault trials. *Social & Legal Studies*, 32(3), 441–463. <https://doi.org/10.1177/09646639221117388>
- Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage Publications.
- Daicoff, S. S. (2006). Law as a healing profession: The comprehensive law movement. *Pepperdine Dispute Resolution Law Journal*, 6(1), 1–61. <https://ssrn.com/abstract=875449>
- De Fina, A. (2003). *Identity in narrative: A study of immigrant discourse* (Vol. 3). John Benjamins Publishing Company.
- Dibaj, I., Halvorsen, JØ, Kennair, L. E. O., & Stenmark, H. I. (2020). Painful memories: Challenges in trauma-focused therapy for torture survivors with PTSD and chronic pain—A narrative review. *Torture*, 30(2), 35–57. <https://doi.org/10.7146/torture.v30i2.119788>
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 1–20). Brunner/Mazel.
- Høyvik, A. C., Willumsen, T., Lie, B., & Hilden, P. K. (2021). The torture victim and the dentist: The social and material dynamics of trauma re-experiencing triggered by dental visits. *Journal on Rehabilitation of Torture Victims and Prevention of Torture*, 31(3), 70–83. <https://doi.org/10.7146/torture.v32i3.125290>

- Iacoviello, B. M., & Charney, D. S. (2014). Psychosocial facets of resilience: Implications for preventing post-trauma psychopathology, treating trauma survivors, and enhancing community resilience. *European Journal of Psychotraumatology*, 5(1), 23970, 1–10. <https://doi.org/10.3402/ejpt.v5.23970>
- Johnson, H., & Thompson, A. (2008). The development and maintenance of post-traumatic stress disorder (PTSD) in civilian adult survivors of war trauma and torture: A review. *Clinical Psychology Review*, 28(1), 36–47. <https://doi.org/10.1016/j.cpr.2007.01.017>
- Josselson, R. (2004). The hermeneutics of faith and the hermeneutics of suspicion. *Narrative Inquiry*, 14(1), 1–28. <https://doi.org/10.1075/ni.14.1.01jos>
- Kaur, G. (2017). Chronic pain in refugee torture survivors. *Journal of Global Health*, 7(2), e1003108, 1–14. <https://doi.org/10.7189/jogh.07.020303>
- Kaur, G., Weinberg, R., Milewski, A. R., Huynh, S., Mauer, E., Hemmings Jr. H. C., & Pryor, K. O. (2020). Chronic pain diagnosis in refugee torture survivors: A prospective, blinded diagnostic accuracy study. *PLOS Medicine*, 17(6), e1003108. <https://doi.org/10.1371/journal.pmed.1003108>
- Keshk, M., Harrison, R., Kizito, W., Psarra, C., Owiti, P., Timire, C., Camacho, M. M., De Maio, G., Safwat, H., Matboly, A., & Van den Bergh, R. (2021). Offering care for victims of torture among a migrant population in a transit country: A descriptive study in a dedicated clinic from January 2017 to June 2019. *International Health*, 13(2), 89–97. <https://doi.org/10.1093/inthealth/ihaa068>
- Khin, P. P., Burt, K., & Fondacaro, K. (2022). Identifying resilience-promoting factors for refugee survivors of torture. *Torture*, 32(3), 31–48. <https://doi.org/10.7146/torture.v32i3.128843>
- Kira, I. A. (2017). A critical outlook on torture definition, structure, dynamics, and interventions. *Peace and Conflict: Journal of Peace Psychology*, 23(3), 328–333. <https://doi.org/10.1037/pac0000243>
- Kira, I. A., Aljakoub, J., Al Ibraheem, B., & Shuwiekh, H. A. M. (2022). Are torture survivors more resilient and develop higher PTG, than nontortured refugees? The role of will to exist, live, and survive: A replication and extension. *Peace and Conflict: Journal of Peace Psychology*, 29(4), 420–425. <https://doi.org/10.1037/pac0000639>
- Kira, I. A., Shuwiekh, H., Al Ibrahim, B., & Aljakoub, J. (2021). The mental and physical health effects of torture: The role of identity salience as a pathway to posttraumatic growth and healing: The case of Syrian refugees and IDPs. *Psychology (savannah, Ga)*, 12(11), 1825–1847. <https://doi.org/10.4236/psych.2021.1211110>
- Lahav, Y., Price, N., Crompton, L., Laufer, A., & Solomon, Z. (2019). Sexual satisfaction in spouses of ex-POWs: The role of PTSD symptoms and self-differentiation. *Journal of Sex & Marital Therapy*, 45(8), 1–32. <https://doi.org/10.1080/0092623X.2019.1594478>
- Lahav, Y., Rodin, R., & Solomon, Z. (2015). Somatic complaints and attachment informer prisoners of war: A longitudinal study. *Psychiatry*, 78(4), 354–366. <https://doi.org/10.1080/00332747.2015.1061311>
- Lahav, Y., Stein, J. Y., & Solomon, Z. (2016). Keeping a healthy distance: Self-differentiation and perceived health among ex-prisoners-of-war's wives. *Journal of Psychosomatic Research*, 89, 61–68. <https://doi.org/10.1016/j.jpsychores.2016.08.008>
- Luci, M., & Di Rado, D. (2019). The special needs of victims of torture or serious violence: A qualitative research in EU. *Journal of Immigrant & Refugee Studies*, 18(4), 405–420. <https://doi.org/10.1080/15562948.2019.1679938>
- Lucius-Hoene, G., & Deppermann, A. (2000). Narrative identity empiricized: A dialogical and positioning approach to autobiographical research interviews. *Narrative Inquiry*, 10(1), 199–222. <https://doi.org/10.1075/ni.10.1.15luc>
- McCull, H., Higson-Smith, C., Gjerding, S., Omar, M. H., Rahman, B. A., Hamed, M., El Dawla, A. S., Fredericks, M., Paulsen, N., Shabalala, G., Low-Shang, C., Perez, F. V., Colin, L. S., Hernandez, A. D., Lavaire, E., Zuñiga, A. P. A., Calidonio, L., Martinez, C. L., Jamei, Y. A., & Awad, Z. (2010). Rehabilitation of torture survivors in five countries: Common themes and challenges. *International Journal of Mental Health Systems*, 4(16), 1–10. <https://doi.org/10.1186/1752-4458-4-16>
- Moisander, P. A., & Edston, E. (2003). Torture and its sequel—a comparison between victims from six countries. *Forensic Science International*, 137(2–3), 133–140. <https://doi.org/10.1016/j.forsciint.2003.07.008>
- Morina, N., Bryant, R. A., Doolan, E. L., Martin-Sölch, C., Plichta, M. M., Pfaltz, M. C., Schnyder, U., Schick, M., & Nickerson, A. (2018). The impact of enhancing perceived self-efficacy in torture survivors. *Depression and Anxiety*, 35(1), 58–64. <https://doi.org/10.1002/da.22684>
- Ostergaard, L. S., Wallach-kildemoes, H., Thøgersen, M. H., & Dragsted, U. B. (2020). Prevalence of torture and trauma history among immigrants in primary care in Denmark: Do general practitioners ask? *European Journal of Public Health*, 30(6), 1163–1168. <https://doi.org/10.1093/eurpub/ckaa138>
- Patel, N. (2019). Conceptualising the right to rehabilitation: A clinical perspective. *The International Journal of Human Rights*, 23(9), 1546–1568. <https://doi.org/10.1080/13642987.2019.1612373>
- Prip, K., & Persson, A. L. (2008). Clinical findings in men with chronic pain after falanga torture. *The Clinical Journal of Pain*, 24(2), 135–141. <https://doi.org/10.1097/AJP.0b013e31815aac36>
- Prip, K., Persson, A. L., & Sjölund, B. H. (2011). Self-reported activity in tortured refugees with long-term sequelae including pain and the impact of foot pain from falanga – a cross-sectional study. *Disability and Rehabilitation*, 33(7), 569–578. <https://doi.org/10.3109/09638288.2010.493597>
- Rees, S., Mohsin, M., Tay, A., Steel, Z., Tam, N., da Costa, Z., Soares, C., Tol, W., Eapen, V., Dadds, M., & Silove, D. (2018). Risk of perpetrating intimate partner violence amongst men exposed to torture in conflict-affected Timor-Leste. *Global Mental Health*, 5(e23), 1–13. <https://doi.org/10.1017/gmh.2018.16>
- Rizkalla, N. (2022). Women and mental health in the Middle East. In S. Joseph & Z. Zaatari (Eds.), *Routledge Handbook on Women in the Middle East* (1st ed., pp. 548–565). Routledge. <https://doi.org/10.4324/9781315165219>
- Rizkalla, N., Arafa, R., Mallat, N. K., Soudi, L., Adi, S., & Segal, S. P. (2020). Women in refuge: Syrian women voicing health sequelae due to war traumatic experiences and displacement challenges. *Journal of Psychosomatic Research*, 129, 109909. <https://doi.org/10.1016/j.jpsychores.2019.109909>
- Rizkalla, N., Bakr, O., Alsamman, S., Sbin, S., Masud, H., & Segal, S. P. (2022). The Syrian regime's apparatus for systemic torture: A qualitative narrative study of testimonies from survivors. *BMC Psychiatry*, 22(787), 1–19. <https://doi.org/10.1186/s12888-022-04425-w>
- Rizkalla, N., & Segal, S. P. (2018). Wellbeing and growth among Syrian refugees in Jordan. *Journal of Traumatic Stress*, 31(2), 213–222. <https://doi.org/10.1002/jts.22281>

- Rizkalla, N., & Segal, S. P. (2019a). War can harm intimacy: Consequences for refugees who escaped Syria. *Journal of Global Health*, 9(2), 2. <https://doi.org/10.7189/jogh.09.020407>
- Rizkalla, N., & Segal, S. P. (2019b). Trauma during humanitarian work: The effects on intimacy, wellbeing and PTSD-symptoms. *European Journal of Psychotraumatology*, 10(1), 1. <https://doi.org/10.1080/20008198.2019.1679065>
- Rizkalla, N., & Segal, S. P. (2020). Refugee trauma work: Effects on intimate relationships and vicarious posttraumatic growth. *Journal of Affective Disorders*, 276, 839–847. <https://doi.org/10.1016/j.jad.2020.07.054>
- Sanders, C. B., & Cuneo, C. J. (2010). Social reliability in qualitative team research. *Sociology*, 44(2), 325–343. <https://doi.org/10.1177/0038038509357194>
- Schick, M., Zumwald, A., Knopfli, B., Nickerson, A., Bryant, R. A., Schnyder, U., Muller, J., & Morina, N. (2016). Challenging future, challenging past: The relationship of social integration and psychological impairment in traumatized refugees. *European Journal of Psychotraumatology*, 7(1), 1–9. <https://doi.org/10.3402/ejpt.v7.28057>
- Schippert, A. C. S. P., Dahl-Michelsen, T., Grov, E. K., Sparboe-Nilsen, B., Silvola, J., & Bjørnnes, A. K. (2023a). Torture survivors' experiences of receiving surgical treatment indicating re-traumatization. *PLoS One*, 18(10), e0287994. <https://doi.org/10.1371/journal.pone.0287994>
- Schippert, A. C. S. P., Grov, E. K., Dahl-Michelsen, T., Silvola, J., Sparboe-Nilsen, B., Danielsen, S. O., Lie, I., & Bjørnnes, A. K. (2023b). Re-traumatization of torture survivors during treatment in somatic healthcare services: A mapping review and appraisal of literature presenting clinical guidelines and recommendations to prevent re-traumatization. *Social Science & Medicine*, 323(115775), 1–19. <https://doi.org/10.1016/j.socscimed.2023.115775>
- Schubert, C. C., & Punamäki, R. L. (2011). Mental health among torture survivors: Cultural background, refugee status and gender. *Nordic Journal of Psychiatry*, 65(3), 175–182. <https://doi.org/10.3109/08039488.2010.514943>
- Song, S. J., Subica, A., Kaplan, C., Tol, W., & De Jong, J. (2018). Predicting the mental health and functioning of torture survivors. *Journal of Nervous and Mental Disease*, 206(1), 33–39. <https://doi.org/10.1097/NMD.0000000000000678>
- Tamblyn, J. M., Calderon, A. J., Combs, S., & O'Brien, M. M. (2011). Patients from abroad becoming patients in everyday practice: Torture survivors in primary care. *Journal of Immigrant and Minority Health*, 13(4), 798–801. <https://doi.org/10.1007/s10903-010-9429-2>
- Taylor, B., Carswell, K., & Williams, A. C. (2013). The interaction of persistent pain and post-traumatic re-experiencing: A qualitative study in torture survivors. *Journal of Pain and Symptom Management*, 46(4), 546–555. <https://doi.org/10.1016/j.jpainsymman.2012.10.281>
- Tedeschi, R. G., & Calhoun, L. G. (1996). The Posttraumatic Growth Inventory: Measuring the positive legacy of trauma. *Journal of Traumatic Stress*, 9(3), 455–471. <https://doi.org/10.1002/jts.2490090305>
- Thomsen, A. B., Eriksen, J., & Smidt-Nielsen, K. (2000). Chronic pain in torture survivors. *Forensic Science International*, 108(3), 155–163. [https://doi.org/10.1016/S0379-0738\(99\)00209-1](https://doi.org/10.1016/S0379-0738(99)00209-1)
- Wang, S.-J., Haque, M. A., Masum, S.-U.-D., Biswas, S., & Modvig, J. (2009). Household exposure to violence and human rights violations in western Bangladesh (II): History of torture and other traumatic experience of violence and functional assessment of victims. *BMC International Health and Human Rights*, 9(31), 1–15. <https://doi.org/10.1186/1472-698X-9-31>
- Wang, S.-J., Rushiti, F., Sejdiu, X., Pacolli, S., Gashi, B., Salihu, F., & Modvig, J. (2012). Survivors of war in northern Kosovo (III): The role of anger and hatred in pain and PTSD and their interactive effects on career outcome, quality of sleep and suicide ideation. *Conflict and Health*, 6(4), 1–16. <https://doi.org/10.1186/1752-1505-6-4>
- Wasser, J. D., & Bresler, L. (1996). Working in the interpretive zone: Conceptualizing collaboration in qualitative research teams. *Educational Researcher*, 25(5), 5–15. <https://doi.org/10.3102/0013189X025005005>
- Weisleder, P., & Rublee, C. (2018). The neuropsychological consequences of armed conflicts and torture. *Current Neurology and Neuroscience Reports*, 18(3), 9. <https://doi.org/10.1007/s11910-018-0818-6>
- Wenzel, T., Griengl, H., Stompe, T., Mirzaei, S., & Kieffer, W. (2000). Psychological disorders in survivors of torture: Exhaustion, impairment and depression. *Psychopathology*, 33(6), 292–296. <https://doi.org/10.1159/000029160>
- Wexler, D. B. (1990). *Therapeutic Jurisprudence: The law as a therapeutic agent*. Carolina Academic Press.
- Williams, d. C. A. C., & Hughes, J. (2020). Improving the assessment and treatment of pain in torture survivors. *BJA Education*, 20(4), 133–138. <https://doi.org/10.1016/j.bjae.2019.12.003>
- Zerach, G. (2015). Secondary traumatization among Ex-POWs' adult children: The mediating role of differentiation of the self. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7(2), 187–194. <https://doi.org/10.1037/a0037006>