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Physiotherapy for torture survivors: Is there evidence of its utility in torture rehabilitation? - Part II

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Letter to the editor

Hunger: Deprivation and manipulation of food as a torture method. State of the art in research and ways forward

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Deprivation of food is one of, if not the oldest method of punishment. Hunger and famine are described in the Bible as a way of retribution when God was offended. There are accounts of the use of forced imposition of hunger or starvation in places of detention and concentration camps worldwide. Surprisingly, however, the quantity and quality of academic research on the subject is unusually low. (Rubin, 2019). It is neither mentioned as a torture method in source handbooks (i.e. Rejali, 2009) nor in the Istanbul Protocol, which mentions it marginally concerning conditions of detention without any other mention or guidance within its pages (UNHCR, 1999). In this Editorial, we would like to update the medical and psychological research on the impacts of starvation as a torture method and suggest some tentative conclusions and avenues for further research.

1. Definitions and conceptual map

1. **Hunger**. Refers to the *subjective sensation of wanting or needing food*. Hunger is an evolutionary adaptive signal essential for survival that directs attention towards food acquisition in a similar way that pain is a signal of bodily harm and a signal of threat (Al-Shawaf, 2016).
2. **Food Deprivation.** Provided that *hunger* is a subjective sensation, in human rights research sometimes is better to work with objective measures. *Food deprivation* is defined as a food intake below the dietary required minimum energy level. There are different ways to measure it, reviewed below. Food deprivation is often combined with *Food manipulation*, a term referred to the quality, aspect, taste or contamination of the food provided to an individual (DIGNITY, 2016).
3. **Starvation**. Refers to a deficiency in caloric intake severe enough to be below the level needed to maintain an organism's life. While the purpose of a reduction in food supply can be to temporarily debilitate the individual physically and psychologically, in starvation, the purpose is to produce unbearable pain and eventually, as a consequence, slow death.
4. **Malnutrition** is the specific effect of having a deficiency of one or more essential nutritional components (ie. thiamine deficit, iron deficiency producing anemia) without necessarily receiving an insufficient daily energy intake.

Objective measures of food deprivation.

Defining and measuring an individual's food needs is a challenge given variations in relation to gender, age, health status and level of physical activity. Based on reports by the World Health Organization (WHO) and the Food and Agriculture Organization of the

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United Nations[1], for a moderately active 70 kg individual (1.75 × BMR) between the ages of 30 and 60, the daily energy requirement (or approximate Total Energy Expenditure (TEE)) is 3000 kcal/day (44 kcal/kg/day) for men and 2500 kcal/ day (36 kcal/kg/day) for women. The recommended WHO baseline protein delivery to avoid starvation in humans is ~ 0.75 g/kg/day. (FAO & WHO, 2005).

Based on the Minnesota study (see below), Wischmeyer, (2017) has suggested that food-deprivation produces starvation when intake is below 30 kcal/kg/day and 0.9 g protein/kg/day. For an average 70 Kg person this is 2100 calories[2] and 36 gr. of proteins.

In monitoring visits to detention centers or in the context of analyzing the use of mass starvation as a war weapon, an alternative measure is to estimate the percentage of individuals with protein-energy malnutrition and, ideally, to perform a follow up after some months. For instance, a study of nutritional status in a women's prison in Anatinomora (Madagascar) found that the proportion of undernourished female prisoners was 38.4%, including those who were pregnant and lactating. Undernutrition was related to the intake of two meals a day instead of three ($p = 0.003$), insufficient energy intake ($p < 0.001$), incarceration duration of more than 10 months ($p < 0.001$), absence of family visits ($p = 0.013$) and lack of financial assistance from family ($p = 0.013$) (Ravaoarisoa et al., 2019).

An alternative and useful measure when the nutritional status cannot be assessed is **Food Insecurity**, usually defined as those households where living conditions cannot ensure daily food provision for all family members. The idea of food insecurity has also been applied to monitoring detention centers. For instance, in a country-wide study in Malawian prisons, 95% of inmates considered themselves food insecure (i.e. uncertain that they could get enough food the following day). 61% of the prisoners reported feelings of anxiety over availability of food. Approximately 22% of the prisoners stated they slept hungry at night, 12% reported staying a whole day and night without eating and 62% of the prisoners used, they themselves believed, shameful means of obtaining food, such as begging or stealing from other inmates (Moloko et al., 2017). There are excellent reviews and proposals of food insecurity measurements, from short scales to complex multidimensional measures (Coates et al., 2003; A. D. Jones et al., 2013; Leroy et al., 2015; Pérez-Escamilla & Segall-Corrêa, 2008).

Legal definition and jurisprudence

At an individual level, Rule 22 of The *Nelson Mandela Rule*s establishes the duty to provide '*food of nutritional value adequate for health and strength, of wholesome quality*'. The Principles and Best Practices on the Protection of Persons Deprived of Liberty in the Americas of the Inter-American Commission on Human Rights states (Principle XI) that: "*Persons deprived of liberty shall have the right to food in such a quantity, quality, and hygienic condition so as to ensure adequate and sufficient nutrition, with due consideration to their cultural and religious concerns, as well as to any special needs or diet determined by medical criteria. Such food shall be provided at regular intervals, and its suspension or restriction as a disciplinary measure shall be prohibited by law*" (ICHR, 2008). Neither definition contains clarity on what would be considered "adequate and sufficient nutrition".

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[1] http://www.fao.org/docrep/007/y5686e/y5686e00.htm#Contents

[2] The Minnesota study only included men, but lacking specific data, the value can be assumed for men and women.

It is beyond the scope of this medical review to analyze the legal precedents of food-deprivation as amounting to torture. Taking as a reference a recent comprehensive preparatory document for the Special Rapporteur Against Torture (IHRLC, 2018) it can be suggested that there is some, although limited legal precedence, notably in the jurisprudence of the Inter-American Court of Human Rights, for considering deprivation[3], and manipulation of food[4] as ill-treatment or torture, especially when combined with other methods (see footnote for details).

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[3] The review considers the following cases: Sendic v. Uruguay, ¶¶ 2.3, 2.4, 20, U.N. Doc. CCPR/C/14/D/63/1979 (Oct. 20, 1981) (holding that subjecting the victim to a "lack of food" while in detention was, in addition to other factors, a form of torture and ill-treatment); Polay Campos v. Peru, ¶¶ 2.1, 8.7, U.N. Doc. CCPR/C/61/D/577/1994 (Nov. 6, 1997) (noting while the victim was detained, "the food [was] deficient" and that this contributed to a finding of torture and ill-treatment); Danilo Dimitrijevic v. Serbia and Montenegro, ¶¶ 2.2, 7.1, U.N. Doc. CAT/C/35/D/172/2000 (Nov. 16, 2005) (finding that the victim was "denied food and water" and that this omission was found, along with other factors, to constitute torture; Miguel Castro Castro Prison, No. 160, ¶¶ 37, 44, 103 (Nov. 25, 2006) (finding that inmates "did not receive food [or] . . . water" during an attack on the prison where they were detained, and that this contributed to a finding of torture); Institute for Human Rights and Development in Africa v. Angola, Communication 292/04, Afr. Comm'n H.P.R., ¶¶ 51, 53 (May 22, 2008) (holding that as "food was not regularly provided" to victims in detention, and was "insufficient," this contributed to a finding of torture); Prosecutor v. Popovic, Case No. IT-05-88-T, Judgment, ¶ 844 (Int'l Crim. Trib. for the Former Yugoslavia June 10, 2010) (finding that victims "were detained in intolerable conditions of overcrowded facilities with no food" and that this contributed to a finding of ill-treatment); Abdel Hadi, Ali Radi & Others v. Republic of Sudan, Communication 368/09, Afr. Comm'n H.P.R., ¶ 74 (Nov. 5, 2013) (holding that the general conditions of detention, which included the deprivation of food, constituted ill- treatment); Franck Kitenge Baruani v. Democratic Republic of Congo, ¶ 2.4, U.N. Doc CCPR/C/110/D/1890/2009 (Apr. 23, 2014) (holding that the deprivation of "food and water" contributed to a finding of torture and ill-treatment); Abdulrahman Kabura v. Burundi, ¶ 7.8, U.N. Doc. CAT/C/59/D/549/2013 (Nov. 11, 2016) (noting that the victim was denied "water . . . [and] food," which contributed to a finding of ill-treatment). (IHRLC, 2018)

[4] According to the same review, providing food which was in poor condition or contained inedible elements, like faeces, urine or dead animals, as amounting to ill-treatment or torture, in the following cases: Cariboni v. Uruguay, ¶ 4, U.N. Doc. CCPR/C/31/D/161/1983 (Oct. 27, 1987), Juvenile Reeducation Institute v. Paraguay, Preliminary Objections, Merits, Reparations and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 112, ¶ 16 (Sept. 2, 2004) Miguel Castro Castro Prison v. Peru, Merits, Reparations, and Costs, Judgment, Inter-Am. Ct. H.R. (ser. C) No. 160, ¶ 37 (Nov. 25, 2006), Déogratias Niyonzima v. Burundi, ¶ 2.7, U.N. Doc. CAT/C/53/D/514/2012 (Nov. 21, 2014), Muteba v. Zaire, ¶¶ 2.1, 8.2, 10.2, U.N. Doc. CCPR/C/22/D/124/1982 (July 24, 1984), (noting that outside food also needed to be brought by the victim's family in response to the provision of "insufficient" food, and the "withholding" of food while in detention, which contributed to a finding of torture and ill-treatment) (IHRLC, 2018). Also in some instances, the treatment amounted to torture by the manner that the food was provided (Cariboni v. Uruguay, ¶ 4, U.N. Doc. CCPR/C/31/D/161/1983 (Oct. 27, 1987) (having to eat with the fingers), Giri v. Nepal, ¶ 2.4, U.N. Doc. CCPR/C/101/D/1761/2008 (Apr. 27, 2011) (eating blindfolded), Istratii and Others v. Moldova, Eur. Ct. H.R., App. No. 8721/05, 8705/05, 8742/05, ¶ 62 (2007) (noting that "all detainees had to eat standing up" because there were no chairs in their cells, although the decisional body did not clarify whether this factored into their finding of torture and ill-treatment), Prosecutor v. Kvocka, Case No. IT-98-30/1-T, Judgment, ¶ 64 (Int'l Crim. Trib. for the Former Yugoslavia Nov. 2, 2001). (Only having 3 minutes to eat and being beaten afterwards).

At a collective level, Conley & de Waal (2019) advocate the term **mass starvation** and **starvation crimes** when famine is intentionally produced through actions that impede the capacity of a targeted country or community to access the minimum food requirements to sustain life. They suggest nine purposes: (i) extermination or genocide; (ii) control through weakening a population; (iii) gaining territorial control; (iv) flushing out a population; (v) punishment; (vi) material extraction or theft; (vii) extreme exploitation; (viii) war provisioning; and (ix) comprehensive societal transformation.

For the interested reader, especially thought-provoking are the historical works on the use of starvation in World War -II (Gerhard, 2015) and post-World War II (Autumn, 2009), Kampuchea / Cambodia (DeFalco, 2014; Tyner & Rice, 2015), Ireland (Nally, 2006), Armenia (Peterson, 2004) and Darfur (De Waal, 2005), as well as the ongoing systematic use of hunger and starvation as torture and method of war in Yemen (Graham, 2020), Syria (Amnesty International, 2016; GRCI, 2019), Libya (United Nations High Commissioner, 2018), Turkmenistan and other former Soviet republics (Sharipzhan, 2015) among many other contemporary contexts.

De Waal and Conley have extensively reviewed accountability issues regarding mass starvation in a seminal paper (Global Rights Compliance, 2019) that follows the elements of the definition of torture as applied to a collective situation. They specifically review how to probe intentionality, purpose and lawfulness. Especially useful is the 41-page annex that includes analysis of starvation in commissions, inquiries and fact-finding missions, courts and tribunals around the world. There has been enormous progress in the definition of the crime of starvation especially after its inclusion in the Rome Statute of the International Criminal Court, although accountability and prosecutions of perpetrators remain a complex issue (Akande & Gillard, 2019; D'Alessandra & Gillett, 2019; Hutter, 2019; Marcus, 2003; Sheldon, 2012; Ventura, 2019; Wayne Jordash et al., 2019).

Two situations that deserve separate analysis. Taking into account all the above, this medical and psychiatric review will be divided according two different phenomena: Food Deprivation and Manipulation and Starvation and Famine (see table 1). Although both situations can ultimately represent a danger to life, the medical and psychological processes and consequences are entirely different.

Table 1. Conceptual domains

1. **Food deprivation and manipulation.** Short-term or partial restrictions in food quantity, including food insecurity, or food of low quality or which is provided in a denigrating manner.
2. **Starvation and famine.** Prolonged and sustained restriction in the access to food that causes undernutrition and, ultimately, compromises life.

We aim to answer the following questions: (a) Is it possible to operationally define food deprivation within the study of the methods of ill-treatment or torture? (b) What is the medical and psychological evidence that exists on the severity of the suffering and the sequels of Food deprivation and manipulation and Starvation and famine? (c) Are there medical or psychological criteria that may be relevant to the legal world regarding the consideration of these facts as amounting to torture?

Setting the baseline: psychophysiology of hunger emotions and the feeding circuit

There is a homeostatic circuit that controls feeding through sets of neurons in the hypothalamus that segregate two specific hunger hormones: *ghrelin*, which signals energy scarcity and drives towards food intake and *leptin*, which signals energy availability and inhibits food-seeking behaviour. Both add to the effects of *insulin* in regulating sensations of hunger in humans. The level of these substances depends on on internal chemoreceptors (i.e. glucose level) and environmental stimulus. Furthermore, external cues may be more important than internal signals in arousing feelings of hunger (Chen & Knight, 2016).

There is evidence of individual differences in the perception of gastric signals of fullness or emptiness. The reason is unknown, although there seems to be coincidence with human variability in perceiving cardiac signals, pointing to a general element of differences in the individual perception of vagal signals (Chen & Knight, 2016).

How we become aware of and feel hunger is still largely unknown. Complex sensory information from the bodily organs (e.g., bowel, bladder, stomach, heart), the skin senses (e.g., cool, warm, touch, itch), internal chemoreceptors (e.g. oxygen concentration, hunger hormones), and muscles and tendons (e.g., proprioceptive feedback, fatigue) is transmitted via spinothalamic and vagal afferents to the anterior insular, somatosensory and orbitofrontal cortices of the brain where it is integrated (Stevenson et al., 2015). This process is mediated by awareness and consciousness that attach meaning to the afferent sensations, including emotions and feelings linked to that meaning (Quadt et al., 2018). These same cortical centres support the integration of all these inputs into drive states (e.g., pain, sex, hunger, thirst) and to associated behaviours (Harshaw, 2014). So, there are strong neural interconnections between physical needs, meanings, emotions and drives. In this sense, the idea of "gut decisions" or "gut feelings" might have more meaning than it may seem.

2. Short-term deprivation of food: physical and psychological effects

Almost all existing academic research is based on experimental studies with students, completed in reward for academic credit or small financial incentives where the motivational and attitudinal elements are far from what is to be found in natural settings where torture occurs. The results must, therefore, be analysed with caution. Here, we will specifically review the impact of food deprivation on emotions, cognitive functions, moral judgment and altruistic and prosocial behavior.

Hunger and emotions. There is an assumption that hunger evokes negative emotions (rage, anger, irritability, sadness). Nevertheless, short-term laboratory studies do not seem to confirm this idea. There is only indirect and inconsistent experimental evidence suggesting that low glucose levels increase impulsivity, aggression and leads to unstable mood (Anderberg et al., 2016; Benton, 2002; Bushman et al., 2014; DeWall et al., 2011; Gailliot, 2013; Hermanns et al., 2007).

The idea behind this assumption is the well-known - even in folk culture - *ego-depletion* theory (Baumeister & Vohs, 2007) that accepts that a human being has a limited amount of physical and mental energy. Self-regulation and self-control, therefore, depend on having sufficient "ego energy". Glucose deficit due to food-deprivation would provoke *ego depletion* and allow negative emotions to appear and render the person more vulnerable to emotional cues. This has been linked to false confessions in the interrogation of suspects (Davis

& Leo, 2012). Recent research suggests that the theory may be too "mechanical" and not give sufficient consideration to other factors, and specially that high motivation can overcome the effect of glucose depletion (Baumeister & Vohs, 2007) suggesting that short-term hunger should be better studied as a context-dependent emotion.

In a similar vein, in a series of experiments with volunteers, MacCormack & Lindquist (2019) showed that subjects who felt hunger reacted with negative emotions to a neutral stimulus only when they were put in a context that they interpreted as unfavorable. Only then, the person reacted with irritability or anger. Furthermore, this effect disappeared when the volunteers were asked to express the emotions they were feeling, including hunger. In most subjects, this led to self-control. This is what probably reflects the popularly-coined expression "hangry", indicating feelings of bad temper or irritability as a result of hunger. When the person is made aware, he can easily regain control and manage the emotion.

A particularly relevant negative emotion is disgust towards inedible or unpalatable food. Laboratory research with volunteers has shown that disgust was significantly reduced in subjects who had been food-deprived for 15 hours and that this attenuation occurred automatically. In other words, subjects found food palatable that they previously saw as disgusting even if they were unaware of their previous reaction (Hoefling et al., 2009).

Cognitive functions. Laboratory studies show that five hours of fasting significantly increases distraction (mind-wandering behaviour) and thinking in actions in the immediate future related to food-relevant stimuli, interfering with normal cognitive function (Gidlöf et al., 2020; Rummel & Nied, 2017). This effect seems to increase in obese subjects (Vicario et al., 2019). In a similar vein, nine hours of food restriction enhances memory for food items but not for non-food items (Montagrin et al., 2019).

When turning to non-food-related cognitive functions, the experimental evidence is inconclusive. In a review of ten studies, Benau et al., (2014) found that in seven of these, short-term fasting did not affect performance in any cognitive task, while in the remaining three, there was a low to moderate impairment in psychomotor speed and reaction times in executive functions including problem-solving and decision-making. Short- and long-term memory seemed unaffected in all experiments (Benau et al., 2014). In summary, research *with volunteers in lab conditions* shows that food deprivation increases attention and memory related to food cues, but not to other elements and it does not support the idea that short-term food-deprivation produces a decline in cognitive functions per se.

Taking decisions. Initial experimental data suggests that during short-term food-deprivation people tend to be less rational and are guided by intuitive decisions, perhaps due to the overall feeling of tiredness or to the need to save cognitive resources (Brown et al., 2020). Also, some very preliminary evidence suggests that hungry individuals tend to take greater risk and do not assess dangers properly (Vicario et al., 2019). No data on naturalistic settings is available.

Moral judgment and punishment. In two laboratory studies with students deprived of a mealtime, subjective hunger was associated with a more lenient view of moral violations in different ethical dilemmas (Vicario et al., 2018) and with more lenient punishments for transgressors (Kerry et al., 2019). Hungry individuals seem to be less strict in judging moral contexts, which might be linked to an overall element of fatigue. This can potentially have implications for explaining wrong decisions in interrogations in the context of hunger.

Social attitudes and short-term food deprivation. From the point of view of evolutionary psychology, in early infancy human beings seem prone to share food. 19-month old infants repeatedly and spontaneously transferred high-value, nutritious natural food to a stranger as a way of exchange and interaction, even after a feeding delay (Barragan et al., 2020). But this changes with age. Hungry 4-9-year-old children were less likely to share overall, but particularly when sharing food-relevant resources. Despite that, children still expected that others behaved to the contrary and shared their food (Huppert et al., 2020).

Anthropological data suggests that in cultures where families place value on being harmonious and empathic toward others, pay attention to reciprocity rules, and childrearing practices support the expression of altruistic behaviour, then food-sharing is the norm. In individualistic societies, food-sharing and cooperative skills become less relevant in family education patterns and must be reinforced at school (Barragan et al., 2020). The results strongly suggest that hunger per se cannot explain altruistic food-sharing behaviour in human adults and children and cultural and educational elements are essential.

In adults, there is a robust popular conception, supported by various surveys, that hunger undermines prosocial attitudes and human beings become selfish and survival-oriented. But the data shows conflicting results. Short-term food-deprivation seems to increase prosocial behaviour (for instance, hungry people are more supportive of welfare programs), but only if it does not mean parting with their resources (i.e. giving money to a charity). Hungry individuals support more egalitarian positions when these are theoretical questions but, in fact, they are less prone to share what they have (Aarøe & Petersen, 2013). In the most comprehensive set of laboratory game studies with volunteers, in overall, acute hunger did not affect pro-sociality, neither in cooperative nor competitive games (Häusser et al., 2019). Again, these are lab studies: the games did not have any emotional nor practical implications for the participant, much less that there was competition for survival or any risk to life.

Psychosocial background and early experiences. Data provide strong support to the idea that experiences of poverty and lack of resources frame the emotions and behaviours associated with food-deprivation. In a series of experiments, Allen & Nettle (2019) showed that adults with a personal history of childhood socioeconomic deprivation reacted with more impulsivity and emotionality in a situation of hunger probably as it evoked past experiences and attached negative explanations and meanings to it.

The symbolic value of food. All the above suggest that beyond caloric intake, in any given context, food has a symbolic value that is also extremely relevant to assess. By way of example, in in-depth qualitative interviews with 30 female inmates at a correctional facility in the US, food was found to be a significant determinant of the subjective impression of punishment carried out by the institution (Smoyer & Lopes, 2017). Although sufficient in quantity, the variety and presentation, the way the food was cooked and served, and being rushed and watched while eating were seen as dehumanising experiences of symbolic punishment that were deeply humiliating. Food was far more than a means for survival and instead was seen as a mechanism of degradation, surreptitiously showing control on all aspects of their life.

In overall, short-term deprivation of food goes beyond simply cutting the supplies of energy to the body; it is an attack on the self and as such, must be studied when documenting ill-treatment and torture.

Combining short-term food deprivation with other torture methods. Finally, the effects of starvation must be studied as interrelated to other concurrent elements in the creation of torturing environments. There is not much research on how these different mechanisms can interact. However, data shows, for instance, that (a) in animal studies, hunger has complex interactions with *fear* and *pain* (Misanin & Campbell, 1969; Ponomarenk & Korotkova, 2018; Verma et al., 2016). Both Fear and Pain increase when the person is hungry and food is not available. However, both Fear and Pain are inhibited and superseded by Hunger when food is available. (b) In humans, *hypoxia* (linked to forced exercising or dry and wet asphyxia) reduces hunger and energy intake, potentiating a short-term debilitating effect of both methods (Matu et al., 2018). The effect seems to be mediated by decreased circulating concentrations of acylated ghrelin. (c) Total food restriction increases *sleepiness* in night shift-workers, while partial food restriction decreases it (Gupta et al., 2019). This seems to be linked to cortisol and glucose levels. (d) There is a mutually exponentially potentiating effect of 10-hours of fasting in combination with total *social isolation* (Tomova et al., 2020). The explanation is unclear, but the authors found fMRI images suggesting common neural pathways that reinforce craving for social connectedness and food.

All these elements are only preliminary data suggesting the complex interactions and consequences of short-term food deprivation and hunger in the creation of torturing environments.

3. Prolonged deprivation: starvation and famine.

Testimonials of survivors. It would be impossible to review the many testimonials available in the literature where prolonged food deprivation and experiences of starvation are described in detail. Prolonged starvation can be excruciating until the point of becoming an unbearable source of pain (Nath, 1998), the obsession with food dominates all thoughts (Levi, 1989; Nath, 1998), and people talk, imagine and dream of food (Frankl, 1964; Semprun, 1972) with a drive even to the point of risking one's life for a small piece of bread (Antelme, 1971; Wiesel, 1983). As Jean Amery (1966) summarises: "*I was my body in hunger and nothing else*".

In a mostly speculative paper, Young (2014) considers that starvation was the cornerstone of the Holocaust system and the main reason to explain the allegedly defeating behaviours of survivors. He links physical and cognitive deterioration to psychological breakdown including apathy and loss of hope.

Anthropological studies. In her analysis, *The Madness of Hunger* ("Delirio de fome" in Portuguese), the anthropologist Nancy Scheper-Hughes (1988) studies *Nervos* ("Nervousness"). She considers *Nervos* an example of the many folk diagnoses, studied as psychiatric syndromes, that can be found among poor, marginalised, ethnic minorities in North and South America, Europe (primarily the Mediterranean) and the Middle East. In her study among Brazilian sugar cane cutters and their families, she describes extensive communities chronically malnourished, in a generally weakened and debilitated state, that become "mad" when, due to agricultural cycles, they have even fewer food supplies. She describes a victim shaky, dizzy and disoriented, emotionally labile, sad and depressed, without an appetite, and often alternating between periods of passive withdrawal and unpredictable outbursts of rage in what she considers that represents a psychiatrization of chronic cycles of starvation. Similar reasoning can likely be applied to such diverse "cultural-bound" syndromes as *Susto* (Mexico), *Mancharisqa* (Peru), *Wendigo* (Inuit) *or Nubila* (Central Africa).

Ghetto studies and The Minnesota Experiment. During the Holocaust, Jewish doctors monitored and recorded the starvation process in the Ghetto of Warsaw and the process of starving to death in Dachau in adult and children. None of the authors survived. Their compelling observations were published after the war (Magowska, 2020).

In the *Minnesota Starvation Experiment,* conducted during World War II (Keys et al., 1950), thirty-six volunteers were subjected to a regime of semi-starvation in which most participants lost in as much as a 30% of body mass, with severe medical and psychological consequences including anaemia, chronic fatigue and apathy, extreme weakness, irritability, neurological deficits, and lower extremity oedema (Guetzkow & Bowman, 2012; Kalm & Semba, 2005). The participants experienced dizziness, extreme tiredness, muscle soreness, hair loss, reduced coordination, and ringing in their ears (Keys et al., 1950). As one of the participants explained, years later: "*Food became the one central and only thing really in one's life*". Pre-and post-starvation personality tests showed a temporary and reversible increase in the Minnesota Multiphasic Personality Inventory (MMPI) scales of Depression, Hypochondriasis and Hysteria. The recovery period took between 8 months and two years with no long-term consequences in follow-up studies (Eckert et al., 2018).

Important as it is, the study is, however, not representative of what would happen in a torturing environment. The volunteers were highly motivated conscientious objectors. All of them had academic degrees and an average IQ of 130. Furthermore, as one of the participants said: "*The difference between us and the people we were trying to serve: they probably had less food than we did. We were starving under the best possible medical conditions and we knew the exact day on which our torture was going to end. None of that was true of people in Belgium, the Netherlands, or whatever*." (Keys et al., 1950).

Animal studies replicating Holocaust conditions. There was a plethora of animal studies in the following decades (table 2). Most of them would be ethically unacceptable nowadays. Table 2 also shows a summary of contemporary studies with animals.

Body adaptation and medical and psychological consequences of chronic food-deprivation. During the initial hours of acute starvation, there is a carbohydrate depletion that affects muscle and brain function in particular, both highly dependent on glucose, producing fatigue and mild cognitive effects. After 24 hours the body begins to resort to body proteins and fat to produce glucose through glycogenesis procedures and the use of fat acids (ketosis metabolism). There is a down regulation to save resources and after two weeks brain glucose consumptions falls to 50%. Although there is significant variability among individuals and contexts (high versus low levels of stress associated to hunger), this compensatory mechanism allows for somewhat decreased but normal functioning during this initial period of 10 to 15 days.

After that period, fat reserves are not enough to keep normal functioning and the body resorts to further visceral and endocrine adaptations to diminish calorie needs (i.e. decrease in thermal regulation, lower blood pressure, lower cardiac frequency, slower kidney functioning) and there is a progressive increase in the consumption of proteins. This

Table 2. Selection of animal studies on starvation

- When albino rats were starved, the drive for food increased steadily from the first day until a point when their search activity decreased abruptly. This *breaking point* was extremely variable, in a range from the 4th to the 15th day with no indication of which variables could predict it (Heron & Skinner, 1937).
- Once the *breaking point* was reached, it was almost impossible to recover the animal. It would always die whatever actions were taken to heal it (Heron & Skinner, 1937).
- When albino rats were starved collectively, hunger did not increase hostile or aggressive attitudes among them. There was one lead rat –not necessarily always the same one- that guided the others towards food. At the end of the experiment, all rats had had a similar amount of food (Weiss et al., 2017).
- Feelings of hunger or drive for food was difficult to condition (for instance, to a light or a sound), contrary to what was expected (Cravens & Renner, 1969).
- Hunger was determined by both bodily weight loss and feeding schedule, with more hunger elicited by irregular feeding schemas (Ezinga & Becker, 1970).
- Hunger elicited an initial phase of *anxiety symptoms* in albino rats, that latterly evolved to depressive symptoms, eventually leading to apathy and lethargy.
- When subjected to electric shocks, hunger did not change the capability to detect and respond to the shocks and develop avoidance behaviours. Starvation did not diminish neither reactivity to pain nor intents to scape it (Misanin & Campbell, 1969).
- Selection of relevant contemporary studies
- In albino rats, hunger and fear interact. When exposed to a threatening situation, hunger diminishes the acquisition of fear. Once acquired, hunger increases the rate at which that fear is extinguished. In other words, hunger seems to decrease feelings of fear (Verma et al., 2016)
- There is an interaction between hunger and pain. When either is sufficiently severe, pain inhibits hunger and vice versa (Ponomarenk & Korotkova, 2018).
- Following the ethological principle that animals should always have one single central motivational drive at each time that over supersedes all others, when food is available, Hunger is the first drive in a hierarchical position. It is able to suppress competing motivational systems, such as thirst, anxiety-related behaviour, innate fear, and social interaction (Burnett et al. 2016)

implies a deterioration in muscle mass and in the production of new cells, including blood cells, leading to anaemia and lymphocyte depletion (see table 3). There is also an overall decrease in endocrine functioning, including hypothyroidism symptoms and amenorrhea. Vitamins decrease sequentially. Thiamine (Vitamin B1) after two weeks, Vitamins C and D after 4-5 months and Vitamins A and B12 after 12 months. The deficit of thiamine, the most dangerous consequence of chronic food deprivation, produces potentially irreversible damage in the cardiovascular and neurological systems, with ataxia and permanent impairment of memory (Wernicke's encephalopathy).

If still prolonged in time, extreme starvation will then lead to lethargy, neurological irritability, fatal oedema and death in an estimated three to four months. This terminal stage corresponds to what survivors of the Holocaust labelled as the "Muselmann": human beings that, through a combination of starvation and the oppressive conditions of captivity had lost all identity and consciousness, who were apathetic and acting without consideration for their actions – virtually waiting for death:

"*Their life is short, but their number is endless: they, the Muselmanner, the drowned form the backbone of the camp, an anonymous mass, continually renewed and always identical, of non-men who march and labour in silence, the divine spark dead within them, already too empty to really suffer. One hesitates to call them living: one hesi-*

Table 3. Physical consequences of chronic deprivation of food - starvation

	Impacts	In practice
Cardiovascular	Short-term - Bradycardia, Hypotension Long -term - Arrhythmias	Fatigue, palpitations, dizziness, sudden death[1]
Renal	Mild pitting oedema Electrolyte abnormalities (Hypo-phosphataemia, hypo-magnesaemia, hypo-calcaemia) Renal calculi Renal failure	Fatigue and weakness Progressive oedema Memory and concentration
Skeletal	Osteoporosis Myopathies	Pathological fractures Weakness
Endocrine	Hypothyroidism Low gonadal hormones High cortisol Hypercholesterolemia Thiamine deficit – Wernicke-Korsakoff syndrome	Cold intolerance Weakness Amenorrhea Loss of libido Irreversible memory and motor damage
Haematological	Pancytopenia: Anemia / Leukopenia / Thrombocytopenia	Weakness Susceptibility to infections Abnormal fever response Difficulties in healing wounds Bleeding
Gastrointestinal	Dysphagia Aspiration pneumonia Slow movements Liver dysfunction - Elevation in transaminases	Difficulties in swallowing Constipation Nausea after ingestion Death due to aspiration of food
Neurological	Brain atrophy Peripheral neuropathies Seizures due to glucose deficit	State of confusion Memory, Attention, Concentration Emotional instability
Dermatological	Lanugo Alopecia	Fragile hair and nails / Losing hair Dry skin that can fissure and bleed Pruritus.
Eyes	Lagophthalmos	Chronic irritation of the cornea

[1] Sudden cardiac death is the main cause of death after suicide in chronic starvation
Sources: Personal elaboration from Jones et al., (2012); Mehler & Brown, (2015); Phillips, (1994); Westmoreland et al., (2016)

tates to call their death death, in the face of which they have no fear, as they are too tired to understand…" (Primo Levi, If This Is a Man)

4. Summary, conclusions and proposals.

1. **Measuring hunger and food deprivation.**
   None of the different international standards for the treatment of prisoners establishes criteria for deciding when a population is being starved. They adhere to the criteria of the person receiving *food in such a quantity, quality, and hygienic condition so as to ensure adequate and sufficient nutrition.* This criteria can be problematic, as lack of enough food will only be detected when there is already severe and detectable malnutrition. Based on UN bodies recommendations, the minimum nutritional requirements for a healthy adult with low activity level can be estimated around 3000 kcal/day (44 kcal/kg/day) for men and 2500 kcal/ day (36 kcal/kg/day) for women. Any food supply under 2000 Kcal/day (30 Kcal/Kg/day) should be considered as starvation (Wischmeyer, 2017). Al alternative for monitoring visits is analyzing Food security, for which there are different measures available in the literature.

2. **Short-term food-deprivation and manipulation as a torture method**.
   a. Hunger is a subjective sensation of wanting and needing food. Context, purpose, motivation and meaning are essential for understanding the impact of short-term food-deprivation. Food manipulation and even mild food deprivation in caloric terms, when used as a form of dehumanisation, humiliation and denigration of the detainee may be a powerful method to produce severe suffering and break identity.
   b. It is especially relevant to assess the combination of short-term deprivation and manipulation of food with other methods as part of a torturing environment, with preliminary evidences showing an interaction with fear, sleep deprivation, hypoxia and pain producing methods including exhaustion exercises. It is also relevant to explore actions that foster forced absorption in hunger feelings[5].
   c. A change in an interoceptive state – such as hunger – has implications, through neural connections, with affective and cognitive functions. This has potential implications in the susceptibility to cognitive and emotional manipulation techniques.
   d. Specific physical and psychological impacts must be assessed on a case by case basis taking into account specific vulnerability criteria of each victim including age, gender, past experiences of deprivation or trauma, physical state and psychological status.

3. **Prolonged starvation and famine as a torture method.**
   a. In chronic food-deprivation, the human body may adapt and resorts to systems of downward regulation during the first two weeks. After that

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[5] The Kubark Manual (CIA, 1963) defined *forced absorption* as the practice of preventing distraction from the pain of hunger; from escaping into mental disconnect, thus making hunger one of the central elements of the experience of the detainee to create cognitive and emotional tension and break the self.

period, severe consequences affecting all organs occur, with thiamine deficit as the earliest and most dangerous condition. This is associated with cognitive, emotional and personality changes leading to a break *in almost all human beings*. The medical and psychological effects of chronic starvation are critical and produce *severe suffering*.

b. The research reviewed suggests, so far, that the limit between short-term and prolonged food deprivation is two weeks. In other words, while short-term food deprivation (less than two weeks) might amount to torture, especially when combined with other methods and conditions, *prolonged food deprivation (established as less than 2000 calories/day for more than two weeks) is a life threatening condition that produces severe suffering in almost all human beings and that should, in most if not all cases, at least from a medical point of view, amount to torture*. There is a need for more interdisciplinary research between medical and psychological experts and legal professionals. The seven proposals aim to help in this direction.

In this issue

We include the second part of the Special Section on *Physiotherapy for Torture Survivors*. Laura Pizer Gueron and MaryAnn de Ruiter present the results of a survey conducted among professionals worldwide regarding the availability and use of physiotherapy services with torture survivors. The same team presents the development and gives initial assessment data of the Group physiotherapy model with torture survivors that has been developed by the Center for Victims of Torture in recent years. Anne-Mette Karrer et alt present an evaluation of the cultural acceptability and feasibility of a School Pain Treatment programme for populations affected by trauma in Arab countries, showing its usefulness in changing traditional practices towards new contemporary models with an integrative perspective. Finally Marie Nordheim Alme et alt describe the PREP programme, an international experience of consensus and collaboration in training processes for physiotherapists working with torture victims. Overall, the two volumes of the Special Section (issues 2020-2 and 2020-3) show how physiotherapy is evolving and the challenges ahead. However, they also confirm the lack of enough evidence-based support for Physiotherapy interventions and especially the lack of proper research related to better profiling target populations and integration with other disciplines.

Within the regular articles, Marta Guarch presents worrying data on the prevalence of situations of ill-treatment or torture of asylum seekers arriving to Serbia. Their findings indicate that most refugees have suffered from situations of ill-treatment on European soil. Moa Nyamwathi Lonning et alt present a nation-wide study on public rehabilitation systems for torture victims in Norway. The results suggest the absence of a common global policy and shortcomings in the planning of services that would require urgent action. Finally, Maria-Angeliki Psyrraki et alt present a study on the narratives of rehabilitation and the importance of mutual support in the Congolese refugee population in Athens. This work is co-authored by Gianfranco di Maio, who unfortunately passed away recently. A person who has been linked for more than 15 years to the work with torture survivors and who left a deep impression for his commitment and humanity.

All in all, an important group of studies to close a year marked by the COVID pandemic as an element of distortion. We are confident that in 2021 there will be new challenges and we will strive to keep on being the Journal of reference in the field of prevention and rehabilitation of torture victims if you, our authors and readers, decide so.

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International survey of the utilisation of physiotherapy in treatment centers for survivors of torture

Laura Pizer Gueron, LPG[1] and MaryAnn de Ruiter, MR[2]

Key points of interest

- Survivors of torture at nearly 1/3 of responding treatment centers do not have access to physiotherapy, either on-site or externally
- Lack of funds/resources and shortage of physiotherapy personnel were perceived as being the biggest challenges limiting access by clients to physiotherapy

Abstract

Introduction: Literature about treatment of survivors of torture tends to focus on counseling and primary medical care. There are fewer articles about the utilisation of physiotherapy (PS) at treatment centers for survivors of torture and other forms of trauma.

Methods: A survey about utilisation of PS at treatment centers for survivors (n = 87).

Results: Approximately 30% of centers report that their patients have no access to PS, one third having physiotherapy on staff. One third of responding torture treatment programs reported being able to refer to physiotherapists (PT) outside of their centers. Therapeutic exercise, manual therapy, massage, group activities and exercises were the most commonly reported treatment modalities provided by PT. Lack of funds or resources and shortage of physiotherapy personnel were perceived as being the biggest challenges limiting patients' access to PS. Twenty-nine of the respondents (33%) were PT, and of these, 90% reported being interested in collaborative activities with other PT working with survivor of torture.

Keywords: Physiotherapy, international survey, modalities, barriers, collaboration.

Introduction

There are more than 200 treatment centers for survivors of torture (SoT) in the world. (International Rehabilitation Council for Torture Victims (IRCT)[1], 2020; National Capacity Building Project (NCB)[2], 2020; United Nations Voluntary Fund for Victims of Torture (UNVF), 2020). There is a wide range of care providers at these centers, with some providing extensive interdisciplinary

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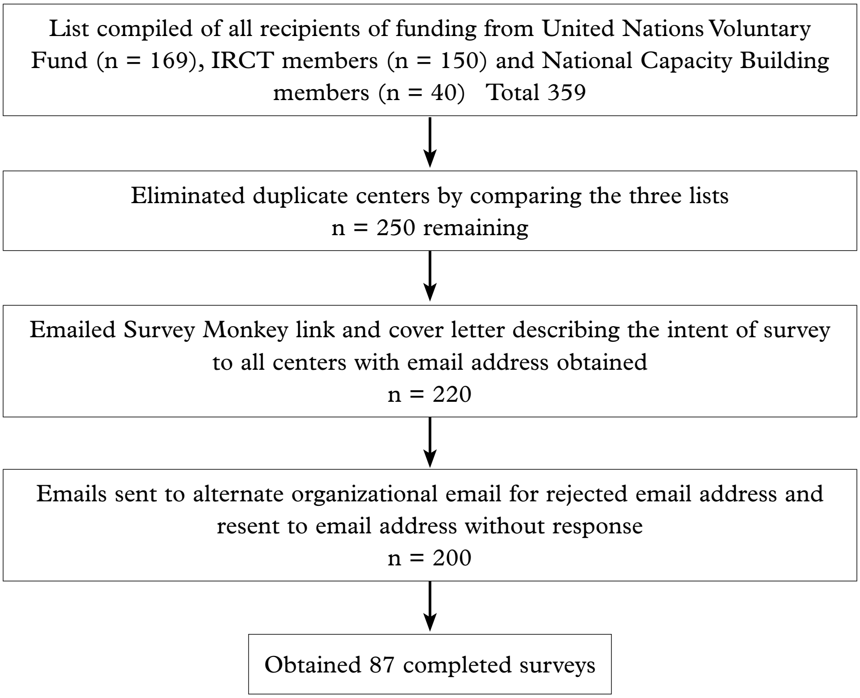
services and some with a more limited focus. Many programs for SoT have a strong mental health focus (Bunn et al., 2016; Kira et al., 2012) while some have an interdisciplinary approach that combines counseling and PS (Amris et al., 2019; Baird et al., 2017; Harlacher et al., 2019; Nordbrandt et al., 2020; Stammel et al., 2017; Wang et al., 2016).

Methods

In 2014, a list of treatment centers around the world was compiled by combining lists of centers for survivors from the IRCT, NCB in the United States and UNVF. Six doctoral PS students from the University of Minnesota helped to create an online survey which asked targeted questions of treatment center staff members and translated the survey from English into Spanish and French. The cover letter that was emailed made the request to forward the survey to a staff PT if there was any working at the center. If there were not PT working at that site, any staff member could fill it out. There were targeted questions for PT only at the end of the survey.

If an email was "automatically returned to the sender," a second survey was sent to additional email addresses at the same center if possible. A second survey was also re-sent where emails had not been rejected, but where the recipient had not responded.

Figure 1. Sampling process for international survey



PT were asked the same questions as non-PT, plus additional questions about their educational level and years of experience. Data is analyzed separately for the questions about biggest perceived problems in providing PS and interest in collaborating with other professionals working with SoT.

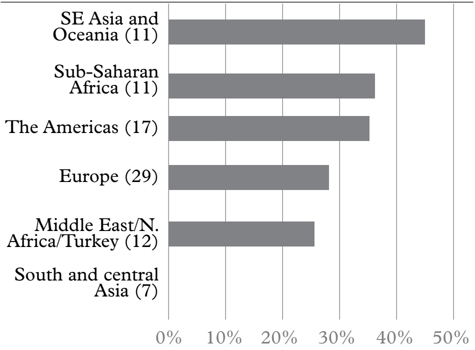
Eighty- seven surveys were completed. The response rate was 43% out of 200 emails sent.

Results

Of the 87 respondents, 42 were from the Global North and 45 from the Global South. Fourteen were working at centers in the USA, six from Cambodia, five from Denmark, four from Italy, and three each from Bosnia and Herzegovina, India, and Lebanon. There were two respondents each from Australia, Democratic Republic of Congo, Finland, Germany, Indonesia, Jordan, Kenya, Liberia, Palestine, Rwanda, Sri Lanka, Sweden, Turkey and the United Kingdom. Finally, there was one respondent each from Armenia, Austria, Belgium, Bulgaria, Burundi, Chad, Chile, Ecuador, Egypt, France, Honduras, Ireland, Israel, Kyrgyzstan, Morocco, Nepal, New Zealand, Nigeria, Norway, Romania, and Serbia.

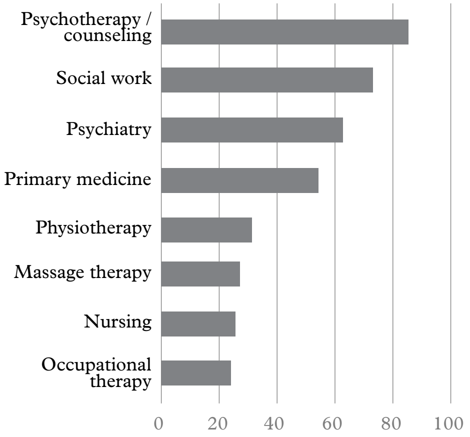
There were no large differences between the Global North and Global South in the percentages of centers offering PS either onsite or by external referral, except that in all responding centers in South and Central Asia, patients had access to PS, as indicated in Figure 2 below.

Figure 2. Percentages of centers where patients have no access to PS, across regions



At the treatment centers for SoT, psychotherapy/counseling was available at 85% of the centers, followed by social work (73%), psychiatry (63%), and primary medicine (55%). PT were on staff at 33% of the centers, massage therapists at 27%, and nursing and occupational therapists at 25%.

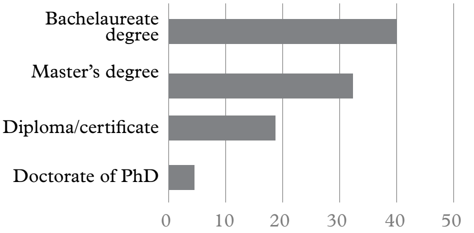
Figure 3. Professionals working at centers for SoT



PT working at treatment centers for SoT who answered the survey tended to be both highly educated and experienced with 82%

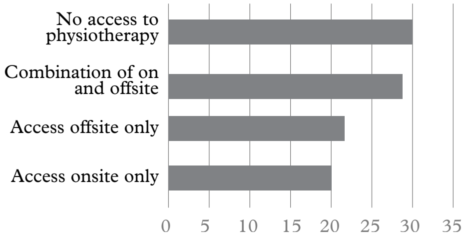
holding at least a baccalaureate bachelor degree, 86% percent with at least 5 years of experience, and 59% having eleven or more years of experience as a PT. Additionally, 55% of PT respondents have at least 6 years of experience specialising in torture and trauma rehabilitation.

Figure 4. Educational level of PT at centers with PT on staff



While at 30% of the centers, the patients have no access to PS services, at 22% of centers the patients can receive PS offsite, 20% onsite at the center only and at 29% of the centers, the patients can receive PS either at their center for SoT or be referred externally for PS services. At the centers where there is a PT on staff, unsurprisingly, the percentage of patients receiving PS services is increased.

Figure 5. Patient's access to PS services



In the one third of centers where there is a PT on staff, a higher percentage of patients received PS than those where there is not a PT staff. (See full survey report in supplemental material).

Figure 6. Percentage of patients receiving PS when there are PS services onsite

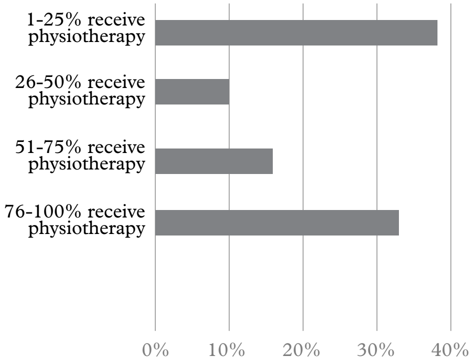
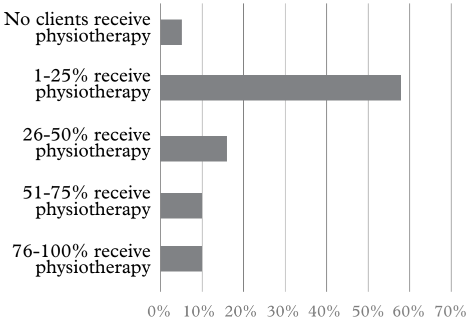
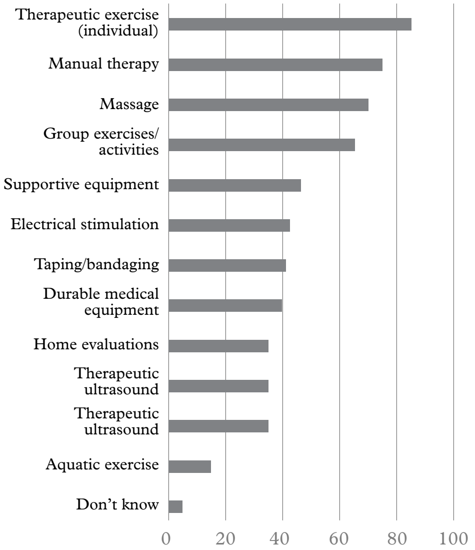


Figure 7. Percentage of patients receiving PS when there is no PT onsite



PT were asked to check all modalities which they used with patients. The most frequently were therapeutic exercise for individuals (85%), manual therapy (75%), massage (70%) or group exercises/activities (65%). The least common were aquatic exercise (15%), home evaluations (35%), taping (40%), or provision of durable medical equipment such as wheelchairs, crutches, walkers (40%). Ultrasound and electrical stimulation treatments were also used by 35 and 40% of PT respectively. There were additional treatments mentioned, including dry needing, body awareness training, the Feldenkrais method, graded motor imagery, dry heat therapy and laser therapy.

Figure 8. PS modalities provided



Both PT and non-PT indicated lack of funds/resources and lack of personnel as being among the main challenges and limitations to providing PS services to survivors. Twenty-two respondents working at centers with no PT present decried the lack of funds as a perceived limitation. PT indicated that lack of time with patients and systemic barriers were the greatest challenges.

Figure 9. Perceived limitations to providing PS at treatment centers where there is no PT onsite (answered by non-PT)

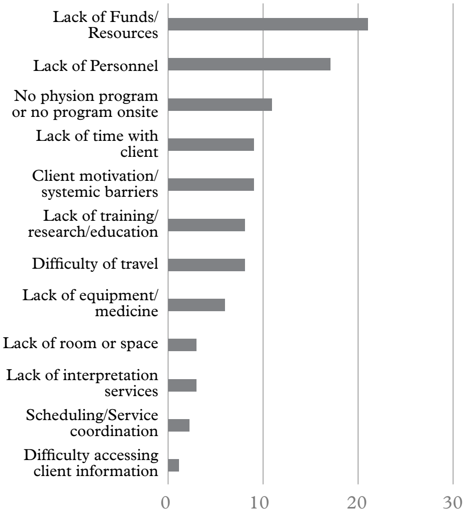
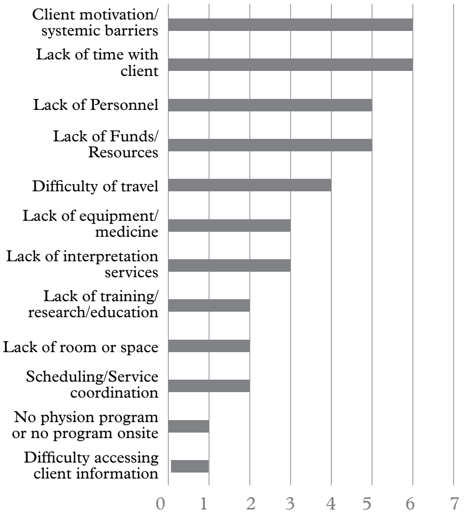


Figure 10. Perceived limitations to providing adequate PS services at treatment centers where there are PT onsite—perceptions of the PTs themselves



Ninety percent of the PT surveyed expressed interest in participating in collaborative activities with other PT who work with SoT. One third were interested in participating in a Facebook group, one third in attending webinars about PS treatment for SoT, 19% in being part of a listserv and 21% in organizing on LinkedIn.

Once the survey results were analysed, all participants were sent a copy of the survey report. In addition, based on the PT expressed interest, in 2016, a Facebook group was created for PT who are interested in working with SoT. The group now has 224 members from 36 countries. While the group is mostly comprised of PT, there are several occupational therapists, massage therapists, chiropractors and medical doctors who are members. There are also PS students from several countries who participate in the group, which has become a forum for sharing resources for those working with refugees and for those who are interested in mind-body approaches for the healing of trauma. Anyone interested in being vetted to join the Facebook group for PTs working with SoT and other forms of trauma can correspond with either of the authors to get more information. In addition, a PS section on the HealTorture.org website was created in response to interests expressed on the international survey. There are links to webinars, PS article reviews and blogs about physiotherapy for SoT.[1]

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[1] https://healtorture.org/content/physical-therapyphysiotherapy

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Group physiotherapy with survivors of torture in urban and camp settings in Jordan and Kenya

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Key points of interest

- Provisional results in a group physiotherapy model suggest clinically and statistically significant improvement in pain, mobility and sleep.
- Improvements noted were similar between survivors of torture (SOT) and non- SOT.

Abstract

Introduction: The Center for Victims of Torture has developed an interdisciplinary group treatment. The program is supported by a clinical assessment that records a broad set of indicators of participant experience and functioning.

Methods: Survivors are identified through referral systems, community education and sensitization campaigns, contacts and trainings with other NGOs and health care providers. Following an informed consent process, survivors participate in a comprehensive individual assessment and then progress to a 10-week program. Wherever possible, follow-up assessments are conducted 2 weeks after the sessions end, and at 3, and 9 months following completion.

Results: On average, participants who completed 3-month follow-up assessments showed statistically and clinically significant improvements.

Discussion: Provisional results are encouraging. As nearly all participants receive both counseling and physiotherapy (PS), it is difficult to know which benefits can be attributed to PS alone.

Keywords: group PS, interdisciplinary care, refugee, pain, pelvic floor.

Introduction

Many survivors of torture suffer from a wide range of physical and psychological symptoms and conditions (Crosby, 2013) which may benefit from PS intervention. These include: traumatic brain injuries, nerve injuries, injury to various parts of the body from beatings including those to the feet; burns; damage to the pelvic floor from sexual torture; fractures

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and amputations (Amris et al., 2019; Prip et al., 2016). Further, many survivors of torture have issues with chronic pain, even years following their torture experiences (Harlacher et al., 2019; Kaur et al., 2020; Wang et al., 2016; Williams & Baird, 2016).

Survivors who have experienced torture and other forms of trauma also often experience: decreased body awareness (numbing of sensations and difficulty identifying sensations, decreased flow and vitality of movement), self-regulation problems (unable to control bodily symptoms of emotional distress), anxiety (shortness of breath, muscle tension, headaches), depression (fatigue, joint pain, headaches, gastrointestinal disturbances, chronic pain) and cardiorespiratory symptoms such as heart racing, shortness of breath, chest heaviness, difficulty breathing, as well as sleep issues (Sandahl et al., 2017; Stammel et al., 2017).

Chronic pain in survivors of torture

Many survivors have issues with chronic pain, even years after they have experienced torture (Amris et al., 2019). The location of pain is at times correlated with the type and location of torture, such as having foot pain after sustaining falanga torture (Prip et al., 2016), head pain after traumatic brain injury, shoulder pain following suspension, and pelvic and back pain following sexual torture (Amris et al., 2019; Baird et al., 2017; Kaur et al., 2020; Nordin & Perrin, 2019; Olsen et al., 2007; Tsur et al., 2020; Wang et al., 2016; Williams & Baird, 2016). .

There is an expanding body of evidence showing that pain neuroscience education results in diminishment of pain and improved function. These interventions are typically paired with goal setting, instruction in ways to improve sleep, as well as in instruction in safe progression of exercises and functional mobility, as part of a biopsychosocial approach to PS (Sallinen, 2018). No matter the type of pain (nocioceptive-from damage or potential damage to body, neuropathic—from damage to somatosensory nervous system or psychosomatic) skilled PS instruction often yields clinically meaningful improvement in pain (Harlacher et al., 2019; Louw et al., 2016; Wang et al., 2016; Wood & Hendrick, 2019). It is also essential that physiotherapists (PTs) present information about pain in reassuring yet accurate ways, so as to enhance placebo effects and to minimize nocebo effects (Rossettini et al., 2020).

Sleep deficits

Deficits of sleep are commonly found among both those experiencing chronic pain and post-traumatic stress disorder (PTSD). The resulting insufficient sleep often leads to maintenance of pain, and decreased mood and energy level (Andrews et al., 2014). PS-led education often produces subjective improvements in patients' sleep duration and quality. The PTs typically instruct in relaxation techniques, mind-body connections, sleep positions and use of props such as pillows to decrease pain, and even in ideal timing of exercise and intake of food and beverages, in order to help patients to improve sleep (Nielsen, 2014; Sandahl et al., 2017; Siengsukon et al., 2017).

Pelvic floor considerations

PTs instruct patients in pelvic floor-related programming in both group and individual sessions in matters such as: ways to prevent urinary and fecal incontinence, constipation, painful sexual activity and other related topics. There is evidence to show that participating in either group or individual PS with pelvic floor emphasis can lead to meaningful improvements (Rosenberg, 2007).

Interdisciplinary needs

Survivors of torture (SoT) typically have complex needs. There is evidence to support the need for PTs and other members of the team working with SoT and other forms of trauma to teach survivors about mind-body connections, including the role of breath, relaxation and practices of mindfulness (Gard & Gyllensten, 2018; Van Damme, 2018). It has been proposed that patients be allowed opportunities to practice these approaches (Andersen et al., 2020; Buczynski et al., 2018; Nordbrandt et al., 2020; O'Sullivan, 2015; Persson et al., 2008; Price & Hooven, 2018). Because of these complex needs and frequent co-morbidities, many have argued that an interdisciplinary approach to treatment, including PS and counseling, is ideal (de Ruiter et al., 2018; Stammel et al., Wang et al., 2016).

Individuals with chronic pain from a variety of causes often benefit from a multidisciplinary treatment approach as well (Saragiotto et al., 2016).

Interoceptive awareness training

PTs should create opportunities for survivors to increase their interoceptive awareness, which is the ability to identify, understand, and respond to signals of the body appropriately (Buczynski et al., 2018; de Ruiter et al., 2017; Price & Hooven, 2018). The survivors should have exposure to sensations, such as faster breathing and heart rates, in a safe and supportive environment, where their fears and concerns are normalized and addressed. Care is taken to gradually progress the intensity of exercises to tolerance and to have these activities be enjoyable. By learning to focus attention inside of the body, such as to be able to soften areas of muscular tension, survivors can learn to have more control over their bodies (Price & Hooven, 2018; Walker & Shepherd, 2001).

Self-sufficiency in survivors of torture

Vancampfort and Stubbs (2018) emphasize that when working with survivors of trauma, and with patients who have chronic pain, it is essential that PTs guard against fostering excessive dependence on the PT. It is crucial that survivors learn skills that they can utilize cany time that they experience pain (Gard & Gyllensten, 2018; Jones & Kulnik, 2018). PTs need to focus on empowering SoT to learn strategies of pain reduction, exercise, improved posture and body mechanics, as well as to restore body awareness and to control their most disturbing symptoms. SoT should be empowered to be as independent as possible and to have knowledge about the role of exercise, pain management, body-mind connections and other concepts which are presented during PS sessions (Nielsen, 2014; O'Sullivan, 2015; Amris et al., 2019). It is important that patients also learn about the role of aerobic exercise in improving mood and on helping to decrease depressive symptoms as well. PTs have an important role in helping patients to find enjoyable ways to exercise safely (Knapen et al., 2018).

Rationale for group model development

Group PS is as effective as individual PS, for both those with mental health (Skjaerven et al., 2018) and physical health concerns (Andersen et al., 2019; O'Keeffe et al., 2017). There are few studies that demonstrate the efficacy of group PS for survivors of torture (Harlacher et al., 2019; Nordbrandt et al., 2020).

In a study, where survivors were randomly assigned to either treatment as usual (with no PS), Basic Body Awareness Therapy or mixed physical activities, subjects in all groups showed similar improvement. As each PS intervention is different, in terms of duration, interdisciplinary model, and PS model, it is difficult to compare interventions and to demonstrate which portions of PS interventions are most effective for survivors of torture.

The Center for Victims of Torture (CVT) group PS model

In the last 10 years, more than 7,000 SoT and other forms of trauma have been treated by CVT PTs in Jordan and Kenya. In Jordan, services are provided at the CVT office in Amman. In this program, 74% of the patients over the last 3 years have been from either Syria or Iraq, with 21% from Sudan. In Kenya, CVT provides PS in Nairobi and near the Kakuma refugee camp. In Nairobi, participants attend sessions at one of three urban clinics located in neighborhoods with high refugee populations (Eastleigh, Kayole and Riruta). In Kakuma, the program is located in one of three "villages" (Village 1) in Kalobeyei Integrated Settlement. Kalobeyei is located several kilometers from Kakuma refugee camp and is close to the border between Kenya and South Sudan. There are separate small buildings for counseling and PS services. In both Kenya programs, the biggest population groups have been from the Democratic Republic of the Congo and Burundi. In the Jordan program, there are specialized interventions for children. This article describes only the adult PS program only and the data shared is regarding adult participants. In all program locations, there is simple equipment, such as yoga mats and exercise bands.

PTs perform subjective and objective assessments, including measuring strength, range of movement, posture, gait and body mechanics. In CVT programs that include PS, each participant always receives counseling services as well. The team members collaborate and refer to social work services as needed. CVT's PTs adhere to the principles of the International Organization of PS in Mental Health (IOPTMH). These include providing health promotion, preventive health care, as well as rehabilitation for both individuals and groups (Probst & Van Damme, 2018).

Although some survivors require individual PS sessions, a majority of CVT patients are seen in groups of between eight and 12. The participants are typically grouped by gender, with the exception of mixed gender LGBTI groups in Nairobi, as well as by country of origin. Each session includes check in and support on goal attainment, exercise, practice of new activities and education about relevant topics. Under the direction of the PT, survivors also support each other in overcoming barriers to goal achievement.

PTs lead discussions and provide psychoeducation about bodily symptoms of trauma, persistent pain and ways to improve sleep. For example, many survivors are not aware that it is important not to drink caffeinated beverages or to exercise heavily soon before going to bed and are able to make changes which enhance their quality of sleep after they receive the education.

PTs utilise a trauma-informed approach in order to avoid retraumatizing participants and to maximize their improvements. PTs offer choices, use invitational language, touch participants only with permission, and respect cultural norms of survivors. Many of those who have undergone torture are hyperaware of bodily sensations. PTs guide survivors to be able to challenge their maladaptive beliefs, as these often contribute to avoiding resumption of activities. In her book, *Trauma and Recovery* (1992), Judith Herman, a respected pioneer in the field of healing from trauma, describes three stages of recovery. CVT counselors and PTs base some aspects of our treatment models on her work.

1. Safety and Stabilization. (Sessions 1, 2 and 3)
During this introductory phase, the survivor often feels vulnerable. Providing a safe space to participants is important in this phase. It is crucial to stabilize their physiological and psychological reaction to trauma. Depending on the safety measures in place in the country to which survivors of torture have fled, such as whether or not they have UN-protected status or aspects relating to their socioeconomic status and security of their housing, SoT have various degrees of feeling safe in their overall environments. As needed, CVT counselors and PTs refer survivors to other local or international NGOs and to CVT social workers to address these issues. Providing a sense of safety for those in PS sessions also refers to the importance of having participants agree on principles such as confidentiality and mutual support. In addition, PTs must carefully adhere to principles of trauma-informed care. This stage is the starting point. It is necessary for all healing and engagement that follows. In PS group sessions, emphasis is on relaxation and breathing, posture and body mechanics and gentle self-touch. Sleep hygiene discussions and psychoeducation about symptoms of trauma are also typically provided during this stage.

2. Remembrance and Mourning. (Sessions 4, 5, 6, 7 and 8)
Once the sense of safety is restored (to the fullest extent possible) and the survivor is stabilized to the extent that the effects of the trauma no longer overwhelm their capacity to function, it is possible to work towards assimilation and integration of the trauma. During the five sessions of this phase, there is an emphasis on pain education and reduction, stretching, strengthening, balance, body mechanics, aerobic exercise and pelvic floor functioning. In all programs, therapeutic pain education is provided for participants that may help them to better identify, localize and decrease their pain. Discussions about pain from a neuroscience perspective are led by the PTs in groups. Survivors often express relief that chronic pain does not mean that an injury has not healed, and that worse pain does not mean worse injury. In addition, they learn that while acute pain has an important protective function, chronic pain no longer has a function. Culturally appropriate metaphors are used (Louw et al., 2019) such as; chronic pain being like a lion in the room, rooster which will not stop crowing, an overly sensitive alarm clock, etc. They are often reassured that despite negative messages which may have been planted by the torturers, they can gradually decrease their pain and improve their overall functional mobility without causing injury to themselves. To reduce any stigma and to normalize the need for education, PTs instruct all group members in techniques such as pelvic floor strengthening and relaxation exercises. The loss of prior physical abilities is acknowledged as is the work of regaining or compensating for their loss. See Figure 1 below for more detail.

3. Reconnection (Sessions 9 and 10)
The reconnection stage involves rebuilding one's life and one's future. By being able to overcome feelings of isolation through the reconstruction of meaningful social connections, quality of life is enhanced. Many who are in the reconnection stage of recovery find that they can resume activities, such as playing football, running, playing with their children, taking care of their household needs and resuming livelihood activities.

Each participant is given a packet with pictures of their home exercise program, as well as tips about posture, body mechanics and other key concepts. Participants are reminded that they will have formal follow up sessions with PTs at regular intervals and are encouraged to contact the CVT PS team as needed. There is often a sense of acceptance, that while SoT may not be able to perform the activities in exactly the same manner that

Figure 1. Summary of Activities Carried Out During Each Stage of Trauma Recovery

Safety and Stabalization

- Safe space for survivors (confidentiality, informed consent, privacy, environmental considerations)
- Establishing trust amongst participants and between participants and physiotherapist
- Explanations of physiotherapy, discussion group norms, expectations of outcomes including specific goals of group members
- Education about trauma and its effects
- Helping survivorss to recognize their feelings and associated physical symptoms
- Teaching techniques for relaxation and managing anxiety
- Teaching self-soothing techniques and body awareness exercises to enable clients to feel more in control and "safe" in their bodies
- Empowering survivors to understand how to safeguard their physical health
- Focus on trauma-informed principles using practices of invitational language, choice, cultural appropriateness of intervention, permission granted before using 'hands-on' approaches

Rememberence and Mourning

- Managing the physical symptoms of trauma (continuing to identify somatic resources, reinforce relaxation and home exercise programs)
- Decreasing and managing pain (graduated programs, continued reinforcement against maladaptive pain beliefs and behaviors, encouragement and understanding, pacing and coping strategies)
- Restoration of what has been lost where able (strength, range-of-motion, flexibility, balance, coordination, sleep, continence, ability to perfor relevant functional activities)

Reconnection

- Reconnection with one's body through mastery of awareness and self-regulation exercises
- Providing opportunities to practice safe movements that promote joy and renew a sense of confidence in their bodies
- Ongoing self-management of symptoms using goal setting, pacing and increased understanding of symptoms
- Rebuilding positive relationships through contributing to positive group dynamics and safe physical interactions within sessions
- Empowering the individuals to engage with their communities (friends, family, in activities such as sports, livelihood programs, religious events, etc.)

they could before their torture experiences, they can still enjoy being active and connecting with others.

This stage is focused upon looking to the future and helping participants to utilize their own resources. Herman (1992) suggests that the essence of this stage can be captured by the phrase, "I know I have myself." PS aims to facilitate survivors' reconnection with their own bodies, enabling them to better understand and control their symptoms and to use their bodies as a somatic resource.

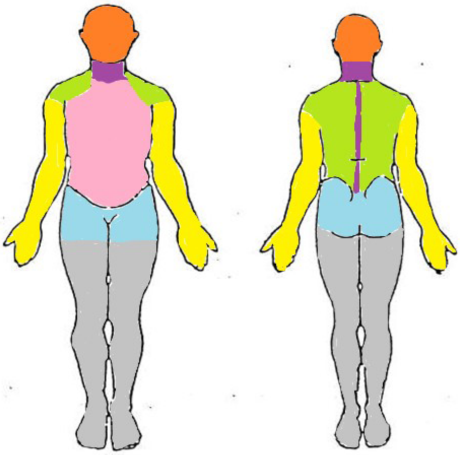
Method

This article presents a secondary analysis of clinical datasets collected by CVT PTs working with survivors in Nairobi, Kakuma, and Jordan.

Participants are recruited into treatment following an initial mental health screening. This screening is conducted by psychosocial counselors to determine general problems and symptoms and if an individual would benefit from, and is interested in, CVT's services. During this process, counselors discuss informed consent. As part of this process, participants can opt-in to their de-identified data being used for research purposes. In Kenya, survivors who have needs in these areas are referred for PS; in Jordan, all survivors are automatically referred for PS.

Part A Disability Rating Index (DRI). Pain-related disability (Harlacher et al., 2016, 2019; Prip et al., 2011) has excellent test-retest reliability (ranging from 0.83 to 0.95), strong face validity (with more than 90% of patients able to answer questions correctly), and strong intra- and inter-rater reliability (0.98 or higher) (Salen et al., 1984). Part B comprises questions on pain, sleep, bladder control, sexual functioning, and body awareness and control using a ten-point scale with 0 anchored to no pain or difficulties, and 10 being the worst imaginable pain or functioning problems. During this assessment participants are asked to describe the parts of their body in which they struggle with pain. Responses are recorded by shading the relevant areas of body outlines (Figure 2). Part C relates to social participation, and part D includes items on coping and outlook. The entire set of measures has been found to be feasible and acceptable across cultures, has been translated into several languages, and shows strong internal consistency within and across sites (Part A Cronbach's Alphas range from 0.86 to 0.92; Part B Cronbach's Alphas range from 0.80 to 0.91).

Figure 2. Body outlines used to record pain locations



The full PS assessment tool and follow up measures are available from the authors on request.

The assessment is conducted in a private room by a PT. Further verbal consent is sought for physical examination and touch. Assessments are conducted over one or two sessions by PTs familiar with the cultural norms and language needs of the participants; some assessments are administered using trained interpreters. The assessment measures perceptions of pain, posture, joint range of motion, strength, nerve involvement, medical history, ruling out "red flag issues" in need of medical attention, and balance. At this time, those with injuries, such as moderate to severe pelvic organ prolapse, anal fissures or severe tears or issues such as gangrene, severe hypertension, pre-eclampsia, breast cancer, and untreated fractures are also referred for medical care.

The "Pelvic Floor Distress Tool"[1] (see supplementary materials) was created by the Kenya PS teams to assess and to better address issues with pelvic floor function. This tool has been used on a pilot basis with 130 survivors.

Follow-up assessments are conducted immediately after the PS intervention has been completed as well as at 3- and 9-months from the date of the first treatment session. Only data from the intake and 3-month follow up are included in this paper.

Data Management and Analysis

Data was recorded on paper forms, reviewed by clinical supervisors, and entered into an encrypted electronic database by monitoring and evaluation staff. Rigorous data protection and confidentiality standards were maintained throughout the process.

Comparison of data is done using Cohen's d effect sizes, chi-square analyses and repeated measures t-tests.

Table 1 provides breakdowns by gender, country of origin, marital situation, and number of children for each of the three samples, Table 2 provides data on location scheme and area of greatest concern and Table 3 on the number of areas of pain at intake and follow-up.

Results

As noted in Table 4 below, 96% of the combined total of 1183 participants improved in at least one of the four areas of the measure. Table 5 has more detailed statistical analysis of all the areas of the PS assessment tool.

It was hypothesized that survivors of torture would show significantly more improvements in all four sections of the PS assessment tool, as they would have typically endured more trauma than non-survivors. However, only modest differences in rates of improvement, and differences were seen, and only for Parts B and D.

Pelvic floor tool and data

While only 12.3% of the participants indicated that they were having issues with pelvic organ prolapse, 16.9% reported having urinary incontinence at least somewhat, 39.2% having constipation at times, 29.2% urinary urgency at least "somewhat." In addition, 20% of the men and 12.7% of the women in the pilot indicated having problems with loss of bowel control at least some of the time.

From this initial pelvic floor pilot, there were some troubling findings. For example, 27.9% of men and 30.9% of women indicated that they had pain of 4 or more on 1-10 scale during sexual activity (moderate to severe pain). (Please refer to supplemental materials for more results of pelvic floor pilot). Because many participants, both those who report being gender-based violence (GBV) survivors and those who do not, report having concerns about bowel or bladder functioning, PTs have added specific brief teaching modules during the 10-week long individual or group PS cycle. For example, PTs instruct in self -abdominal massage to decrease constipation and provide psychoeducation about toileting posture and foods and beverages, which can make constipation or incontinence.

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[1] See supplementary materials on https://tidsskrift.dk/torture-journal/index

To reduce any stigma and to normalize the need for education, PTs instruct all participants in the group in techniques such as pelvic floor strengthening and relaxation exercises. Female genital mutilation (FGM) is very common among some of the patient populations with which CVT works in Kenya (Somalia-98% estimates, Eritrea, 88%) FGM survivors have higher rates of both bladder and bowel incontinence than the general population (UNICEF, 2013) which is another reason why it is essential for PTs to address pelvic floor concerns.

Discussion and Conclusions

This report provides a description of the CVT group PS model for survivors of torture in both urban and refugee camp contexts. The

Table 1. Demographic factors of participants in three program sites

Intake Demographics		**Nairobi (N=802)**	**Jordan (N=1632)**	**Kakuma (N=454)**
Gender	Men	40%	38%	44%
	Women	59%	62%	56%
	Non-binary	1%		
Country of Origin	DRC	45%		31%
	Burundi	20%		31%
	Somalia	12%	1%	0.4%
	South Sudan	0.2%		18%
	Ethiopia	7%		16%
	Uganda	13%		3%
	Syria		43%	
	Iraq		31%	
	Sudan		21%	
	Other	4%	4%	1%
Age	Age range	13-74	14-82	18-77
	Age mean	32 years	39 years	36 years
Marital Situation	Married/coupled	39%	69%	70%
	Single	46%	19%	14%
	Widowed	9%	7%	12%
	Divorced/separated	7%	5%	4%
Children	No children	41%	30%	16%
	1-3 children	35%	38%	34%
	4+ children	24%	32%	50%
Rx	Taking medications	32%	60%	28%

Table 2. Location of Pain and Area of Greatest Concern

Areas of Pain at Intake	**Nairobi (N=802)**	**Jordan (N=1619)**	**Kakuma (N=454)**
Back, shoulders	610 (76%)	729 (45%)	359 (79%)
Leg, knee, ankle, foot	457 (57%)	988 (61%)	268 (59%)
Chest, abdomen, torso	385 (48%)	534 (33%)	317 (70%)
Head, face	329 (41%)	599 (37%)	313 (69%)
Neck, spine	233 (29%)	745 (46%)	104 (23%)
Arm, wrist, hand	201 (25%)	583 (36%)	132 (29%)
Pelvis, hips	144 (18%)	324 (20%)	59 (13%)
Area of Greatest Concern	Nairobi (N=782)	Jordan (N=1583)	Kakuma (N=443)
	Back, shoulders (47%)	Neck, spine (23%)	Chest, abdomen, torso (31%)
	Chest, abdomen, torso (14%)	Leg, knee, ankle, foot (22%)	Back, shoulders (28%)
	Leg, knee, ankle, foot (14%)	Back, shoulders (17%)	Head, face (17%)
	Head, face (10%)	Head, face (14%)	Leg, knee, ankle, foot (14%)

Table 3. Number of areas of pain at intake and three -month follow-up

Number of areas	**Nairobi (N=355)**		**Jordan (N=621)**		**Kakuma (N=192)**	
	Intake	**3 Months**	**Intake**	**3 Months**	**Intake**	**3 Months**
0 areas	4 (1%)	32 (9%)	6 (1%)	12 (2%)	0 (0%)	24 (13%)
1 area	53 (15%)	121 (34%)	112 (18%)	217 (35%)	10 (5%)	58 (30%)
2 areas	96 (27%)	103 (29%)	174 (28%)	199 (32%)	42 (22%)	58 (30%)
3+ areas	202 (57%)	99 (28%)	329 (53%)	193 (31%)	140 (73%)	52 (27%)
Reporting fewer areas at six months	227 (64%)		329 (53%)		156 (81%)	

Table 4. Participants who improved in each section of the assessment tool in all three locations and combined

Intake to 3-month	**N (total participants assessed)**	**Participants who improved**									
		A		**B**		**C**		**D**		**At least one area**	
		N	**%**	**N**	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Nairobi	355	246	69	257	72	200	56	276	78	334	94
Kakuma	194	168	87	180	93	145	75	172	89	192	99
Jordan	634	424	67	470	74	398	63	441	70	604	95
Combined	1183	838	71	907	77	743	63	889	75	1130	96

Table 5. Differences in mean scores at baseline and 3-month follow up

Outcome area	Program	N	Intake mean	Intake SD	3- month mean	3- month SD	Cohen's d	p
Part A: Functional ability (12 items) *0=without difficulty / 100=cannot do activity at all*	Jordan	634	38.3	21.1	29.4	19.3	0.439	***
	Nairobi	356	36.5	19.5	27.6	21.0	0.442	***
	Kakuma	194	35.8	21.0	13.6	15.5	1.202	***
Part B: Body functions & physicality (11 items) *0=no pain; excellent / 10=worst pain; poor*	Jordan	638	4.6	1.6	3.3	1.6	0.827	***
	Nairobi	355	3.7	1.7	2.7	1.9	0.571	***
	Kakuma	194	4.2	1.7	1.4	1.4	1.830	***
Part C: Social participation & functioning (8 items) *1=worst outcome / 4 = best outcome*	Jordan	638	2.8	0.6	3.0	0.6	0.453	***
	Nairobi	355	2.8	0.6	3.0	0.7	0.265	***
	Kakuma	194	2.9	0.5	3.3	0.4	0.896	***
Part D: Coping & outlook (11 items) *1=worst outcome / 4 = best outcome*	Jordan	638	2.7	0.3	2.9	0.3	0.699	***
	Nairobi	355	2.6	0.4	3.0	0.4	0.948	***
	Kakuma	194	2.6	0.4	3.1	0.3	1.487	***

P-value (two-tailed) from repeated measures t-tests
* p≤0.05
** p≤0.01
*** p≤0.001

quantitative results presented above are supported by anecdotal feedback to CVT's PTs.

> *Before attending PS sessions, I was not able to attend community meetings, but now I attend them and have also joined a tailoring class. Now, I feel much more hopeful about my future and about the possibility of earning income!* (40-year-old male survivor)

> *I could not do most of my daily activities like fetching water, or sweeping, and would rely on my neighbors, but now I am able to carry a 10- liter container of water. Before attending PS sessions, I could not stand upright because of my back pain, but now I have no back pain, and I do my exercises every day.* (62-year-old female survivor)

Table 6. Number of participants showing improvement between baseline and three-month follow up in Jordan, Nairobi, and Kakuma

	Survivors of torture	**No reported torture**	**Total**	**Total number of participants assessed (N)**
Part A: Functional ability	361 (74.0%)	476 (68.8%)	837 (70.9%)	1180
Part B: Body functions & physicality	399 (81.6%)	506 (72.9%)	905 (76.5%) ***	1183
Part C: Social participation & functioning	309 (63.2%)	433 (62.4%)	742 (62.7%)	1183
Part D: Coping & outlook	393 (80.4%)	495 (71.3%)	888 (75.1%) ***	1183

P-value (two-tailed) from chi-square tests of significance
* p≤0.05
** p≤0.01
*** p≤0.001

Similarly, survivors noting improvement in pelvic floor functioning describe a renewed desire to be sexually active with their partners, as well as being able to relax and having less pain. They also report being able to resume attendance at religious activities and other community events as they are confident that they will no longer have leaking of their bladder or bowels with resultant odor, and that they are able to walk longer distances in the community without worrying about embarrassing bowel or bladder accidents on the way.

Several limitations must be considered when reviewing these findings. Firstly, these preliminary results are presented without comparison to a control group. The contribution of non-specific therapeutic factors such as a strong therapeutic alliance, group support and structured assessment are well documented. Secondly, since CVT's approach includes both counselling and PS intervention, we are unable in this analysis to separate out those benefits resulting from different aspects of our interdisciplinary work. Thirdly, although the sample sizes presented here are large, they represent only a small part of the total set of survivors who received treatment in the Kenya program, and a majority of those receiving services in the Jordan program.

In humanitarian settings with great need and limited resources, and in places where survivors are often moving around, long-term follow up is challenging. As a result, we have no data on the functioning of those with whom we have lost contact following the end of treatment. Finally, we also lack data on those who dropped out of treatment before the end of the program. Given these significant limitations, the authors merely note the overall benefits in quality of life and functioning to those participants with whom we are have seen for follow up assessments, and make no claims to specific therapeutic mechanism or comparative treatment efficacy. We point to the important complimentary role that PS can play in interdisciplinary care. In closing, we call for more research into the efficacy of group PS interventions with survivors of torture, especially those living in low and middle-income countries, and note the importance of issues relating to the pelvic floor in working with survivors of torture.

Supplemental material (available at https://tidsskrift.dk/torture-journal) :

1. Copy of the Pelvic Floor Distress Inventory Tool
2. Additional data which was not shared in the body of the article about changes between baseline and 3-month follow-up assessments

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Acceptability of a physiotherapeutic pain school treatment in trauma-affected populations in the Middle Eastern & Northern African region

Anne-Mette Karrer[1], Ane Kirstine Viller Hansen[2], Marie Louise D. Oestergaard[3] and Linda Nordin[4]

Key points of interest

- A mixed method study of a physiotherapeutic pain treatment for persistent pain conditions (Pain School), showed acceptance and feasibility among physiotherapists in the Middle Eastern and Northern African (MENA) region.
- Initial quantitative outcome of this treatment, in the MENA region, also indicated positive results in traumatised individuals.
- Limitations were found in possible author biases and in not having a control group.

Abstract

Introduction: The aim of this study was to evaluate the acceptability of a physiotherapeutic pain treatment (Pain School), focusing on patient education, physical exercises and self-reliance, and a capacity building program developed for MENA based physiotherapists working with pain and trauma-affected populations.

Method: Qualitative interviews with seven physiotherapists participating in the Pain School training program. Preliminary results of the Pain School treatment were also analyzed in 38 patients suffering from persistent pain and trauma-related stress.

Results: The qualitative analysis showed good feasibility and high acceptance among the participating physiotherapists. The pre- to post-treatment evaluation of Pain School, also gave an indication of positive treatment effects.

Limitations: Lack of mental health measures, author biases (authors carrying out training, interviews and analyzing qualitative results) and no control group.

Keywords: persistent pain, traumatic stress, feasibility study, physiotherapy, MENA.

Introduction

Being a refugee, having survived traumatic experiences and living under continuous stressful conditions, such as poverty, loss of status, and limited access to health services

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and education, can lead to long-lasting negative implications on a person's health (Pacella et al., 2013; Rometsch-Ogioun El Sount et al., 2019), the most common being post-traumatic stress disorder (PTSD), anxiety, depression, poor sleep and persistent pain (Husak & Bair, 2020; Nicol et al., 2016; Williams & Alayarian, 2019).

The lack of pain specific treatment methods in combination with large numbers of refugees in regions such as the Middle East and North Africa (MENA), indicate a crucial need to develop cost-effective, evidence-based methods that address persistent pain, as well as educating health professionals in handling these complex cases.

The aim of this mixed method study is to: (1) Evaluate the acceptability and feasibility of Pain School, a physiotherapeutic pain treatment, developed and contextualized during a capacity building program for MENA-based physiotherapists; (2) Evaluate the clinical trainings of physiotherapists delivering the treatment; (3) In a preliminary fashion, investigate the pilot results of the Pain School treatment in patients suffering from persistent pain and trauma-related stress.

Study specific theoretical background

In 2019, the International Association for the Study of Pain (IASP) introduced The International Classification of Diseases' (ICD-11) definition of chronic primary pain. Chronic primary pain is a persistent pain condition, where the pain is, not better accounted for by any other specific classified disease (Perrot et.al., 2019). Recent years of pain and neuroplasticity research supports a change in terminology from chronic pain to persistent pain by suggesting that persistent pain conditions are indeed not necessarily chronic. As persistent pain can decrease and/or stabilize over time (Abbey, 2015; Moseley & Butler, 2015; Moseley & Butler, 2017). A shift from a biomedical to a biopsychosocial understanding of pain, in recent years, is clearly seen in IASP´s definition of pain as "An unpleasant sensory and emotional experience associated with, or resembling that associated with, actual or potential tissue damage" (IASP, 2019).

When both PTSD and pain are present, the severity, duration, and functional impact tend to increase (Harlacher et al., 2016; Ruiz-Parraga & Lopez-Martinez, 2014). It has been suggested that not only PTSD, but also depression and anxiety may interact with pain through a combination of mechanisms (Brennstuhl et al., 2014; McAndrew et al., 2019). An attempt to illustrate the complexity is Amundson & Katz´s shared vulnerability model (Figure 1).

The model represents a biopsychosocial understanding of pain and suggests that the traumatic events, such as violence, torture or displacement, can create an emotional response, leading to a modulation in the nervous that affects the response system and overall pain perception. The alertness in the nervous system that is present in both trauma-related responses and pain conditions creates increased sensitivity and can produce dysfunctional neuroplastic changes. What seems to be an over-evaluation of risk of harm, creates a hypersensitive nervous system leading to a low threshold for daily stressors and bodily sensation, with increased pain and stress reactions, as a result (Asmundson & Katz, 2009; Defrin et.al., 2017; Nordin & Perrin, 2019).

Figure 1. Shared vulnerability model.

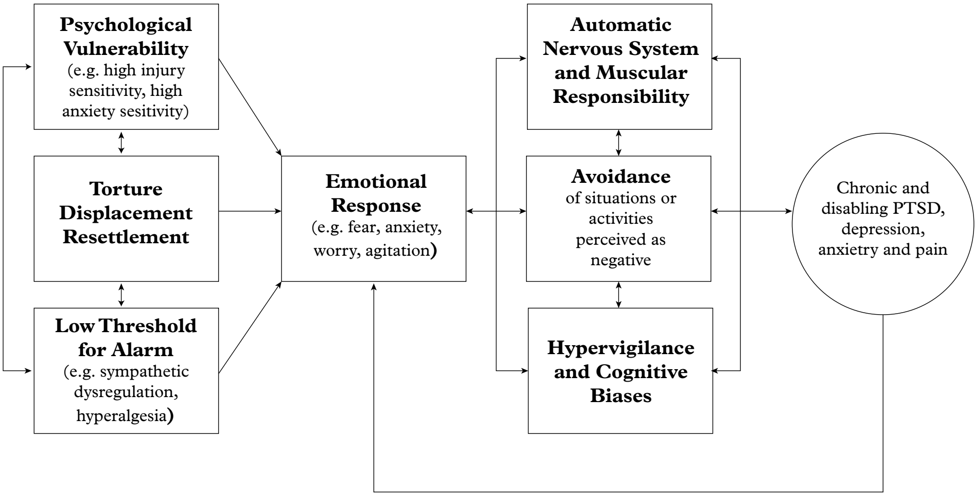

Figure 1. Shared vulnerability model. From Asmundson GJG, Abrams MP, Collimore KC: Pain and anxiety disorders, in Health behaviors and physical illness in anxiety and its disorders: Contemporary theory and research. Edited by Zvolensky MJ, Smits JAJ. New York: Springer, 2008, pp 207–235, p. 216. Copyright 2008.

Symptomology and treatments

Persistent pain conditions among refugee populations, living in asylum in the western world, is known as a significant contributor to decreased quality of life, functioning and disability (Buhman et al., 2014, Nordin, 2020). Persistent pain and trauma-related stress enhances “fear-avoidance” behavior (Nordin & Perrin, 2019; Vlaeyen & Linton, 2000), leading to general inactivity, which again negatively affects mental and physical health (Boakye et al., 2016); Martinez-Calderon et al., 2020). The documentation of persistent pain and somatic distress, along the expected co-occurrence with mental health conditions and malfunctioning among refugees in the Middle East, or bordering countries, is limited. A recent study, assessing Syrian refugees in Turkey, (McGrath et al., 2020) indicates the same symptomology and a 2008 study concluded that such co-occurrence seems to be similar across cultures and regions of the world (Tsang et al., 2008).

A Cochrane Review from 2017 (Baird et al., 2017) revealed only three documented attempts to address persistent pain in torture survivors. The treatments that were evaluated were cognitive behavioral therapy (CBT) with biofeedback, in combination with either physiotherapy group treatment or physiotherapy home exercises, versus waiting list (Liedl et al., 2011; Wang et al., 2017) and complex manual therapy versus self-treatment (Kim & Yu, 2015). None of the studies demonstrated a reduction in pain, and only the manual therapy study claimed, at the end of treatment, to have reduced disability and distress. The review also concluded that the prevalent persistent pain condition tends to be overlooked by mental health professionals and therefore few attempts have been made to explore effective treatments for the traumatized refugees, including survivors of torture, especially in regions outside the western world.

The shift from a biomedical understanding to a biopsychosocial understanding of pain has changed the clinical approaches in pain rehabilitation. IASP recommends that the treatment of non-malign, persistent pain conditions in torture survivors, should contain components of pain education, physical therapy, self-management and behavioral aspects of adaptation to pain (Amris & Jansen, 2019), which equals IASP general guidelines for all pain rehabilitation. Understanding the biopsychosocial reasons for pain, as well as slowly re-learning that it is safe to stay active, seem to stabilize the overall conditions (Louw et al., 2016). Studies conducted in the western world have shown that protocols containing pain education and exercise therapy for patients suffering from persistent pain have a positive impact on self- perceived health and disability, pain intensity, physical function, life quality and avoidance behavior amongst others. However, lack of replicable protocols and consistency in outcome measures makes the studies hard to compare (Chipchase et al., 2012; Malfliet et al., 2018; Pardo et al., 2018).

Three clinical approaches often used within pain and mental health rehabilitation are: Basic Body Awareness Therapy (BBAT); Acceptance, Commitment Therapy, ACT and Pacing principles. BBAT is a Scandinavian developed body-mind physiotherapy method (Gyllensten et al., 2018). Studies find that BBAT has a positive effect on pain, stress, depression and physical function (Blaauwendraat et al., 2017; Bravo et al., 2018.; Stade et al., 2015). Pacing principles (Moseley & Butler, 2013, p.118-125) provide a guideline on how to economize strength and endurance by working and resting intermittently during daily activities and physical training, with the aim to stabilize and avoid pain, stress and fatigue outbursts. Both Pacing principles and BBAT exercises aim to decrease the need to use a fear-avoidance strategy and thereby enable a person to stay active in their daily life. ACT is an acceptance-based, action-oriented approach that originates from the third wave of cognitive behavioral therapies (CBT) (Dahl & Lundgren, 2006; Dahl et al., 2004). ACT has proven to have effect on pain, depression and anxiety (A-Tjak et al., 2015; Zhenggang et al., 2020). ACT focuses on the overall “here and now” condition and not the cause of the pain, anxiety or depression. ACT promotes the individual to plan, for them, meaningful and necessary activities despite their conditions. ACT, as BBAT, uses mindfulness and body awareness to facilitate, acceptance, resilience and self-reliance.

Method

Ethical Considerations

The study follows the World Medical Association´s (WMA) Declaration of Helsinki 1964, as updated most recently in 2013: International Ethical Guidelines for Biomedical Research Involving Human Subjects, including research on identifiable human material and data (WMA, 2013). DIGNITY - Danish Institute against Torture´s internal ethical committee provided approval for the treatment manual and the monitoring and evaluation (M&E) tool. At this stage of the feasibility study no further approval was applied for, since the content of the treatment has been part of clinical practices for the target group in Denmark for years, with no known negative outcomes. Informed consent forms were signed by both physiotherapists receiving training and patients receiving treatment.

Study Design

The study follows the new Medical Research

Council´s (MIC) guidelines for developing and testing complex interventions (Craig et al., 2008). The guideline contains IV phases; I: Development II: Piloting/Feasibility III: Evaluation and IV Implementation. This study represents a phase I and II trial of a complex intervention, applying a mixed method design.

Phase I: Development and configuration of the pain school treatment

DIGNITY initiated a capacity building program for physiotherapists working in non-governmental organizations (NGOs) in the MENA region. The purpose of the program was to provide training for physiotherapists who are treating trauma-affected patients that also suffer from persistent pain. The NGOs expressed an urgent need for new, cost-effective, and replicable ways to treat the large numbers of refugees and/or torture survivors, who continued to seek treatment for severe pain.

In collaboration, DIGNITY and the NGOs identified areas in which the physiotherapists needed to increase their competencies. It was observed that among the physiotherapists there was an overall biomedical understanding of pain conditions. Many were using manual and electrical techniques (i.e. TENS, ultra-sound) to treat pain while few used exercise therapy and patient education. Additionally, many also concentrated their treatment on relieving symptoms, and did not include concepts of empowerment, prevention or self-reliance as part of their treatment.

An already existing, not published, Danish Pain School treatment guide was manualized and adapted throughout the first half of a training program, using feedback from the physiotherapists in training to contextualize and include enough materials to support their clinical praxis when providing the Pain School treatment and to make the treatment replicable.

Population: The first group of trainees consisted of 12 physiotherapists (seven females, five males) of which 10 physiotherapists completed the program. The trainings, 4 x 5 days, took place in Amman, Jordan. The training was carried out in English, with the support from Arab and French interpreters. The physiotherapists worked in health clinics and in refugee camps, based in Tunisia, Morocco, Lebanon and Jordan. They had between one and 30 years of clinical experience, with the majority having 5-8 years of experience.

The training program was designed to give the physiotherapists clinical competences to apply the Pain School treatment for groups and individuals. The trainings consisted of lectures, group work, roleplay, physical exercise training and supervision. The program contained one written and one practical evaluation and a required a number of case-presentations during online supervisions between trainings. The evaluations were only used to ensure relevant support for the individual physiotherapist in areas they found difficult and to motivate for self-study.

Configuration of manual: The Pain School treatment manual aims to empower trauma and pain-affected patients to live meaningful and engaged lives, despite pain and trauma-related stress conditions. The treatment consists of 10 manualized sessions, containing three main components: 1) *Patient education* with the aim to increase the patient´s general understanding of physical and mental challenges and body-mind interaction, 2) *Physiotherapeutic exercises* to decrease fear-avoidance and increase basic body function and awareness, 3) *Active planning for behavioral changes* to decrease fear-avoidance strategies and enhance daily functioning, selfcare and self-reliance. The duration of each group session is 2 x 45-

minutes and 60 minutes for individual sessions. Each session is planned to contain an equal amount of time for all three components. The educational topics addressed in the manual are 1) Pain Mechanisms, 2) Pain and Stress, 3) Pain and Sleep, 4) Pain, activity and daily living (Table 1).

The patient education is presented, in a lay-person friendly manner with the aim to provide an understanding of pain mechanisms, stress and co-related challenges such as poor sleep and inactivity (Moseley & Butler, 2017). The physiotherapeutic exercises are inspired by BBAT (Gyllensten et al., 2018) and Pacing principles (Moseley & Butler 2013, p. 118-125). Through the calm and rhythmical movements, the exercises provide practice on how to economize strength and endurance by working and resting intermittently during daily activities and physical training, with the aim to stabilize and avoid pain, stress and fatigue outbursts. Principles from ACT are used to promote active planning for behavioral changes. In each session, the patients make plans for home practice and exercises between the sessions to integrate what they learn in their daily life. Metaphors and analogs are used to promote understanding of the topics addressed and self-reflection.

Phase 2: Feasibility Pilot-Study

The Pain School treatment was evaluated with a mixed-method analysis using quantitative analysis of the initial treatment effect and qualitative interviews with physiotherapists (receiving training and delivering the treatment). All participants complete standardized measures of mental and physical health

Table 1: Session content Pain School treatment manual

Session 1: INTRODUCTION	• Why are we here and what will we learn and explore? • Introduction to the treatment and structure of the sessions • Tryout the exercises and plan first home-exercise
Session 2 and 3: PAIN MECHANISMS	• What is acute pain? • What is persistent pain? • How can I understand, and should I react to acute and persistent pain?
Session 4 and 5: PAIN AND STRESS	• What is trauma-affected stress? • How does stress and anxiety affect how and when we feel pain? • What is catastrophizing?
Session 6 and 7: SLEEP AND PAIN	• Why do we need our sleep? • What can I do to improve my sleep? • What can I do to reduce pain and stress during sleep?
Session 8 and 9: ACTIVITY, DAILY LIVING AND PAIN	• How do I live with pain? • How do I balance my level of activity?
Session 10: REPETITION, EVALUATION AND WAY FORWARD	• Repetition of models used in the previous sessions and encouragement to self-care after finished treatment, according to the need of the clients

(described below) pre- and post-treatment.

Monitoring and evaluation tool for Pain School treatment: Pain severity and pain interference were assessed using the nine item, short-form version of the Brief Pain Inventory (BPI) (Cleeland & Ryan, 1994). Item 1 asks whether the person has experienced any pain over the past week. They are then presented with a two-dimensional representation of the human body (front and rear projections) and asked to shade in areas where they experience pain, making it possible to assess the total number of shaded areas. The next four items assess the worst, least, average, and current pain interference (0 = No Pain, 10 = Worst Pain Imaginable). Two items assess medication use and the degree of relief from pain when using the medication (0% = No relief, 100% = Complete relief). Item 9 asks the respondent to rate interference from pain (0 = No interference, 10 = Complete interference) in seven different areas of life (general activity, mood, mobility, work, relations with others, sleep, and enjoyment of life). Pain severity (four items) and pain interference (seven items) scores are the mean of the 0-10 ratings for their respective items. The BPI has been found to possess high levels of internal consistency for both pain severity and pain interference (Cronbach $\alpha = .85$ and .88), and to be valid for use in medical and psychiatric populations across cultures (Cleeland & Ryan, 1994; Tan et al., 2004; Turk et al., 2003). The internal reliability coefficients for the pain severity and pain interference scales in the current sample were Cronbach $\alpha = .91$ and .93.

Body awareness was assessed using the nine question Body Awareness Scale-Experience, (BAS-E) questionnaire_(Gyllensten, & Mattsson, 2011; Hedlund et al., 2016). BAS-E gives information about the patient´s own views on how the body is functioning in their daily life. Items focusing on 1) the experience of the body, 2) muscle tension, 3) pain and discomfort, 4) ability to perform daily activities, 5) exercise habits, 6) relationship to appearance, and 7) breathing, as well as 8) subjective belief in if the overall conditions can improve and 9) coping strategies in daily life. The scale ranges from 0-3, where 0 equals no problems and 3 equals extreme problems. Each question offers narrative answers on each

Table 2: Session-outline for session 2-10 (60 minutes or 2 x 45 minutes)
Starting the session (5-10 minutes)
Breathing and grounding exercise
Follow-up from last session (5-15 minutes)
Questions to be explored (See table 1)
Education and sharing on today’s topic (10-15 minutes)
BBAT inspired exercises (minimum 20 minutes)
Education and sharing on today’s topic (10-15 minutes)
Finishing the session (10/15 minutes)
Short plan for home practice (ACT and pacing principles are used)
Progressive muscle relaxation
If the session is carried out in 2 x 45 minutes a break is placed where it seems most relevant.

level (0-3), of which the patient chooses the answer that equals their subjective experience the best. BAS-E was developed as a part of the Body Awareness Scale Movement Quality and Experience (BAS MQ-E), that also contains a movement quality assessment and a qualitative interview about experience during movement. The movement quality assessment is not part of the Pain School assessment tool and therefore not included in this study. The BAS-E questionnaire has, as part of the BAS MQ-E, been validated for patients with musculoskeletal pain, schizophrenia, affective disorders, as well as for healthy adults. The interrater reliability and concurrent validity were found acceptable (Sundén et al., 2016). BAS MQ-E has also been found applicable and useful as a measure of bodily symptoms in patients with PTSD (Nyboe et al., 2016).

The English and Arabic translations of the BAS-E questionnaire were not validated. Translations were made by experienced translators in close collaboration with BBAT specialists in Denmark and Sweden and the first author. The questionnaire is widely used in rehabilitation centers treating Middle Eastern patients in Scandinavia but has not been culturally validated yet. Self-rated health was examined with the single-item question: "In general, would you say that your health is: excellent, very good, good, fair, or poor ?", on a five-point scale where 1 equals excellent and 5 equals poor. This question was included, because it has been established as a strong predictor of mortality and morbidity (Idler & Benyamini, 1997; Schnittker & Bacak, 2014).

Exposure to trauma and torture was examined with two questions; "Have you ever experienced traumatic war events?" and "Have you ever experienced torture?". The physiotherapists were instructed to obtain this information from the referring doctor, psychologist or medical journal and if this information was not available, to leave the question un-answered. If the physiotherapists were already trained to address these kinds of sensitive questions, they could also address it directly with the patient.

Statistical analyses: All analyses were conducted with a two-sided level of significance ($p<0.05$) and calculated in SPSS 25.0. Health status (pain, body awareness, coping and understanding bio-psychosocial influences on health) was compared pre- and post-treatment. Pearsons chi^2 was used to test gender-based differences in relation to experience of war and torture. Paired-samples t-tests were used to compare pain severity and pain interference, BAS-E indicators and self-rated health before and after treatment.

Qualitative interviews were conducted with seven physiotherapists, receiving training in the Pain School manual, in December 2019 and January 2020. It was attempted to achieve an equal distribution of participating NGOs and male and female respondents from the different countries (Jordan, Lebanon, Tunis).

Inclusion criteria for receiving Pain School treatment and for this study were; exposure to war trauma and/or torture, being above the age of 18 years, and referral to physiotherapy treatment due to pain complaints lasting more than 3 months. Exclusion criteria were severe psychological disorders (such as personality disorders or ongoing psychosis) or severe cognitive or mental impairment. No specific protocol for this assessment was made, since this was pre-assessed (data not available). Patients receiving less than six sessions of treatment were also excluded in this study. The reasons for dropouts were analyzed and found to be due to staff turnover during the project and patients lacking funds for transportation to and from treatment. These dropouts are not explored further in this study. The 38 patients included came from Jordan and Morocco.

Interviews thematic analyses: A semi-structured interview guide with 20 items related to "learning objectives," "working with a manual" and "evaluation of the training," was used. The interviews were carried out online, with interpreters present at three of the seven interviews.

All interviews were recorded and transcribed. Data was analyzed using thematic analysis (Skovdal & Cornish, 2015).

Results

Qualitative evaluation of treatment and pain school training program

The themes of the qualitative analysis from the interviews of the physiotherapists are given in the sections following below.

Theme 1. The bio-psychosocial understanding of pain: The physiotherapists expressed that they learned new ways to understand pain mechanisms and how any type of pain experience is always produced by the brain. It also provided them with a broader perspective on how to conceptualize pain. One said: "*The training has given me a new perspective to how environmental, social, physical and psychosocial factors can influence pain intensity"* Additionally, they mentioned that they became increasingly aware of the close linkage between stress and pain. For instance, one physiotherapist had a patient who constantly feared that the pain was caused by a serious condition.

The new knowledge helped the physiotherapist to address the constant fear as a stressor, and how that increases the severity of the pain. The biopsychosocial approach to physiotherapy and rehabilitation was new to most of the physiotherapists *"Usually, we just worked with the patient as a body."*

The increased focus on psychological aspects means that verbal and non-verbal communication play a greater role in the meeting between physiotherapist and patient when conducting the Pain School treatment. "*I have learned to better understand the language of the patient. Because the torture survivor does not always tell things, as they are, - so you have to look after other things, to better understand them."* A holistic view also encompasses noticing the body language of a patient. "*It is difficult for them (i.e. the patients) to tell you everything directly, so I have to interpret. Now I am looking at their behavior, body language and breathing."*

Theme 2. Group versus individual treatment: Most of the physiotherapists experienced the Pain School most effective, when provided in groups over individual treatment. Breaking isolation and engaging socially are some of the behavioral changes registered by the physiotherapists. Others explained that the patients opened up, shared thoughts and feelings and expressed relief in the meeting with others, who had the same symptoms and challenges. "*When I do Pain School in groups, I experience a greater focus on the interaction between the patients and feel that the focus on the persistent pain and stress condition are harder to sustain."*

Theme 3. Culture and context: According to the physiotherapists, patients start noticing relief from their pain after three to four sessions. This would convince the few patients, who were reluctant in the beginning, that the treatment could work. Reluctance towards the Pain School treatment was explained as cultural differences. "*Culturally, here in the Middle East, you expect a massage from the physiotherapist." "The majority liked the idea, others liked regular physiotherapy more.* " However, one physiotherapist explained that torture survivors did not like to be touched because of their bad experiences with authorities touching them violently and concluded that Pain School could be an alternative to more traditional methods. Encouraging behavioral changes, for a more active lifestyle, was difficult among patients who had been sedentary for many years. This was especially the case in Jordan where one of the physiotherapists explained that medical doctors in Jordan advised people just to go home and rest, which is contradictive to the Pain School approach.

Theme 4. Working "manualized" and data driven learning: It is well known among clinicians that working manualized can be challenging with patients that do not always feel, act or say what fits the format of a manual. Nevertheless, the interviews showed a mutual positive experience with the final version of the manual. "*In the beginning of the training I felt confused and it was difficult to know what to do in the different sessions, but now I find that the manual supports me, so I feel I know what I am doing and when.*"

Physiotherapists are used to working with functional tests and questionnaires. However, working with a structured standardized tool for monitoring and evaluation was new to most of them. Few found the monitoring and evaluation time-consuming, but most were motivated by it, as the improvements in patients' symptoms suddenly was measurable and detectable.

Theme 5. Participatory learning: From the combination of lectures, groupwork, roleplay, participants presentations, physical exercises and session practice, all the interviewed physiotherapists highlighted roleplay and practicing the sessions and the physical exercises, as the most supporting activities for their learning process. "*Practicing the sessions were my top priority… at the end I felt relaxed and confident with my group of patients because I had done it with the other physios (i.e. physiotherapists).*" It was also expressed that there was enough time to discuss, ask questions and share clinical experiences. Challenges in the learning process evolved from the interviews as well. *"At first I had an issue with the PTSD in the manual. The word itself, I understood, but it is not acceptable for these patients. I experienced that some got flashback the more I explained it. We talked about it in the training and so we changed the name."* Based on similar experiences among other physiotherapists, and because PTSD is not part of the Pain School treatment, it was decided to replace PTSD with "stress" related to present stressors and past traumatic experiences.

Theme 6. Supervision and evaluation of the participants: All physiotherapists were positive about the online supervision setup between the training sessions. It was stated that the supervision was a big help and it gave a sense of self-assessment to express clinical challenges. The practical and theoretical tests were well received by the physiotherapists. Most stated that it underlined the seriousness of the training, and that it forced them to study the manual in depth. Some expressed that the practical exam was more important and felt more confident in this compared to the theoretical test. A challenge expressed by some was poor internet connection and limited time for the supervision sessions, because of other project responsibilities.

Theme 7. Personal growth: All physiotherapists expressed that the body awareness exercise practice gave them tools for self-care and awareness of their own stability, sense of grounding and ability to detect and act on their own stress reactions. *"On a personal level it changed me because I became more aware. It changed my posture, my body awareness and self-awareness."* A conscious awareness of being a role model was also something that was mentioned as a personal growth "*We cannot convince others to believe or do something, if we don´t believe or do ourselves… I cannot talk about bad or good posture if I myself have a sedentary inactive lifestyle and bad posture.*" The opportunity to build new competencies and self-confidence was expressed by many as a result of the training as well as feeling a sense of added value to their career paths.

Theme 8. Clinical experiences and perceived treatment effects: When the physiotherapists were asked about the differences between regular physiotherapy and the Pain School treatment, a central theme arising was that the Pain School treatment resulted in independence from the physiotherapist. "*It is a more long-lasting strategy. Patients I have seen for two or three years, suddenly don't need physiotherapy anymore.*" Through patient education, *"They know where their pain comes from, how stress affects the pain and they know how to deal with it."* Another physiotherapist expressed that, *"Until now, no one came back after the last session. This is very good, because I have seen these patients for one year, where they kept coming back for more."*

Compared to previous approaches to treating persistent pain conditions, the difference was seen as a combination of achieved knowledge on the interaction between stress and pain, in particular caused by effective exercises and tools they can use at home. It was emphasized that the provided tools improved the patients sleep and helped them to manage everyday activities. "*At the pre-assessment the patient wouldn't even initiate to fix things around his house, but at the post-assessment the patient said that he not only tried to fix things, but he actually succeeded in fixing things around the house.*"

The physiotherapists stressed that the body awareness exercises, and the use of metaphors in pain education had the biggest impact on patients. A complex pain theory was taken to a level where everybody could understand it through metaphors developed to the cultural context of the patients' lives. The exercises were simple, but effective, and therefore easy to implement. "*The body awareness exercises are my favorite, because the patients end up being more conscious about their feelings, of their bodies, their position, how they sit, how they walk.*" Practicing body awareness and using pacing principles to plan daily living, supports the patients with interpreting signals from the body and thereby being able to take better care of themselves, to to be active, prevent both de-conditioning and flareups of pain and stress. "*I give them exercises and tell them about pacing and graded exercises to ensure that the concept is clear to them.*

Patients that did not seem to benefit from the treatment were also mentioned. One phys-

Table 3. Distribution of socio-demographic data among patients.

	(n= 38)	**%**
Gender		
Male	10	(26.3)
Female	28	(73.7)
Age categories		
16-25	1	(2.6)
26-35	6	(15.8)
36-45	14	(36.8)
46-55	7	(18.4)
56-65	3	(7.9)
66-75	6	(15.8)
Missing	1	(2.6)
Nationality		
Iraqi	4	(10.5)
Syrian	16	(42.1)
Sudanese	3	(7.9)
Moroccan	11	(28.9)
Other	1	(2.6)
Missing	3	(7.9)
Marital status		
Single	3	(7.9)
Engaged	1	(2.6)
Married	28	(73.7)
Divorced	2	(5.3)
Widow(er)	4	(10.5)

iotherapist working in a refugee camp shared, "*Not that she* (patient) *did not want to act* (be active in the treatment sessions and at home), *but she had other problems, she does not have money or a proper home….She got better, but not like the others.*"

Quantitative Evaluation
Most patients included in this study were refugees who received physiotherapy Pain School treatment in Jordan (71.1%), whereas 28.9% were local citizens receiving treatment in Morocco (Table 3). On average, patients in this study received 9.92 treatment sessions (SD: 1.7, range 6-15) with a duration of 7.97 weeks (SD: 5.4 range 1-19). 15 patients (39.5 %) were treated in refugee camps, while 23 (60.5 %) received Pain School in an out-patient clinic. 28 (73.7.%) received individual treatment while the remaining received group-based treatment. In one case it was not indicated whether the treatment was individual, or group based. Referral to either individual or group was solely pragmatically on what was possible in each context and was not due to a clinical evaluation. No negative results from treatment were reported.

Within this sample the vast majority had experienced traumatic war events, as only one person answered "no" and one "not at all" to the question *"Have you ever experienced traumatic war events.*" One patient did not answer the question. Nearly half (47.4%) had been directly exposed to torture. Pearsons X^{2}-test showed a statistically significant difference (p=0.002) between genders in relation to torture, as approximately one third of the women (32.1%), while all men, except one missing, reported that they had experienced torture.

A burdened target group: The mean score for self-rated health was 3.95 indicating a poor self-rated health. Many felt pain on numerous areas of the body. Out of 45 options, patients felt pain in 11.95 areas on average. On a scale from 1-10, where 10 equals the worst pain one can imagine, the average of the perceived severity of pain was 6.51. The pain interference level was also high with a mean score at 7.02 on a scale from 1-10. In addition to participating in the Pain School treatment, 76.3% reported receiving other types of treatment at the pre-treatment assessment and post-treatment 47%. Other treatment was mainly different types of pain relief medications. No further information to explore the reason or specifics on this was available.

Table 4 show statistical low to moderate significant changes on all parameters, with high effect sizes, ranging from d=1.04 to d=2.38.

Table 5 also shows statistically significant changes pre- to post-treatment for all scales on the BAS-E, except experience of breathing, with low to moderate effect sizes ranging from d=1.1 to d=2.2, except for satisfaction with looks (d=.43).

Patients' learning and coping outcomes: To be able to benefit from Pain School, it is crucial to understand the main elements of the treatment approach. 65.8% of the patients fully believed they could influence the intensity of their pain by planning their daily activities after the Pain School treatment compared to 18.4 % before treatment (responses "completely true"). Likewise, 55.3 % fully believed that they could influence their experience of stress by planning their daily activities compared to 13.2 % before treatment.

Perceptions of medicine as the only method to pain relief had changed considerably during the course of treatment, as 84.2% replied "not true at all", compared to 18.4% before Pain School.

Having resignedly negative thoughts about the prospects of one's pain condition improved markedly after Pain School treatment, as 81.6% replied "not true at all" to the statement that "My pain is terrible and I think it's never going to get better," post-treatment, compared to 21.1% pre-treatment

Discussion

The qualitative interviews with the physiotherapists showed predominately positive attitudes towards both Pain School, as a treatment, as well as the training program. This matches the experience of the trainers, even though the first half of the training period seemed objectively confusing for most of the physiotherapists. Some challenges can be condensed from the interviews. Finding the time for supervision and having internet connections, especially when working in the refugee camps in Jordan was hard. Addressing mental health challenges, such as PTSD, was also new and overwhelming and therefore the manual was adjusted accordingly. One physiotherapist mentioned that "*The word [PTSD] itself, I understood, but it is not acceptable for these patients.*" Whether the physiotherapist was referring to PTSD as a label for the trauma reaction or for risking flashback reactions is not clear, but nevertheless it is very important to address in future trainings. The clinical reality in which the implementation of the Pain School treatment took place did not allow for diagnostic assessment, due to lack of economic resources

Table 4. Paired T-tests comparing Pre- and Post-treatment on BPI, Body Awareness and Self Rated Health

	PRE Mean (SD)	**POST Mean (SD)**	**p-value**	**Cohen's d**
Pain severity	6.51 (1.53)	2.41 (1.89)	<0.001**	2.38
Pain interference	7.02 (1.79)	2.64 (2.31)	<0.001**	2.12
Body awareness	1.78 (0.71)	0.89 (0.70)	<0.001**	1.26
Self-rated health	3.95 (0.96)	2.87 (1.12)	<0.001**	1.04
Number of painful body areas	11.95 (6.67)	4.76 (4.00)	<0.001**	1.31

Table 5. Paired T-test comparing Pre- and Post-treatment on BAS-E

	PRE Mean (SD)	**POST Mean (SD)**	**p-value**	**Cohen's d**
Muscle tension	2.32 (0.57)	1.03 (0.59)	<0.001**	2.22
Pain or aching	2.05 (0.57)	1.08 (0.67)	<0.001**	1.56
Day to day limitations	1.95 (0.70)	1.05 (0.66)	<0.001**	1.32
Exercise	1.78 (0.82)	0.89 (0.77)	<0.001**	1.12
Satisfaction with looks	0.79 (0.88)	0.45 (0.69)	=0.003*	0.43
Experience of breathing	1.18 (1.04)	0.89 (0.65)	=0.086	-

and clinical know-how. Nevertheless, indicators of mental health conditions should be added to the M&E tool.

Not having a final manual to follow from the beginning and having to learn and integrate both exercise therapy and education into their treatments seemed, for many, overwhelming. The discussions and feedback during this period contributed to a manual that, to the greatest extent possible, reflected the needs of the context in the given program.

The physiotherapists found the online supervisions supportive, which also gave the trainer a chance to evaluate the clinical reasoning and implementation challenges. Even so, an offer on in-person supervision would have given a clearer idea of how the Pain School manual was used and how replicable the treatment is. Pragmatically at this phase, this was not possible, but this should be considered in the next phase.

The qualitative analysis also indicated that the training on a biopsychosocial understanding of pain, was not part of the standard educational physiotherapy programs in the Middle East that the physiotherapists had undertaken. This, and basic knowledge on trauma-related mental health conditions, should continuously be addressed when providing future trainings for physiotherapists in this region. Also, physiotherapy literature in Arabic was described as almost non-existant. The students are, in most cases, referred to medical or English and French written literature. A language barrier was described. Recently published teaching materials *"Beyond Pain,"* an evidence-based pain science and assessment in Kurdish and Arabic (Gamble, 2020), and a 2014 praxis paper *"Interventions for physiotherapist working with torture survivors"* (Nielsen, 2014) in Arabic and French, are relevant contributions.

This study showed no clear indications on whether the Pain School treatment provided for individuals or groups had different effects. This has to be further investigated in the next phase of the research.

It was neither a priority, nor a possibility in this study, to isolate the patients from other types of treatments. This could be solved in the future with a control group given treatment "as usual." It would also be beneficial if the Pain School treatment were to be tested in combination with a psychotherapeutically PTSD-focused intervention, such as prolonged exposure, narrative exposure therapy, or EMDR, as long as such intervention would be ACT-compatible. The BAS-E measurement was also not validated for this population and this should be done in the future.

Limitations

A limitation in this study is that the interviews were planned, carried out and analyzed by two of the authors. One was also the trainer and the developer of the Pain School manual and a second having developed the M&E tool. This could have influenced the physiotherapists towards a more positive attitude to both treatment and training and the authors ability to recognize answers from each respondent. Further, interviews with patients would have strengthened the study outcomes and must be included in the next phase of study.

The effect of treatment should be reviewed with caution since no control group was used .

The Pain School protocol, the selected evaluation-scales and particularly the MENA sample, makes it very hard to compare outcomes to previous studies since very few similar studies have been carried out. Also, depression, anxiety or PTSD were not measured in this study, making it unclear whether the patients were, in fact, trauma-affected from their experience of war and-or torture.

Conclusion

This study showed good feasibility and high acceptance among the participating physiotherapists. Monitoring and evaluation of treatment was found useful, but indications of mental health status were evaluated to be missing. The pre- to post- treatment evaluation of Pain School also gave an indication of positive treatment effects. Due to the limitations, the results do not provide a final conclusion on the training program nor treatment effects. Nevertheless, this study is a first step to offer evidence-based standardized treatment for pain and trauma-affected populations in the MENAregion.

Phase III and IV: Evaluation and Implementation

Based on the results of this paper, a future phase III is planned, in addition to collecting data in a larger sample, to include: 1) Identification of socio-demographics that might show predictors in treatment outcome and if the treatment response differs when it is delivered individually or in a group 2) Add mental health-related outcomes indicating measures on trauma and persistent pain, such as PTSD, anxiety and depression. 3) Evaluate patients' subjective treatment effects and tolerability through interviews. 4) Further review and enhance the treatment manual. 5) Compare Pain School treatment with a control group receiving treatment as usual. 6) Conduct a baseline study assessing the prevalence of coexisting persistent pain and post-traumatic stress conditions in refugee populations in the MENA region.

Phase III should contain trainings of an additional two groups of physiotherapists in the region, with participants from Tunisia, Jordan, Kurdistan Iraq and Iraq. Data collection on treatment effects will be gathered in 2021 with an expected larger sample size. The 2021 trainings will, expectedly, be conducted in Arabic and Kurdish Sorani, by local physiotherapists.

Phase IV is planned to contain final evaluation and implementation in the MENA region. An additional ambition in the implementation phase is also to explore collaborations with physiotherapy faculties in the MENA region. This will secure sustainability for future trainings in the region and further contextualization.

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Collaborative effort to increase the physiotherapist's competence in rehabilitation of survivors of torture

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Dear Editor

Thank you for this opportunity to share perspectives from our work within the Physiotherapy and Refugees Education Project, PREP, an Erasmus+ funded project within the KA2 strategic partnership program. Researchers, educators, students, and clinicians within institutions of higher education, health services and humanitarian organisations, have worked together in this project to define competencies that physiotherapists need in working with refugees. Based on this, we have made a course openly available for physiotherapists worldwide. A central aim of the work in PREP has been the creation of a network in which educators, students and clinicians can meet, discuss, and learn from each other. We welcome everyone who shares our interest to join us in this network. In this perspective paper, we want to share our thoughts and opinions on how such a collaboration can be used for building competence. We will discuss topics that are central for physiotherapists working with victims of torture, and finally, we will discuss what we believe are the important next steps within physiotherapy to be able to support this group.

Collaboration for competence building

The PREP project (PREP, 2018) started with an important acknowledgment; in order to support physiotherapists who work with refugees, we needed to gather and combine experiences and expertise outside the initial project group consisting of educational institutions and the mainstream health care system. Equity in health is a challenge, and there are several groups within our society that do not receive the health care service that they need and to which they are entitled. Refugees

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constitute one of these groups. Humanitarian organisations play important roles in supporting these populations, although it in many cases should be the role of the official health care system. To manage to reduce inequality in health care, educational institutions have a responsibility to educate candidates who have the competence to work inclusively. Educational institutions can also provide learning spaces where health professions and organisations can learn and work out effective ways of solving complex problems. In this way, a sound knowledge frame concerning needed competences for physiotherapists could be described and implemented.

During our work, we have seen that health consequences of torture and rehabilitation strategies for survivors of torture are topics that are not sufficiently addressed in physiotherapy curricula (McGowan et al., 2020). This is despite the World Physiotherapy's Torture Policy statement: The curriculum for professional physical therapist entry level and continuing professional development programmes should include principles for the treatment of vulnerable populations including those with physical and psychological effects of torture" (WP, 2011); One can only speculate about the reasons for the lack of coverage of this topic. There might be a lack of awareness of the problem and academic staff might not have experience or relevant knowledge. Further, a well-defined and accepted description of physiotherapeutic rehabilitation for survivors of torture is, so far, missing. In many countries, torture might not have been considered relevant for physiotherapists, and in an educational program which is already full, this topic has been left out. We therefore see the need of raising awareness about this topic and to create networks for collaboration within educational and health sectors to better meet this competence need.

For educational institutions, humanitarian organisations, and local practice fields, engaging in a project like PREP is a strategic decision. Such collaborations can provide educational institutions with valuable experience and up-to-date information on the competences that are needed. Humanitarian organisations have identified the need to train their health professionals specifically in this field, and they have asked for more focus on this during education. Collaboration enables future research areas in migration health, rehabilitation, and physiotherapy (Blessinger, 2019). Partnerships like this are therefore not just of benefit, but are essential to provide equity in health care.

To accomplish a close collaboration, the PREP Content Development Project was established as a route to engage various stakeholders in communicating needs and sharing knowledge in relation to physiotherapy and refugee health (Physiopedia, 2020). The Content Development Project is hosted online on a neutral and openly accessible platform. This collaborative content creation has proved to be inclusive of many sectors, demographics and needs. It also serves to create a space where stakeholders feel comfortable to share knowledge. In this project, physiotherapists worldwide have contributed to content for the course.

Physiotherapy in rehabilitation of victims of torture

Physiotherapy is one of several different approaches for working with survivors of torture, and within physiotherapy there is a variety of perspectives and views on what physiotherapy interventions should, or could be, in this context. As a consortium, we want to raise awareness of five closely related aspects of physiotherapy practice that we argue are important for physiotherapists working with survivors of torture.

These are: *trauma-sensitive care*; *body awareness and empowerment*; *pain management*; *advocacy and self-care for the physiotherapist.*

Trauma-sensitive care

Physiotherapists are trained to work with various forms of trauma, and trauma-sensitive care is an important part of working with refugees and torture survivors. Trauma-sensitive care is not considered a method but a way of understanding a health situation and complex health needs. This includes an understanding of what is at risk for the individual. As part of trauma- sensitive care, trauma-focused therapies can play an important role. Integrated health care strategies directed at the psychological and physical health, as well as rigorous control of risk factors, are likely to improve the quality of life of traumatised refugees (Bath, 2008; Reeves, 2015).

Body awareness and empowerment

Physiotherapists work according to a view that the human being is an indivisible entity. The "body and mind approach" recognizes that physical and psychological dysfunction is a response of the whole individual. This includes body structures, emotions, previous experiences, beliefs and thoughts within their unique social, cultural and environmental context (WP, 2011). Torture and trauma results in alterations of the body ego or body awareness of an individual. Loss of body awareness means loss of the ability to recognize physical experiences or sensations, to understand needs and emotions. This can lead to an inability to trust the body, and to develop a negative body image, dissatisfaction with the body and mistrust in activity performance. One important part of recovery is to learn how to use movements to deal with, or regulate, a conflicting inner state (Nilsson et al., 2019; Nyboe et al., 2017; Stade et al., 2015; Thornquist & Bunkan, 1991). The role of the physiotherapist is to help their patients to use and develop their movement potential. In this way, they help the patient to gain trust in the body. This can be done using a variety of strategies and treatment methods adjusted to individual needs. The key point is to guide clients to gain insights into how sensations, feelings and images from traumatic experiences are interrelated and affect the body. Empowerment should be one of the main goals of rehabilitation.

Pain management

Physiotherapists are equipped with a toolbox for working with pain. Pain is a frequent result of torture and is commonly connected to psychological discomfort (Thomsen et al., 2000; Williams et al., 2010). There is not one single method available that can address the pain and discomfort that can be experienced by persons with a traumatic background. A broad and contextual understanding of concepts of pain are therefore paramount (Gamble et al., 2020). The aim must be to create opportunities to change for the better, which might require additional measures and use of a more holistic approach.

An important element of treating pain in the rehabilitation of victims of torture is to be able to acknowledge the individual as a person; someone that has suffered something that is illegal under international law and a violation of their human rights. For individuals who experience such violations, it can have negative impact on education, work, family life, relationships, and activity of any kind. In addition, the person must suffer the consequences, while the perpetrators will, in many cases, go unpunished. This adds to the burden. The physiotherapist needs to appear as a fellow human and build a relationship of trust in which shame and guilt is not a part. This requires presence, time, and capacity and willingness to listen, and means accepting that improvements may not be visible from one session to the next.

Advocacy

Advocacy within physiotherapy is defined as, "responsibly using physiotherapy knowledge and expertise to promote the health and well-being of individual patients, communities, populations, and the profession." It has been recognised as a key component of physiotherapy but is still not well incorporated into physiotherapy education or practice (Bessette et al., 2020; Kelland et al., 2014). Physiotherapists can advocate for the rights of refugees and asylum seekers on issues such as access to health care, freedom to work or provision of housing. They can also help refugees to advocate for themselves to obtain resources and support, particularly in relation to issues that may impact their health and well-being. Refugees can face many challenges accessing health services in their host countries. Difficulties in communication, stereotyping, cultural issues, and challenges in understanding how to navigate foreign health systems, are all factors that affect the accessibility of health care. In addition, many are unaware of the services available or how to access specific services (e.g. rehabilitation). Therefore, a key role of physiotherapists should be to assist refugees to understand the organisation of the health care system, the nature of therapies available and how resources are funded (Brzoska & Razum, 2017; Khan & Amatya, 2017; Lindsay et al., 2012; Razavi et al., 2011).

Survivors of torture may need to access a range of services and professionals. The trust built through the therapeutic alliance places the physiotherapist as an ideal advocate to assist them to access the services they need. With the heavy demands placed on health professionals, the role of health advocates can be lost among competing responsibilities (Flynn & Verma, 2008; Kelland et al., 2014; Khan & Amatya, 2017) . However, physiotherapists who are working with refugees and survivors of torture should develop their competence as advocates so that they can effectively use their professional expertise, knowledge of the health system and network of connections to help address the health concerns specific to these populations.

Self-care for the physiotherapists

Exposure to unknown experiences affects us all in different ways. Meeting the "ugly face of torture" can be a difficult experience. Therefore, the health and well-being of health care providers should be considered. Having professional or peer counselling is important for the physiotherapist to not have to carry the burden of their clients' testimonies alone. Working with traumatised persons affects the health care professional to various degrees. It can rock the very foundation of what is perceived as human, and it can leave the health care professional feeling powerless and unable to help. What happens between the therapist and the patient during therapy sessions might take different roads. A relationship of trust might develop; a professional relationship where compassion can be a natural part. To discuss the nature of this relationship and look past the setting of the "helper" and the "receiver," and even challenge the term "patient," as it can contribute to manifest the superiority of the health care giver, would give these topics the attention they deserve. Openness to this discussion can help the therapists dealing with difficult and complex human experiences.

Next steps: towards better support of survivors of torture with physiotherapy

PREP has made an openly available, digital course that is a resource for educational institutions, humanitarian organisations, and individual physiotherapists. The material covers the five key points for physiotherapy rehabilitation we have presented here. Participating organisations and other interested stakeholders can use it as a stand-alone course or integrate it in other programs they offer. The PREP network can advise on implementation.

We strongly argue for an update of entry-level physiotherapy curricula to meet the competency needed for working with rehabilitation of victims of torture. At the very least, it should be capable of building competence in recognising the health consequences torture might have. Deeper insight into this topic could be included in master programs or free-standing courses. By connecting several sectors and using the engagement that exists in such student groups, we hope that we can raise awareness and support physiotherapists in building the necessary competences to further develop this field, and to advocate a broader perspective on health and health care services.

Conclusion

Rehabilitation of survivors of torture is a complex field in which physiotherapists have a natural role. There is, however, a lack of an overarching understanding concerning required competencies for physiotherapists and health care professionals providing health services for torture survivors. We have shared what we consider are key elements for physiotherapists in this regard, and we suggest continuing along the pathway begun in PREP. Building upon the PREP work, a more detailed competence framework may be created for physiotherapy for survivors of torture. We suggest a future focus on three important steps that can be implemented simultaneously: 1) Further explore the experiences, challenges and successful rehabilitation strategies for refugees and survivors of torture. 2) Implementation into programs and curricula at educational institutions. 3) Continuation of the dialogue and co-creation between multiple organisations, institutions, and most of all survivors of torture, to ensure ongoing development.

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Violence and torture against migrants and refugees attempting to reach the European Union through the Western Balkans

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Key points of interest

- Migrants and refugees during their transit through Europe are submitted to situations of ill-treatment and torture that add to the burden of the torture suffered in their country of origin.

Abstract

Introduction: The number of people being forcefully displaced is increasing and militarized border enforcement efforts have made migration a dangerous endeavour. The European Union is externalizing its borders, but migrants and refugees have not ceased arriving in Western societies despite facing violence and torture both throughout their journey, and at the gates of Europe. *Method*: 54 participants were assessed, 51 males and 3 females, 26 were self-declared economic migrants and 28 stated that they fled due to political or religious persecution. The Iraqi version of the *Harvard Trauma Questionnaire* (HTQ) was adapted to collect traumatic and torture stressors experienced by the migrants/refugees during their stay in Western Bosnia, and more specifically during their detention and *refoulement* (push-backs) when attempting to cross the border between Bosnia-Herzegovina and Croatia. *Results*: 98.14% reported experiencing multiple forms of torture, 81.5% reported having their property looted, and 70.4% stated that they had been physically harmed during migratory transit. 50% of participants fulfilled the criteria for post-traumatic stress disorder (PTSD) due to the cumulative effect of traumatic experiences. Differences were found only in the amount of traumatic experiences between economic migrants and refugees who fled for political or religious reasons. No differences were found in torture experiences and PTSD diagnosis. *Conclusions:* Violence perpetrated by security forces against migrants is crystallized at the border-zones. Migrants are held in conditions that would amount by themselves to torture. Traumatic experiences have an effect on migrants/refugees' mental health and can trigger the development of post-traumatic stress disorder. Guaranteeing human rights for migrants/refugees throughout their journey is needed.

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Introduction

Increased coverage of the harmful effects of displacement and related violence experienced during migrants' journeys to host countries has begun to shine a light on the vulnerability they suffer both along the trip and at the border crossing (Arsenijević et al., 2017; Crepet et al., 2017; Farhat et al., 2018; Infante et al., 2012; Koning, 2019). Some have experienced beatings, sexual violence, torture and forced detention. As Pérez-Sales (2018) points out, there is significant evidence of migrants' torture in their home country, during the migration process, during the asylum process and in humanitarian protection. During the migration process, kidnapping, extortion, trafficking, human rights violations and detentions at borders are frequent. However, some of these incidences are difficult to detect (Silva et al., 2018). The perpetrators are often smugglers, police/border agents and other migrants. During the asylum process, many other human rights violations may take place (Pérez-Sales, 2018), such as lack of access to the legal and healthcare system, detentions, delays in procedures, inappropriate interview processes and credibility assessments of allegations.

Examples of human rights violations against migrants can be found around the world, for example at the border between the United States and Mexico (Infante et al., 2012), in Libya (Beşer & Elfeitori, 2018; Reques et al., 2019) or in Niger (Veronese, Pepe, & Vigliaroni, 2019).

In Europe, there are actors who oppose inward migration, often presenting it as a threat to the nation state. Accordingly, coverage of the so-called "migrant crisis" has been criticized for attaching negative connotations to the terms *migrant* and *refugee,* rather than focusing on countries' management of the migratory phenomena (Karamanidou, 2016). Farhat et al. (2018) examined 728 Syrian refugees' experiences of violence during their journey, finding that, whilst they were in Greece, the main type of violence that refugees were subjected to was beatings, which were perpetrated by police in both Greece (33.3-82.3%) and Turkey (7.8-59.3%). Along the migratory journey, migrants/refugees experience new potentially traumatic events that add to already harmful experiences prior to departing the country of origin. In Italy, Crepet et al. (2017) found that a large percentage of recently arrived migrants/refugees (89%) experienced traumatic events along their journey. The most frequent events experienced were finding themselves in a situation of combat or at risk of death (29%), detention/kidnapping (24%) and kidnapping/torture (11%).

Arsenijević et al. (2017) denounced a lack of protection for migrants/refugees crossing through Serbia. One out of three interviewees experienced a violent event perpetrated by state authorities. Systematic violence at the EU's external borders is a primary method of "gatekeeping" in international protection and aiding collective expulsion (Border Violence Monitoring Network, 2020). Despite the fact that the Central Mediterranean route remains the dominant path for migrants into Europe, there are also land routes on which migrants/refugees continue the trip on foot or by motor vehicle (El-Shaarawi & Razsa, 2019). The country of origin and the characteristics of the route determine the typology of violence migrants experience during transit. For instance, the Balkan corridor is now an established alternative to the Mediterranean Sea but in itself, it remains replete with its own dangers and risks for migrants.

Violent deterrence is not exclusively perpetrated throughout Europe; it also seems to be a wide buffering strategy to discourage migrants and refugees globally. In addition, second-country hosts are becoming less receptive, or even hostile, toward displaced persons (Holmes & Casteñada, 2016).

Psychological effects of violence on migrants and refugees

Several studies have reported the effects of exposure to war and political violence on the civilian population in different countries. Steel et al.'s (2009) meta-analysis of 161 articles (181 surveys) reported rates of 30.6% for PTSD and 30.8% for depression. The variability observed across the different studies is due to a type of numerous factors, such as torture, number of and cumulative exposure to potentially traumatic events, time since conflict, residency status and assessed level of political terror (Steel et al., 2009).

Following the definition of torture by the United Nations Convention against Torture (UNCAT, 1984), the present paper examines violent and torture events as experienced by economic migrants and refugees during their period of transit and detention on the EU´s borders between Croatia and Bosnia-Herzegovina. It also shows traumatic events as experienced by migrants during the migratory journey, in their home country and its impact on mental health as PTSD.

Current situation at the border crossing between Bosnia-Herzegovina and Croatia

Until relatively recently, Bosnia-Herzegovina was outside of any established migration route. Since 2015, however, with Hungary and Slovenia fortifying its borders, the so-called "Balkans route" emerged as one of the steps before arriving in the EU (Amnesty International, 2019; Meçe, 2018). From January 2018 to December 2019, 53263 refugees/migrants arrived in Bosnia-Herzegovina - over 2200 per month. Most of them were located in Sarajevo and close to the Western Croatian border (UNHCR, 2020).

Bosnia-Herzegovina stands out as a transit country; migrants/refugees have reported that they intend to settle in other destination countries such as Italy (27%), France (18%), Germany (14%) and others (41%) (IOM, 2020). Limited capacity and resources, along with the political stalemate and institutional dysfunction that has paralyzed the country since the end of the war in 1995, mean that Bosnia-Herzegovina has been ill-prepared to provide neither adequate protection nor living conditions for migrants (Amnesty International 2019). In addition, the locations that house migrants frequently contain a concentration of violence based on conditions of pervasive insecurity, the quantification of which is almost impossible to manage. Given this, by virtue of the complexity and volatility of the patterns of mobility as well as the diversity of experiences and itineraries of those who have arrived at the border, the situation at the border between Croatia and Bosnian-Herzegovina represents an auspicious place for research into how migrants are subjected to violence or bodily trauma when attempting to enter EU. During 2019, the Border Violence Monitoring Network (2020) recorded 3,251 pushbacks from Croatia to Bosnia-Herzegovina, and from Greece to Turkey. Moreover, there is little quantitative documentation of the prevalence of violence among these migrants, their experiences on the border, their period of transit or time spend in detention centres.

In the present project, the initial goals were to evaluate the traumatic and torture events suffered by the migrants/refugees, and consequently the presence of PTSD. However, throughout observation in the field, a large number of people were detected being pushed back illegally to Bosnia-Herzegovina from Croatia. They usually returned wounded and without their property (mobile phones, money and other items such as bags, glasses and clothes). In their own words, when this occurred, they had “lost the game.” The research goals were therefore adapted, focusing on the violence and inhuman and degrading treatment they experienced along the aforementioned border. To achieve this, we focused on the towns of Bihać and Velika Kladuša, two points on the Western Balkan route. This path extends from Turkey to Greece, passing through the former Yugoslav States and Hungary (Milan, 2019). Located on the border with Croatia in the northwest of Bosnia-Herzegovina, both towns had become a temporary refuge for between 5000 and 5500 migrants fleeing conflict, persecution and poverty (Amnesty International, 2019). In both these locations, there were institutional barracks that host migrants. However, not all migrants could access suitable accommodation due to overcrowding and restricted access to various services.

Method

Participants

Fifty-four participants were assessed, 51 males (94.4%) and 3 females, of ages ranging between 17 and 41 years (M = 26.15; SD = 4.72). They were recruited in two ways: (1) referrals from local NGOs and (2) snowball as chain referrals by migrants living in Bihać and Velika Kladuša. The sample was obtained by asking members of the migrant population if they would take part freely in the research, as an opportunistic sample. All were deemed irregular migrants/refugees and were considered “on the move” as they were in transit in Bihać and Velika Kladuša (Bosnia-Herzegovina) and waiting to travel further into EU, regardless of the official political status afforded to them. These two towns are two “hot spots” in the Western Balkan route, due to the number of violent pushbacks (unofficial deportations) that take place there.

In this study, the number of pushbacks considered as illegal deportations from Croatia to Bosnia-Herzegovina was understood as the number of attempts to cross the border; in their own words, the number of times they had “lost the game.” Finally, it deserves to be mentioned that all migrants/refugees from the North of Africa had chosen the Balkan route in order to avoid crossing the Mediterranean Sea.

Instruments and procedure

The Arabic version of the *Harvard Trauma Questionnaire* (henceforth HTQ) adapted for the Iraqi population (Shoeb, Weinstein, & Mollica, 2007) and a questionnaire specifically designed for this study were applied. The study includes those stressors that migrants/refugees suffered in their home country, during other stages of their journey or perpetrated by other migrants or human smugglers. Consequently, the main body of this research focuses on the presence of traumatic events perpetrated on the external EU borders.

For the purposes of this research, we used the thirty-five binary “yes/no” questions from the torture section of the HTQ; for example, “Were you exposed to dirty conditions leading to ill health?” or “Were you humiliated and threatened?”

The fourth section of the HTQ measures the symptoms of trauma and is composed of 44 items that evaluate the severity or intensity of the symptoms on a 4-point Likert-type scale (1 = not at all, 2 = a little, 3 = quite a bit, 4 = extremely). The first 16 items aim to measure PTSD symptoms according to Diagnostic and Statistical Manual of Mental Disorders (4th ed.; DSM-IV; American Psychiatric Association, 1994) criteria, with a threshold of 2.5 or higher. The other 28 items quantify what the authors name "refugee specific," which evaluates the impact that the traumatic events could have had on their perception of their own daily life. The Cronbach's alpha of the section in this sample was .939 and inter-item correlation was .253.

Also, an adapted clinical questionnaire was used as it permitted for the collection of sociodemographic characteristics (age, marital status etc.); cause of the migration or length of the migratory journey.

Questionnaires were completed orally with a trauma psychologist completing the questionnaire in line with the respondent's answers. However, for the open questions interviewees also had the possibility of writing the answer in Arabic or another language. The interviews were conducted in English and individually. In addition, the questionnaires were written both in English and in Arabic, so the participants could also read the questions in both languages.

Table 1. Socio-demographic characteristics of migrants/refugees to survey (*N* = 54).

		N	**%**
Origin	Algerian	21	38.9
	Moroccan	10	18.5
	Iraqi	8	14.8
	Syrian	8	14.8
	Palestinian	2	3.7
	Tunisian	2	3.7
	Lybian	1	1.9
	Pakistan	1	1.9
	Western Sahara	1	1.9
Sex	Male	51	94.4
	Female	3	5.6
Age Category (Years)	18-25	29	53.7
	26-34	22	40.7
	≥ 35	3	5.5
Marital Status	Single	47	87
	Married	5	9.3
	Divorced	2	3.7
Progeny	Yes	6	11.1
	No	48	88.9
Reason of migration	Better life	26	48.1
	Political/religious persecution and war	28	51.9

The strategy was to have a flexible and dynamic approach to participant recruitment that took into consideration the ever-changing migration context in the region. Interviews were conducted between July and August 2019. As such, we spent time at NGOs, self-organised migrant camps and urban parks. It was here where migrants gathered to regroup or to share information.

Ethical aspects

This study is part of a larger research project which assesses the psychological needs of refugees and asylum seekers. It was approved by the Ethics Committee of Complutense University of Madrid (Spain), and declared of interest to the United Nations High Commissioner for Refugee (UNHCR) and the United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA).

Like other studies with migrant populations (Ibrahim & Hassan, 2017) and for cultural and security reasons, informed consent was obtained verbally. As such, there were no exclusions based on gender or ethnicity.

Results

The socio-demographic characteristics and referral sources of the 54 migrants/refugees are shown in Table 1. All of the interviewees were waiting for the opportunity to cross the border from Bosnia-Herzegovina into Croatia to get into the EU Schengen open border area and further into Europe. Nearly all the data collection was conducted in Velika Kladuša and the vast majority of the migrants/refugees were men and under 35 years old. Most interviewees were single and none of them travelled with dependent children. Participants in this research came mainly from countries in the Middle East and North Africa. Slightly over half of the refugees/migrants cited political and religious persecution as the motivating factors when deciding to leave their home country. As such, according to international law regarding the rights of refugees, they should have had the right to apply for asylum (UNHCR, 2019).

The largest declared country of origin was Algeria (38.9%), followed by Morocco (18.5%), Iraq (14.8%) and Syria (14.8%). The most migrants seeking to enter Europe do so through the Western Balkan route (IOM, 2020; UNHCR, 2020). However, this pattern is not necessarily representative of all migratory movements along this route, as this path to Europe tends to be continuously evolving. This is in line with the literature, which shows that this route intersects with other routes, with people travelling from Central Asia, the Middle East, North Africa and Sub-Saharan Africa (Crepet et al., 2017; El-Shaarawi & Razsa, 2019). This emerging route shows how new migratory European policies divert the traditional routes from North Africa to Italy and increase arrivals through Turkey.

From a national perspective, the majority of the Algerians (81%) who contributed to this

Table 2. Characteristics of the migration process.

	M	SD
Length migratory journey (months)	20.50	17.66
Length stay in Bosnia-Herzegovina (months)	5.84	5.03
Number of deportations from Croatia to Bosnia-Herzegovina	5.87	5.50

study cited "a better quality of life" as their motivation for travelling to Europe. In contrast and unsurprisingly, all Syrians (100%) said that they left because of political persecution. This is in comparison to 75% of the Iraqis who stated that religious persecution was the main motivational factor in their decision to leave. Therefore, as mentioned before, slightly over half should have had the right to apply for asylum and have been considered as refugees according to their migratory status.

Overall, departure dates from the country of origin ranged from August 2012 to June 2019. However, in this study, most of the migrants/refugees left their home countries between December 2017 and June 2019. As Table 2 shows, the median length of their migratory journey was close to two years since they left their home country. However, the median length of time in Bosnia-Herzegovina was barely 6 months, with 22.2% of the interviewees spending 12 months in the country. The minimum period of stay was 10 days and the maximum was 2 years. Finally, 48 out of 54 participants attempted to cross the border at least once and were deported without due process or access to asylum procedures. The median number of attempts to cross the border was also close to six and 24.07% had tried to cross ten times or more. According to their statements, nobody had the opportunity to apply for asylum and were unlawfully deported to Bosnia-Herzegovina.

When the motive for migration is considered as an influencing factor, we found that there were no effects on the length of time they had stayed on the border between Bosnia-Herzegovina and Croatia, $F(1,52) = 0.326$, $p = .570$, $\eta^2 = .006$; nor on the number of times they had been deported, $F(1,52) = 2.155$, $p = .148$, $\eta^2 = .040$. Migrants for economic reasons stayed an average of 187.69 days (*SD* = 145.93), and 163.75 (*SD* = 160.86) days for refugees for political/religious reasons. The average number of deportations was 7.00 (*SD* = 6.23) for economic reasons, and 4.82 (*SD* = 4.60) for political/religious reasons.

Traumatic experiences

The data shows that life in Bihać and Velika Kladuša was fraught with difficulties and hardships, and there was a high prevalence of instances of both violence and torture reported. In addition, for the migrants/refugees resident in Bihać and Velika Kladuša, the sense of insecurity and the frequent push-backs were clearly issues. All the participants (100%) stated that they had been subjected to traumatic experiences associated to their migratory experience. In addition, the vast majority (98.14%) reported experiencing multiple forms of physical and psychological trauma during their push-back or attempted border crossing from Bosnia-Herzegovina to Croatia. Data from the first section of the HTQ revealed that 81.5% reported having their property looted, 70.4% stated that they had been physically harmed of which 46.3% maintained that they had been subjected to beatings to the head. 40.7% claimed that they had been physically tortured or perceived themselves as torture victims. Despite Table 3 showing all of the results, for this research we have selected just the three mentioned traumatic experiences (in bold in the table) because they took place according to their testimonies during their detention on the Croatian border. Moreover, regarding the item "physically harmed," 25 of the migrants added that they were beaten on the head. Therefore, this item was included as an extra item below "physically harmed." The rest of traumatic events, however, are not fully described in this research because participants stated that they had occurred throughout the whole migratory journey or in their home country. The expe-

Table 3. Trauma events among migrants (*N*=54) during their migration process. In bold letters specific events occurred in Bihać and Velika Kladuša during July-August 2019. Sorted from highest to lowest frequency.

Trauma Events	N	%
Witnessed someone being physically harmed	45	83.3
Property looted, confiscated, or destroyed	44	81.5
Suffered from lack of food or clean water	43	79.6
Forced to flee your country	40	74.1
Physically harmed	38	70.4
Beatings to the head	25	46.3
Suffered ill health without access to medical care or medicine	35	64.8
Confined to home because of chaos and violence outside	35	64.8
Murder or violent death of friend	34	63.0
Disappearance of a friend	33	61.1
Lacked shelter	32	59.3
Searched	31	57.4
Present while someone searched for people or things in your home.	30	55.6
Witnessed rotting corpses	28	51.9
Witnessed torture	28	51.9
Witnessed murder	28	51.9
Oppressed because of ethnicity, religion, or sect	27	50.0
Forced to leave your hometown and settle in a different part of the	26	48.1
Witnessed the arrest, torture, or execution of religious leaders	25	46.3
Witnessed shelling, burning, or razing of residential areas or	25	46.3
Serious physical injury of family member or friend from combat	25	46.3
Tortured	22	40.7
Imprisoned	21	38.9
Expelled from country based on ancestral origin, religion, or sect	20	37.0
Witnessed the desecration or destruction of religious shrines	20	37.0
Murder or violent death of family member	17	31.5
Received the body of a family member	17	31.5
Friend kidnapped or taken as a hostage	17	31.5
Witnessed chemical attacks on residential areas or marshlands	16	29.6
Witnessed sexual abuse or rape	16	29.6
Someone informed on you placing you and your family at risk of injury	16	29.6
Witnessed mass execution of civilians	15	27.8
Disappearance of a family member	14	25.9
Forced to inform on someone placing them at risk of injury or death	13	24.1
Family member kidnapped or taken as a hostage	11	20.4
Used as a human shield	10	18.5
Serious physical injury from combat situation or landmine	9	16.7
Forced to physically harm someone	8	14.8
Forced to pay for bullet used to kill family member	6	11.1
Kidnapped or taken as a hostage	6	11.1
Forced to destroy someone's property	5	9.3
Sexually abused or raped (i.e., forced sexual activity)	2	3.7

Table 4. Torture experiences among migrants in Bihać and Velika Kladuša (*N*=54) during July-August 2019. Sorted from highest to lowest frequency.

Torture experiences	N	%
Exposed to rain or cold	50	92.6
Deprived of food and water for long periods of time	36	66.7
Deprived of medical care	36	66.7
Exposed to dirty conditions leading to ill health	35	64.8
Exposed to strong heat, sun or light	32	59.3
Punched, slapped, kicked or stricken with objects	30	55.6
Forced to stand for long periods of time	29	53.7
Humiliated and threatened	28	51.9
Deprived of sleep	25	46.3
Exposed to continuous/piercing noise	21	38.9
Prevented from urinating or defecating	21	38.9
Chained or tied	16	29.6
Forced to undress in front of people	16	29.6
Placed in a sack, box or very small place	15	27.8
Beaten on soles of feet with rods or whips	14	25.9
Placed in an isolation cell with no clothes, toilet or ventilation	14	25.9
Prohibited from ablution and prayer	11	20.4
Forced labor	8	14.8
Witnessed the sexual abuse, rape or torture of someone	8	14.8
Electrocuted	7	13.0
Forced to write false confessions	7	13.0
Forcibly arranged in various humiliating or sexually explicit positions	7	13.0
If 'yes', where you photographed	3	5.6
Subjected to mock executions	4	7.4
Blindfolded	3	5.6
Stretched on a rock for long periods	3	5.6
Burned by cigarettes, electrically heated rods, hot oil, fire, or corrosive acid	2	3.7
Head submerged in water with near-drowning	2	3.7
Suspended from a rod by hands and feet for longs period of time	2	3.7
Sexually abused or raped	1	1.9
Other experience of torture	1	1.9

Table 5. Frequencies, mean scores (M) and standard deviations (SD) for trauma symptoms among migrants in Bihać and Velika Kladuša (N=54) during July-August 2019. Sorted from highest to lowest scores.

Trauma symptoms	Not at all	A Little	Quite a bit	Extremely	M	SD
Trouble sleeping	12	10	10	22	2.78	1.21
Recurrent thoughts or memories of the most hurtful or terrifying events	5	19	14	16	2.76	0.99
Feeling that you have no one to rely upon but god	14	5	15	20	2.76	1.21
Feeling exhausted	8	18	11	17	2.69	1.08
Difficulty concentrating	11	13	14	16	2.65	1.12
Feeling irritable or having outbursts of anger	10	15	14	15	2.63	1.09
Avoiding activities that remind you of the hurtful event	17	7	13	17	2.56	1.24
Feeling no trust in others	7	19	19	9	2.56	0.92
Feeling that you have less skills than you did before.	15	9	16	14	2.54	1.16
Sudden emotional or physical reaction when reminded of the most hurtful events	14	13	12	15	2.52	1.16
Less interest in daily activities	18	6	17	13	2.46	1.19
Ruminations, poor concentration, lack of initiative, boredom, sleep problems, tiredness, and somatic complaints	17	9	14	14	2.46	1.19
Feeling as if you don't have a future	19	7	13	15	2.44	1.24
Feeling on guard	13	17	12	12	2.43	1.09
Feeling that someone you trusted betrayed you	21	5	12	16	2.43	1.28
Feeling humiliated by your experience	20	8	11	15	2.39	1.25
Feeling that others don't understand what happened to you	16	13	13	12	2.39	1.14
Sensation of the heart being squeezed	17	12	12	13	2.39	1.17
Avoiding thoughts or feelings associated with the hurtful events	16	13	14	11	2.37	1.12
Feeling detached or withdrawn from people	19	14	6	15	2.31	1.23
Feeling as though the event is happening again	18	14	12	10	2.26	1.12

Trauma symptoms	**Not at all**	**A Little**	**Quite a bit**	**Extremely**	**M**	**SD**
Irritability, nervousness, lack of patience, and anger outbursts	16	20	6	12	2.26	1.12
Feeling of tightness in the chest and a choking sensation)	19	15	8	12	2.24	1.16
Recurrent nightmares	21	12	9	12	2.22	1.19
Feeling as though you are split into two people and one of you is watching what the other is doing	22	15	7	10	2.09	1.14
Feeling powerless to help others	25	11	7	11	2.07	1.20
Feeling unable to make daily plans	25	12	7	10	2.04	1.16
Difficulty paying attention	23	15	8	8	2.02	1.09
Inability to remember parts of the most hurtful events	26	11	10	7	1.96	1.10
Spending time thinking why God is making you go through such events	29	8	7	10	1.96	1.20
Feeling jumpy, easily startled	26	10	13	5	1.94	1.05
Having difficulty dealing with new situations	26	14	6	8	1.93	1.10
Blaming yourself for things that have happened	32	5	6	11	1.93	1.24
Feeling that you are a jinx to yourself and your family	30	9	6	9	1.89	1.16
Unable to feel emotions	28	14	5	7	1.83	1.06
Troubled by bodily pain or physical problems	32	9	6	7	1.78	1.09
Feeling guilty for having survived	34	5	8	7	1.78	1.13
Feeling others are hostile to you	26	19	5	4	1.76	0.91
Poor memory	32	10	6	6	1.74	1.05
Feeling ashamed of the hurtful or traumatic events that have happened to you	30	15	2	7	1.74	1.03
Feeling a need for revenge	36	5	5	8	1.72	1.14
Finding out or being told by other people that you have done something that you can't remember	29	15	6	4	1.72	0.94
Hopelessness	36	8	3	7	1.65	1.07
Feeling that you are the only one who suffered these events	38	4	6	6	1.63	1.07

rience of traumatic events has a cumulative effect on mental health (Steet et al., 2009). The average number of traumatic experiences suffered by migrants was 17.74 (*SD* = 9.34, range [1-36]). Effects were found based on the motives to migrate, (F (1,52) = 26.604, p < .001, η^2 = .338). Migrants motivated for economic reasons suffered an average of 12.15 (*SD* = 6.67) traumatic experiences, and refugees for political or religious reasons suffered an average of 22.93 (*SD* = 8.49).

Torture experiences

The most common type of torture (Table 4) was prolonged exposure to rain and/or cold (92.6%), while 59.3% reported being exposed to strong heat, sun or light and 55.6% stated that they had been punched or slapped with objects in their attempt to cross the border. When referring to periods of detention of the border, 66.7% reported that they had been deprived of food and water for long periods of time, 66.7% reported that medical care had been withheld when required and 64.8% were exposed to dirty conditions leading to ill health. According to the migrants' testimonies, all the violence perpetrated by others was attributed to border agents. For instance, when they said that "were electrocuted" and "burned by cigarettes, electrically heated rods, hot oil, fire or corrosive acid," all of them (13%) described having been wounded by electrical weapons such as tasers, except for two people who stated that they were burned by cigarettes. Similarly, the maintenance of actions that involved orders or deprivations such as "forced to stand for long periods of time," "photographed in sexual positions" or "subjected to mock executions," between others, took place under police custody or during the period of time between the arrest and the push-back.

The average number of torture experiences suffered was 9.02 (*SD* = 5.19, range [0-27]). No effects were found based on the motives to migrate, (F(1,52) = 0.359, p = .552, η^2 = .007). Migrants motivated for economic reasons suffered an average of 8.58 (*SD* = 4.59) torture experiences, and refugees for political or religious reasons suffered an average of 9.43 (*SD* = 5.74).

Psychological effects

According to the HTQ, 27 out of 54 migrants/refugees (50%) met the criteria for PTSD diagnosis. The cumulative effect of traumatic experiences were positively associated with PTSD (F(1,52) = 9.006, p < .01, η^2 = .148). Migrants diagnosed with PTSD suffered an average of 21.30 (*SD* = 9.59) traumatic experiences, for 14.19 (*SD* = 7.73) traumatic experiences in no PTSD condition.

The number of torture experiences was not determinant to predict the aforementioned disorder. As such, for those who did not suffer from PTSD the number of torture events was 8.56 (*SD* = 5.20) compared to 9.48 (*SD* = 5.22) who fulfilled the criteria for the diagnosis (F(1,52) = 0.425, p < .01, η^2 = .148).

No significant differences were found due to motivation for migrate, (χ^2 (1, N = 54) = 2.670, p = .102). Ten migrants (36.46%) for economic reasons and 17 (60.71%) for persecution reasons were diagnosed PTSD.

The amount of trauma and torture experiences were related to the presence of psychological trauma symptoms; (r(54) = .468, p < .001, and r(54) = .298, p < .05 respectively). The greater negative experiences, the more presence of trauma symptoms. Table 5 shows frequencies and the average scores for each symptom.

Discussion

This study examines the prevalence of traumatic events experienced by migrants/refugees throughout migratory transit and also in their home country, and how these experiences were associated with PTSD. Similarly, the study found the prevalence of other violent events perpetrated by police and border agents amongst the participants during July-August 2019. The data showed differences in the number of traumatic events experienced by economic migrants and refugees for political and religious reasons. The latter suffered almost twice as many traumatic experiences as the former. However, in the present study no differences were found between refugees and economic migrants with regard to torture experiences and PTSD diagnosis. Since both have been in Bosnia for roughly the same time, they have suffered similar numbers of deportations, and economic migrants probably had no traumatic and torture experiences in their home country. These results could indicate that refugees for political/religious reasons experienced many more traumatic experiences because they add trauma suffered in their origin to those suffered during the trip and in their attempts to enter the EU. The reports of experiences of torture can then be assumed that occurred mostly during the trip and during pushbacks at the border.

To summarise, according to the data, during the trip and their stay in the EU border, migrants/refugees were subjected to a multitude of human rights violations including inhuman and degrading treatment. The data provides a better understanding of their situation (Crepet et al., 2017). Moreover, this data provides an insight into how politically supported systematic violence is directed toward refugees. However, as previous studies have pointed out, given the motivation to obtain protection there may be a tendency to overreport PTSD symptomatology (Peace & Masliuk, 2011). This can potentially explain the difference in prevalence of PTSD as compared to other populations (Steel et al., 2009). The migrant population in both of these towns was almost exclusively made up of young, single males. This is unsurprising, given that gender differences also affect migratory processes. For example, vulnerable people, such as single women, unaccompanied minors or families may have been directed toward migration reception centres or safer areas (Crepet et al., 2017; Guarch-Rubio & Manzanero, 2020). For instance, Bouhenia et al. (2017) found that in their work in Calais (France), local authorities frequently moved women and children to a separate off-site facility.

Similar to Arsenijević et al. (2017), our data indicates that while border closures in Balkan countries are associated with a considerable decline in arrivals, they may also be associated with an increase in violence and torture. As noted, European policies are based on political agreements that promote the externalization of borders whilst not openly condemning the use of violence as a deterrent. Border violence, therefore, includes the entire set of processes whereby migrants' somatic and mental capacities are repressed or destroyed both at and beyond the territorial border. The processes of border violence operate within the framework of contemporary "geopolitics of migration" (Hyndman, 2012) which is characterized by a global process of worsening the conditions for migration (selective, restrictive, repressive and punitive migration policies) through surveillance, detention and rendering migrants legally and economically precarious. Research e reveals the frequent violence and torture that migrants/refugees suffer by police and border agents in their attempt to reach the European Union (Arsenijevic et al., 2017; Crepet et al., 2017; Farhat et al., 2018; Koning, 2019). Psychologically, exposure to these violent episodes during transit serves to add to previous traumatic events and increases the risk of mental health issues for migrants and refugees (Dimitry, 2012; Manzanero et al., 2017).

However, despite the institutional violence and torture mentioned, just 40.7% perceived themselves as victims of torture, although this 51.9% of the interviewees felt humiliated and threatened by their experiences. The results of the current study support the argument that migrants constitute a vulnerable population experiencing often-ignored high rates of violence (Bouhenia et al., 2017). This should be brought to the attention of political and medical authorities as well as the general public.

The most frequent form of torture was exposure to rain or cold (92.6%). This could be for two reasons. Firstly, it can partly be explained by the fact that many of the respondents, at the time of data collection, occupied empty factories that had been hastily converted into improvised accommodation centres that lacked basic amenities. This experience also exposed migrants to dirty conditions which was a risk for their health. Secondly, the reported exposure to rain and cold could be understood by the very nature of the migratory process. For example, travelling long distances on foot in extreme weather with little food or water. In addition, 59.3% had been exposed to strong heat, sun or light through the journey and 66.7% reported deprivation of food and water for long periods of time, during the border crossing or the push-backs. Similarly, in their work with Syrian-Kurdish refugees, Ibrahim and Hassan (2017) found that a high number of their respondents also reported being exposed to rain or cold. Therefore, the traumatic experiences described here can be explained by the conditions endured during the migratory process and also by institutional violence.

In addition, the capacity to respond to the influx of migrants in the region is strained, where centres at the time of data collection were close to capacity and limited sustainable alternatives existed (United Nations, 2018). Data suggests that in this region there is a systematic and organised element to the discrimination experienced by migrants. Relating to this, 66.7% of the respondents reported a lack of access to medical health care in Bosnia-Herzegovina. This is similar to the research conducted by Bouhenia et al. (2017) in Calais (France) who found aggravated health problems in migrants due to poor access to healthcare, often due to obstacles such as fear of detection, language barriers, transport issues and fear of racism. Adding to this, our findings echo Freedman (2016), who maintains that the current migration "crisis" in Europe is exposing the failure of the EU to offer real protection to those fleeing conflict and seeking refuge in Europe.

Limitations: One of the major limitations of this study is the small sample size. As such, this research is limited in its ability to make wider inferences. Qualitative research is also needed to understand the subjective perspective of the participants. Furthermore, under-reporting is a key concern for violence owing to the highly sensitive nature of the topic (Falb et al., 2013). On the other hand, another limitation may be an overestimation of data due to the use of an opportunistic sample likely with people who are more willing to talk about their traumatic experiences and who feel that their rights are more vulnerated. Finally, the last obstacle is that no medical nor psychiatric examination was conductED beyond applying the HTQ. Future research should assess reporting issues, as well as potential mechanisms and predictors of violence across settings, to identify potential protective characteristics to reduce the use of violence during attempted border crossings.

Conclusion

This research supports previous evidence of systemic and deliberate unofficial deportations, with frequent use of violence against migrants at the border between Bosnia-Herzegovina and Croatia (Amnesty International, 2019; Border Violence Monitoring Network, 2020). At a time that saw unprecedented numbers of people on the move toward Europe, studying the vulnerability of mobile populations, as well as the violence and trauma they suffer is of central importance.

This paper supports the claim that traumatic experiences have an effect on migrants/refugees' mental health and can trigger the development of PTSD. This study has also shown how violence perpetrated by security forces against migrants is crystallized at the border-zones. Considering this, and notwithstanding the dearth of research in the context as described in the previous sections, there is a need for continued research that examines the conditions faced by migrants on the European borders. Furthermore, this article lends support to recent calls for an improved response from the EU to ensure the safety and human rights of migrants who are attempting to enter Europe along the Western Balkan route.

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Conflict of interest

No potential conflict of interest was reported by the authors.

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"A random system": The organisation and practice of torture rehabilitation services in Norway

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Key points of interest

- Rehabilitation services in Norway for torture victims with a refugee background are fragmented, and the resulting practice is highly person dependent.

Abstract

Introduction: This article addresses the provision of rehabilitation services for torture victims with a refugee background in Norway. It engages the topic from the outset of relevant rehabilitation rights and duties, presenting the organisation of rehabilitation services within the Norwegian health care system, and exploring the challenges and opportunities professionals see and experience as they seek to provide adequate treatment and rehabilitation for torture victims.

Methods and material: Qualitative interviews with 46 experts and practitioners that contribute to or otherwise focus on treatment and rehabilitation for torture victims in Norway, conducted between March and August 2019 and an email-based educational programme survey. *Results and discussion:* Rehabilitation services for torture victims suffer from the absence of a systematic approach to identification and documentation of torture injuries. Moreover, the quality of rehabilitation services suffers from a lack of coordination and inclusion of actors that can contribute to comprehensive rehabilitation processes. Students of relevant professions, such as medicine, psychology, nursing, law, and policing, are to a large extent not exposed to knowledge about torture injuries and rehabilitation for torture victims during their professional studies.

Conclusion: Rehabilitation services for torture victims in Norway are fragmented, and the resulting practice is highly person dependent. Three recommendations are proposed in order to ensure minimum standards in rehabilitation services for this group: 1) developing and implementing a national plan of action on torture rehabilitation; 2) knowledge and capacity-building within relevant educational programmes, the national health services and

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other relevant public sector services; and 3) strengthening and institutionalising interdisciplinary communities of practice with specialised expertise on the topic at all relevant levels.

Keywords: Norway, professional practice, public health services, refugee background, rehabilitation.

Introduction

Torture leads to multifaceted rehabilitation needs across physical, mental, social, legal, welfare-related, and spiritual aspects of life (Patel, Kellenzi & Williams, 2014). The injuries affect both the person subjected to torture and the next of kin. It follows that rehabilitation must be coordinated between different service providers, which for torture victims with a refugee background may include health, care, social and other welfare services, as well as the immigration authorities and the reception system. It may, as such, encompass public and private institutions, as well as charities and non-governmental organisations (NGOs). This article starts from a well-founded concern that individuals who have been subjected to and survived torture before arriving in Norway do not receive the rehabilitation that they need and have a right to. Practitioners and experts have long expressed concern over the quality and extent of rehabilitation services for this group (Dyresen, 2017; Halvorsen, 2012; Lie, Sveaass & Hauff, 2014; Norwegian Psychiatric Society, 2014; RVTS, 2014; Sveaass, 2013; Varvin, 2015). Norwegian legislation does not provide torture victims with explicit rights to rehabilitation. The health regulations allow for individual assessment of each patient's needs (Ministry of Health and Care Services, 2000). However, Norwegian health regulations shall be in line with international obligations, and when examining the rights and duties for rehabilitation following torture in a Norwegian legal context, different international human rights treaties are relevant. The UN Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1984), hereafter UNCAT, Article 14 makes it clear that rehabilitation shall be ensured:

> *Each State Party shall ensure in its legal system that the victim of an act of torture obtains redress and has an enforceable right to fair and adequate compensation, including the means for as full rehabilitation as possible. In the event of the death of the victim as a result of an act of torture, his dependants shall be entitled to compensation.*

The wording of UNCAT does not, however, provide many holding points to *what* "full rehabilitation" entails or *how much* rehabilitation should be offered, nor does it clarify which state holds the responsibility when the victim no longer resides in the country where torture was inflicted. The commentaries by the Committee Against Torture (2012) are therefore very useful in their guidance to address such uncertainties, even if non-binding. The Committee has made clear that persons subjected to torture shall be helped to regain their previous functions, or alternatively, receive help to acquire new needed functions, and be rehabilitated as far as possible from their personal preconditions (p. 3) – not limited by the state's available resources (Sveaass, Gaer & Grossman, 2018). The Committee Against Torture (2012, p. 3) further advocates for a long-term and integrated rehabilitation approach that takes account of the torture victim's individual situation. Specialised services must be made available, including a procedure for evaluating individual needs according to the *Manual on Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment* (OHCHR, 2004), hereafter the Istanbul Protocol. States must enact legislation providing the right and access to rehabilitation (Committee Against Torture, 2012, p. 5). Access must be granted as soon as possible after assessment by qualified medical personnel and rehabilitation must be available to everyone (p. 7). Emphasis is placed on ensuring access to asylum seekers and refugees (p. 3). The Committee Against Torture (2012, p. 8) also point out that police and prison staff, health personnel, lawyers and professionals working with immigrants, must be trained to use the Istanbul Protocol. They further maintain that rehabilitation does not only apply to individuals who have been tortured, but also to individuals who have been subjected to inhuman or degrading treatment (p. 1).

For torture victims with a refugee background, rehabilitation entails healing in exile. Flight, exile, and post-migration difficulties can complicate this process. Challenges that follow exile – such as finding one's place in a new society and the transnational space, are factors that impact on wellbeing (Quiroga & Jaranson, 2005), in addition to uncertainties and restrictions that follow from insecure and temporary legal statuses. Conditions in countries of origin and concern for significant others elsewhere also have an effect (Patel, Kellenzi & Williams, 2014). Even if exile entails new possibilities, and the absence of war and persecution, it does not necessarily translate into a sense of safety – pointing to the important difference between *being* safe and *feeling* safe. Exile often involves several losses such as loved ones, community, roles, self-worth, social networks, and life projects (Varvin, 2003). Exile can furthermore include experiences of isolation, discrimination, and the loss of income and can therefore lead to poverty, and even destitution, in the absence of adequate reception and welfare provisions (Jaranson & Quiroga, 2011). Moreover, a climate of mistrust, and the suspicion and ambivalence that refugees can face in the societies where they seek refuge, may heavily impact their rehabilitation process:

> *Many survivors relate that the worst was that they were not supported by those they had counted on. A refugee who experiences suspicion, an unfriendly bureaucracy, rejection of their asylum application, rejection on their housing application, rejection on economic support, rejection on their application for benefits, racism, xenophobia, can acquire a new trauma, one that fundamentally impacts trust, and that can lead to bitterness. Several have said that: it is worse than prison and the torture (Varvin, 2003, p. 25).*

Accordingly, experiences from flight and exile, as well as integration, inclusion and treatment in the new country, and what future prospects allow for, affect the impact of torture injuries in a context of migration and displacement. For migrants with an irregular legal status, access to public services is limited. In response to a lack of accessible health care services, the Church City Mission and the Red Cross run health care centres for undocumented migrants in Oslo (2009-) and Bergen (2013-). From the beginning, the centres were established as a temporary solution to humanitarian needs, with the explicit ambition to become superfluous once public authorities secured necessary and predictable health care services for persons with an irregular legal status. The centres are still in operation, and the health professionals and social workers who volunteer their time and knowledge at these centres meet migrants who have survived torture and who are in need of comprehensive rehabilitation (Church City Mission & Oslo Red Cross, 2020).

It is from this outset that the Norwegian Red Cross decided to examine the status and quality of rehabilitation services for torture victims in Norway (see also Norwegian Red Cross, 2020). As part of this project, this article looks at the provision of rehabilitation services within the Norwegian national health system – addressing both the organisation of services, knowledge in relevant professions, and practitioners' experiences of providing help, treatment and rehabilitation, and what, according to them, is needed to secure adequate rehabilitation services for torture victims.

Methods and material

This article combines intakes from a literature and grey literature review; a brief, email-based educational programme survey; and qualitative interviews with a diverse group of experts and practitioners whose work addresses torture injuries. We contacted all educational institutions in Norway offering professional studies in medicine, psychology, nursing, law, and policing (see table 1 for a complete overview), with two questions: *if* 'torture' is covered as a topic within the relevant programmes during the academic year 2018/2019, and if so, *how* the topic is integrated in the curriculum and teaching. We contacted the departmental administrations of each given programme (a total of 25 programmes at 16 institutions), which either responded directly or referred us to relevant staff members. We received no response from three institutions and obtained an incomplete answer from one department.

The primary contribution of this article is, however, based on the qualitative interviews we conducted with professionals whose work concerns torture victims either clinically or in research, academia, care work, reception and refugee integration work, and capacity-building. The recruitment process for these interviews started with preliminary talks with publicly known experts and scholars who introduced and shared an overview of relevant professionals. We further contacted the Directorate of Health, the National Institute of Health, the Norwegian Centre for Violence and Traumatic Stress Studies (NKVTS) and the five Regional Resource Centres about Violence, Traumatic Stress and Suicide Prevention (RVTS), who also shared information about relevant professionals.[1] We aimed for a strategic sample to include professionals with considerable experience with and knowledge about "refugee health," including torture rehabilitation. As we started interviewing, we were introduced to participants' networks and colleagues – and benefitted greatly from this snowballing element. All in all, we invited 57 professionals to take part – and as we concluded the interviews in August 2019, we had interviewed 46 of them. The strategic sampling approach has given insight into the field of torture rehabilitation from across Norway's four health regions (South-East, West, Mid-Norway and North). The lowest number of participants from one single region was 6 and the highest was 21. Note, however, that the number of participants from each region does not reflect the population size of the relevant region, or the number of practitioners that operate there. In total, we interviewed 28 women and 18 men, and their individual professional experience focusing on refugee health spanned from around one year to more than 40 years. Half of the participants had worked within this field for around 20 years or more.

We did not limit our interviews to any one profession, service provision or specific part of the rehabilitation process, as we have sought

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[1] The Directorate of Health hosts a professional council for immigrant health, the National Institute of Health has a dedicated unit working on migration health, and NKVTS and RVTS have refugee health and forced migration as part of their focus areas, and the RVTSs are, furthermore, mandated by the Directorate of Health to include torture among their many specified topics.

to explore the breadth of professionals' experiences with treatment and rehabilitation of torture injuries for this study. That said, most interviewees are health care providers. 43 of the 46 participants have a clinical background: 35 work within specialised health care services, and seven work on primary health care services, both within NGOs, and the private and public sectors. Several participants are also affiliated with universities, refugee reception structures and humanitarian organisations. While some exclusively focus on the arrival and/or settlement phases (10 out of the 46 participants) – most work with refugee health at all stages, spanning the arrival, settlement and subsequent stay in the country. Accordingly, their patients/clients have different legal statuses – from persons with an irregular legal status to those who are Norwegian citizens. Half of the participants work primarily or exclusively with issues to do with refugee and migration health, whereas the other half work on various topics yet still have extensive experience on this. By profession, the participants are trained psychologists (16 out of the 46), nurses (7), medical doctors (6), psychiatrists (5), social workers (4), physiotherapists (3), dentists (2), an occupational therapy nurse, a child welfare worker, and a lawyer. Many have completed specialisations. It is important to emphasise again here that the selection of participants for this study has been strategic in that we have prioritised professionals with considerable experience on refugee health. We have therefore not interviewed general practitioners (GP) as such, albeit they are important first line responders within the national health care system – and key gatekeepers for access to rehabilitation services for torture victims through referrals.

Most of the interviews (27) were conducted one-to-one, by the first author. She also conducted three group interviews (two with two participants and one with three), and three focus groups with four participants each. For all interviews, we used a topical interview guide as a point of departure, covering eight themes: (1) experience; (2) identification of torture injuries; (3) documentation of torture injuries and competency; (4) interdisciplinary treatment and rehabilitation; (5) rehabilitation services and perceived availability; (6) relevance of exile and background; (7) socio-economic issues and social rehabilitation; and (8) quality of services, including also a specific focus on being a practitioner in this field. Each interview covered all eight themes, but depending on participants' knowledge and respective emphasis, they varied in terms of which topics were covered most into-depth. We asked participants to share both their professional experience and their assessment of the general state of rehabilitation services for torture victims. Participants were not presented with a definition of "rehabilitation" but spoke to the spectre of services as regards torture injuries – from housing and help with specific ailments to understandings of what constitutes comprehensive rehabilitation.

All focus group interviews, one group interview and 17 one-to-one interviews were recorded and later transcribed verbatim and analysed in NVivo. We specifically looked for similarities in perspectives, positions, and experiences that spanned different background variables (e.g., participants' professions and geographic locations). Participants whose quotes are used are referred to by profession (and number where necessary to differentiate between them). All quotes have been translated into English.

Findings and discussion

Describing the services available for people subjected to torture, one participant stated, "The so-called Norwegian model [is not] a model. The Norwegian system is a random system" (Psychologist 1). This echoed in the accounts of many participants. In the following, we will present an overview of the organisation of services. The overview builds on grey literature and information gathered from institutions of higher education providing professional studies in medicine, psychology, nursing, law and policing. We then explore the participants' experiences and reflections on providing help, treatment and rehabilitation to torture victims with a particular focus on identification and documentation of torture injuries and the importance of interdisciplinary communities of practice. We proceed by exploring their reflections on the crucial components for adequate rehabilitation. Our findings are then discussed in relation to each other in the conclusion, where we also suggest measures to ensure that Norwegian authorities meet rehabilitation needs resulting from torture injuries.

Organisation of services and inclusion in educational programmes

Norwegian authorities have a proclaimed goal of equal and adequate health and care services for the whole population (Ministry of Health and Care Services, 2013). This implies that provisions should be equally good and adapted to each patient regardless of background. Yet, the rehabilitation services available to torture victims with a refugee background are affected by general challenges that immigrants face in accessing health, care, and welfare services. Adequate translation and interpretation services for those who need it are preconditions for equal and adequate services (Alpers, 2017; Directorate of Health, 2011). Issues and challenges associated with language and interpretation services were raised in 25 interviews, including the three focus groups. While participants discussed several issues pertaining to language, such as the benefits and drawbacks of face-to-face versus remote interpretation (by video or telephone), how to facilitate good collaboration between interpreters, themselves and their patients/clients, the implications of which language is used (the mother tongue or another language), and the importance of also offering peer support to interpreters, many focused in-depth on halting language services and a hesitant public sector that sometimes lacks even basic skills in working with interpreters. For instance, one nurse working within the general health care services explained the situation as follows, "What I perceive as very basic knowledge about using an interpreter is not always known. [Service providers] therefore have reservations about using interpreters and experience unnecessary barriers. […] Many [professionals] are poorly trained and find it difficult." A survey among interpreters in the national interpreter register shows that interpreters with formal qualifications were used in only four out of 10 interpretation assignments within the public sector in 2017 (Directorate of Integration and Diversity, 2018). Moreover, while family members should not be used as interpreters by public services and authorities (Directorate of Health, 2011), it is not uncommon that both adult and minor family members have this function (see, e.g., Faryabi, 2017). It places an unduly burden on family members and can hinder what can be communicated. Furthermore, using children as interpreters is prohibited by law (Ministry of Justice and Public Security, 2016, § 11 e). Participants also described concern over general system competency and cultural competency, which are further important aspects in the provision of rehabilitation – and which may hinder both identification of torture injuries and a proper understanding of their impact in the patients'/clients' lives (Alpers, 2017; OHCHR, 2004; Quiroga & Jaranson, 2005).

The national health care service is the main provider of rehabilitation services for torture victims in Norway. In practice, this implies that those with a right to a GP, must seek referral to the specialised health care services from there. It also means that they are liable for a user fee until they have paid the annual maximum fee (NOK 2,460 in 2020) and receive an exemption card for such expenses. Several participants noted that treatment related expenses pose a barrier for patients with limited funds and income. This contrasts with the situation at specialised centres elsewhere that provide services free of charge for torture victims (e.g., Freedom from Torture in the UK), traumatised refugees (e.g., DIGNITY in Denmark[2]), and for persons with a refugee background more broadly (e.g., the Swedish Red Cross) (Norwegian Red Cross, 2020). We identified a few places in Norway where referrals could be made by others than the GP or other health professionals, including possibilities for self-referral, and where consultation was free of charge. However, these represented the exception rather than the norm. Several participants also pointed out that costs for transportation in order to access services represents an additional barrier.

While no specialised centres for torture rehabilitation exist in Norway, a specialised dental service includes torture victims: fa-cilitated dental health provision for persons subjected to torture, assault and with odontophobia (TOO) (Directorate of Health, 2010). This service is limited to persons with a valid residence permit, and torture injured patients represent a very small share of patients; two percent according to information we received from the Directorate of Health (e-mail, August 2019). Yearly, this amounted to 18–22 patients in 2016 to 2018. Regardless of this low number, research shows that it is common with torture to the face, the mouth, and the teeth (Høyvik, Lie & Willumsen, 2019).

In order to gain insight into how knowledge about torture is ensured in relevant disciplines and professions, we examined *if* and *how* the topic is included in selected educational programmes during the academic year 2018/2019. We contacted all Norwegian educational institutions offering professional studies in medicine, psychology, nursing, law, and policing. We found that lectures addressing the topic are overwhelmingly absent. For professional studies in medicine given at four universities, knowledge about torture as a separate topic is part of the mandatory instruction at one institution (University of Bergen) and the not legally binding instruction at another (The Arctic University of Norway). It is not part of the curriculum in any of the profes-sional studies in psychology. Furthermore, only one nursing degree granting institution includes the topic as part of the mandatory training (Oslo Metropolitan University). Both for professional studies in law and policing education, the focus is limited to establishing the prohibition of torture. This was also reflected in participants' experiences. Among the seven participants who discussed whether the topic had been covered during their studies, only one had experienced this, in the 1990s.

Identifying torture injuries and the importance of interdisciplinary communities of practice

Identification, examination, and documentation of torture injuries are important steps for treatment and rehabilitation. Research and clinical practice highlight many challenges in identifying persons who have been tortured. This is further complicated by one of this article's main findings: the absence of a systematic approach to identification and

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[2] With the limitation that they have been granted permission to stay in Denmark.

documentation, and an unclear division of responsibilities. There are several points during the asylum and settlement processes where public service providers and asylum seekers and refugees interact, both formally and informally. The issue at stake is therefore not an absence of opportunities in which experiences of torture can surface (Brekke, Sveaass & Vevstad, 2010; Jakobsen et al., 2007; NOU, 2011). For instance, the Directorate of Health (2015) has developed the *National guidelines for the healthcare services for asylum seekers, refugees and family reunited persons IS-1022*, hereafter IS-1022, where both torture victims and the Istanbul Protocol (OHCHR, 2004) are referred to explicitly, and which recommends offering a general health examination by the local health authority (physician or nurse) three months after arrival (Directorate of Health, 2015). For the examination, a form including two questions about identifying torture is recommended: *Have you witnessed torture? Have you been subjected to torture?* (Directorate of Health, 2017). Our participants

Table 1. Overview of torture as topic in selected educational programmes.

Degree	Educational institution	Mandatory	Other**
Medicine	University of Oslo (UiO), The Arctic University of Norway (UiT)	No	Yes
	University of Bergen (UiB), Norwegian University of Science and Technology (NTNU)*	Yes	
Psychology	UiO, UiT, NTNU	No	No
	UiB	Incomplete	Incomplete
Law	UiO, UiT	Yes	Yes
	UiB	Yes	
Nursing	Oslo Metropolitan University	Yes	
	UiT, NTNU, University of Agder, University of Stavanger, Molde University College, Østfold University College, University of South-Eastern Norway, Western Norway University of Applied Sciences	No	No
	Inland Norway University of Applied Sciences	No	Yes
	VID Specialized University, Nord University, Lovisenberg Diaconal University College	No reply	No reply
Policing	The Norwegian Police University College	Yes	

** Guest lectures, part of non-mandatory lectures or similar.

* Not as own topic but included in lectures about trauma and abuse.

highlight some actors as particularly important for identifying torture injuries following arrival and settlement: health and social workers, teachers, reception centre staff, the immigration authorities[3] (especially during the asylum interview) and NGOs.

While identification was discussed in all interviews, the issue of *when* torture injuries are usually identified was raised in nine, including the three focus group discussions. Several of these participants spoke about how, unless torture injuries are identified early, it can be delayed for years and even decades. Some spoke about torture victims who had been in Norway for years before anyone had asked whether they had been tortured:

I have met people who have been here a long time without having their torture injuries identified. Symptoms, you treat the symptom […] and then we never ask the question. There are extreme examples with people who have become extremely disabled due to torture, but where no one ever asked the question of what caused it or why it is this way. Where the patient themselves, due to brain damage, was unable to communicate it or where they did not know that what they had been subjected to is called torture according to the law (Psychologist 2).

Unless identification efforts are institutionalised and followed in a systematic manner, torture injuries can remain unidentified, leaving people without adequate services or support, as suggested by another participant:

I sometimes get patients who have been in Norway for 20 years and have never been in contact with the needed health service. They have tried to stay at home, tried to hold down a job, became disabled at some point but never received support for their mental health needs (Psychologist 3).

While acknowledging how difficult it can be to identify torture injuries, participants spoke of how certain forms are easier to identify than others. Acts of torture that do not leave visible marks are more difficult to identify than physical injuries, although the marks are not always identified as related to torture. Seeing different symptoms in relation to one another can itself be challenging (Høyvik & Woldstad, 2018). Furthermore, torture victims can be afraid or hesitant to reveal their experiences to service providers, as torture is often committed by professional representatives of public organs, within institutions, and can include health professionals being present. Torture victims may have suffered cognitive damage, loss of consciousness, dissociative amnesia, numbness, or alienation due to the injuries inflicted (Høyvik & Woldstad, 2018; Quiroga & Jaranson, 2005). They may also worry about issues of confidentiality, the presence of interpreters and concern regarding access to treatment and rehabilitation. Trust is generally both a precondition and a challenge – and it can take time to build a sense of safety, a safe space where trust allows for sharing. Sexualised forms of torture are described as particularly difficult to talk about regardless of the victim's gender. Having been forced to commit torture is also a form of torture that the participants emphasised as particularly difficult. In addition, they spoke of patients/clients with survival guilt who had witnessed the torture of others that they could not or dared not intervene on behalf of. Intense feelings of stigma, shame and guilt were also raised as barriers that prohibit some from ever talking about what they have been subjected to. Torture victims may also refrain from sharing their experiences out of concern for others' wellbeing:

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[3] Fafo Institute for Labour and Social Studies is undertaking a study (September 2020–February 2021) for the Norwegian Directorate of Immigration on torture victims in the asylum process. For more information, see (in Norwegian): https://www.fafo.no/prosjekter/aktive-prosjekter/item/utredning-om-torturutsatte-i-asylprosedyren

Many of my patients were very much in doubt whether I could bear to listen to what they had been subjected to […] Would I be able to listen and to carry the burden of knowing about it? If they told me, would I break into pieces? They did not want to expose me to the strain of listening to what they had been subjected to (Psychologist 4).

At the system level, identification is challenged by a lack of guidelines for *how* it should be done, *who* should do it, *what* it should entail and, furthermore, by whether there should be a general screening or not (Sveaass & Lie, 2020). It also relates to insufficient knowledge about the topic within the national health service and a concern that deliberate identification is unethical if one has nothing to offer at the other end. Our participants emphasised that torture as a topic can be experienced as difficult, causing some professionals to refrain. A precondition for identification therefore appears to be that service providers are confident about the topic and, moreover, that they can offer or refer patients/clients to adequate services.

The Istanbul Protocol represents the international minimum standards for examining and documenting torture and other inhuman treatment (OHCHR, 2004). There is no Norwegian edition nor summary of the Protocol. Our study points to a lack of systematic implementation of the Istanbul Protocol in the national health services and an absence of professionals who can undertake an examination and provide documentation according to it. As noted by others (Lie et al., 2015; RVTS, 2014), a lack of tariffs for reimbursement for documentation also represents a hampering factor. The IS-1022 states that "Health certificates [documentation and preceding examination] in immigration and asylum cases are necessary in order to safeguard the rule of law, both when applying for protection and for facilitation of the stay in the country" (Directorate of Health, 2015, section 3.2, para. 1). To this, we can add the importance of professional documentation of torture injuries and subsequent rehabilitation. As explained by one participant, *"Norway is not fulfilling its obligations to torture victims as I have seen them formulated in UN statements. Full rehabilitation shall be offered. Nor do we know the Istan-bul Protocol properly"* (Psychiatrist 1).

Participants also described the important role played by accessible, institutionalised and interdisciplinary, communities of practice for the provision of adequate treatment and reha-bilitation services. Research participants shared a need for and emphasised the meaning of such communities. Some highlighted a need for a na-tional reference centre to lean on; others underscored the value of established, specialised peer groups or teams at the institution where they work. For all, the value of such communities lies in common dedication and the opportunity to reflect on practice, develop skills, peer con-sultation and support, and debrief challenging treatment and rehabilitation processes. An em-phasis was also placed on institutional frame-works that value their expertise and assessment and allow for flexibility in their practice as to respond to complex needs and patients'/clients' life situations. We found several communities of practice and networks in our mapping of services with particular knowledge about refugee health. However, rather than a result of a na-tional systematic and equal service, they were often local, and in some instances, regional solutions initiated by dedicated profession-als both within private practices, the national health care service, and NGOs. One psychol-ogist shared their experience of being part of such a group of practitioners:

I know what to do, but that is because I have had the opportunity and time, and have been offered guidance and was told what to read and what to look into; and I have also been given time to put all this into a clinical setting. It would not have been like this if I had just tumbled across the *topic [torture injuries and rehabilitation]. I have been given the opportunity to acquire the necessary competency* (Psychologist 2).

A psychiatrist also raised the importance and implications of feeling competent:

If you know that you can do something, then it is much easier to handle challenging situations. If you do not have any methods or means, then it is much easier to feel helpless, and then you can get burned out (Psychiatrist 2).

A satisfactory rehabilitation service for torture injuries, accordingly, also relates to the presence of adequate support structures for those who provide interpretation, help, treatment, and rehabilitation. In the other Scandinavian countries, where there are established centres providing specialised rehabilitation for this group, the importance of such peer support systems is well acknowledged, and a key component of the centres' infrastructure (Norwegian Red Cross, 2020).

Practitioners' reflections on adequate rehabilitation

We have established that UNCAT's (1984) Article 14 states that torture victims shall have "as full rehabilitation as possible" and that the Committee Against Torture (2012) recommends what such rehabilitation should entail and where the responsibility lies. As part of our research, we also asked the participants what they see as important components for adequate rehabilitation. Combined, their experiences speak to three interrelated factors that should be present to secure satisfactory rehabilitation processes for torture victims:

1. An interdisciplinary and comprehensive approach (identification, documentation, treatment and rehabilitation, individual and family perspective, advocacy, capacity-building, etc.) that includes user involvement.
2. Coordinated and systematic interventions across service providers (physical, mental, legal and social) and consideration of the role of different institutions (private, public and NGOs).
3. Ensuring systemic, cultural, and language competency.

According to the participants, torture tends to have cross-cutting implications in torture victims' lives and for their next of kin. Rehabilitation should therefore be coordinated between relevant services and consider both an individual perspective, a family perspective, living conditions and overall quality of life. Hence, rehabilitation should also include a community and societal perspective. In the provision of services, it is important to remember that ideas about illness, social skills and quality of life can differ between those providing and those receiving help (Jaranson & Quiroga, 2011). Torture rehabilitation emerges as a field of practice that stretches across administrative authorities, social, care and health services, and the life cycle. Overall, and importantly, there has been little focus on how children of torture victims cope and manage in the Norwegian context (RVTS, 2014), although emergent research highlights how parental suffering and trauma among adult refugees impacts on children's daily life and development in diverse ways (Johansen & Varvin, 2019). It is also important to keep in mind that people of all ages are subjected to and are witnesses to torture.

It is a cause for great concern that several participants in our study describe institutional frameworks that either directly hinder adequate responses to the needs of torture victims or make the needed response more challenging to carry out. Several participants pointed out how patients/clients with traumas originating from torture with need for mental healthcare in particular, experience challenges in accessing the needed services, and that increasingly, these focus on short treatment plans and increased production figures – into which comprehensive rehabilitation programmes do not necessarily fit:

The rehabilitation situation for this group of patients within the mental health services is unsatisfactory. You do the minimum effort if you do anything at all. It is very difficult to refer these patients to mental health services. Most of them must make do with the primary health care service. They take the great majority of these patients (Psychiatrist 3).

Participants spoke to the necessity of service provisions that respond to complex needs and allow for a holistic approach and sufficient time; an approach that minimises patient/client drop-out. Several participants emphasised the importance of responding to basic needs first. They offered examples of torture victims who were lacking the very essentials, such as food or electricity. These participants described the importance of a comprehensive understanding of rehabilitation needs to include the spectre of help, treatment, and rehabilitation, ranging from food, housing, and translation of documents to surgery and different therapeutic interventions. As pointed out by one participant, *One of the first things you should do when providing treatment, is to ensure that you are helping people in a way so that they feel an actual improvement of their situation* (Psychologist 1).

Two functions were repeatedly described as particularly important, but more or less absent in the rehabilitation provisions: a dedicated case manager to coordinate the process and a social worker to facilitate and translate the various regulations and rights in terms of social welfare and work programmes in line with social rehabilitation. Many participants pointed out how rehabilitation services are fragmented and emphasised the importance of not operating in silos independent of one another when several professionals are involved. Coordination and collaboration are therefore of paramount importance. Social worker competency was the professional capacity most asked for in interviews for this study. Social rehabilitation concerns living conditions and general life conditions. As described by one participant,

Many torture victims I have met, have been given social benefits, and have placed themselves in a small flat, and are sitting there in the dark by themselves. There is quite a bit of social rehabilitation required in order to have a dignified life (Psychiatrist 1).

Social rehabilitation entails rehabilitation back into society (Quiroga & Jaranson, 2005). Having someone in charge of social and broader welfare-related issues becomes particularly important in relation to administrative authorities, such as the Norwegian Labour and Welfare Administration (NAV). As highlighted by participants, who were often asked for help with interpretation and translation during therapy sessions and medical appointments, internet-based services and decision letters in Norwegian can be impossible to comprehend for several reasons, including language skills and illiteracy, digital or otherwise. Several participants within the specialised health care service had taken the coordination and social worker roles upon themselves. This involves assisting patients in navigating available services and acknowledging the patient's broader circumstances and needs. It was clear that helping patients with practical matters was an important component of treatment and in establishing a therapeutic alliance. This is crucial as effective treatment in a therapeutic setting depends on trust and an alliance between the professional and the patient. At the same time, some expressed that it was outside their expertise, that it was time-consuming and left little room for traditional and equally important therapeutic interventions; highlighting the importance of the involvement and support also of other professionals to respond adequately to their patients' rehabilitation needs.

Conclusion

This article shows that torture victims with a refugee background are far from secured access to adequate rehabilitation services in Norway. This results from several interrelated issues. It pertains to general challenges, such as ensuring adequate and equal access to health and care services for all regardless of background, but also more specific challenges relating to having been subjected to torture and other grave human rights violations. These issues concern different systemic levels and authorities but are all crucial for a satisfactory rehabilitation service. In our research, we met highly competent professionals, many of whom have stretched far beyond what can be expected in their jobs, to address the needs of torture victims who they meet in their professional capacity. There are many other professionals like them out there. Rather than shying away from a task too tall to handle, they develop skills and expertise through perseverance, personal initiatives, networks, and profound dedication to help those who have trusted them with their experiences. Some have employers who acknowledge the value of their dedication and allow time and resources to respond to complex needs. However, their work and prioritisation of a group of patients/clients with particular vulnerabilities, and what can be comprehensive rehabilitation needs, are more often person-dependent than the result of institutional or national priorities. Importantly, several participants pointed out that their efforts where done despite of the organisation of rehabilitation services, rather than because of it.

Given the general lack of coordination, institutional priorities, frameworks, and inclusion of actors that would contribute towards a comprehensive rehabilitation process, the rehabilitation services for torture victims are fragmented across the country. Practitioners who strive to ensure local rehabilitation services describe a powerlessness when faced with a system that does not facilitate satisfactory rehabilitation. We have also found preliminary evidence that service providers may lack sufficient knowledge about the topic and that students of relevant professions, such as medicine, psychology, nursing, law, and policing, are to a large extent not exposed to the subject as part of their training, particularly as concerns rehabilitation. Accordingly, services are likely to continue to be characterised by insufficient knowledge about 'torture' as a topic and unfamiliarity with international protocols for identification and examination – as encapsulated in the Istanbul Protocol (OHCHR, 2004). While the Istanbul Protocol is importantly referred to in IS-1022 (Directorate of Health, 2015), the guideline is not legally binding and professionals may be un-familiar with it. This again affects the quality of services. As the organisation of practice stands today, a national systematic approach is missing, and identification and documentation of torture injuries therefore appears arbitrary. Given that persons subjected to torture often struggle with mistrust of public authorities, feel-ings of shame and even denial, both knowledge about torture and a systematic approach is necessary. Importantly, without knowledge about torture injuries, it becomes extremely challeng-ing to undertake good identification – a precon-dition for full rehabilitation to take place at all. To this end, there is an urgent need for further research that investigates GPs' knowledge about and practice pertaining to identification, refer-rals, and rehabilitation.

Finally, our findings suggest that torture victims with a refugee background experience the same barriers that immigrants more generally share in accessing public health, care and welfare services, such as issues pertaining to a public sector that still needs more competence in terms of serving an increasingly diverse population. This is manifested for instance through issues arising from language, including the usage of interpreters without formal qualifications, and different understandings of health, systemic knowledge and health literacy. There is therefore also an urgent need to continue to follow-up and address identified challenges (Directorate of Health, 2018) as to achieve the Norwegian authorities' goal of equal and adequate health and care services for the whole population (Ministry of Health and Care Services, 2013).

To secure rehabilitation for torture victims in Norway, the shortcomings of the current rehabilitation "model" needs to be addressed. Based on the experiences accounted for by the professionals we interviewed for this study, we make three recommendations to ensure that the authorities meet the current rehabilitation gaps.[4] First and foremost, we recommend that

1. *Norwegian authorities develop and implement a national plan of action on torture rehabilitation*. A national plan of action would provide the framework for a systematic, equal, accessible and comprehensive rehabilitation service to people who have survived torture – rather than the current fragmented services and the resulting highly person dependent practice.
2. *A focus on knowledge and capacity-building within relevant educational programmes, the national health services and other relevant public sector services.* All participants highlighted the importance of both general knowledge and expertise, among a wide group of professionals. Few participants had themselves been exposed to the topic of torture as part of their studies and raised the importance of this topic within educational programmes in medicine, nursing, physiotherapy, psychology, occupational therapy, dentistry, interpretation, social work, law, and police science. In addition, they emphasised the importance of frameworks on identifying, documenting, treating and rehabilitating torture injuries and of strengthening competence within existent service provisions (as would be ensured by a national plan of action).
3. S*trengthening and institutionalising interdisciplinary communities of practice with specialised expertise on the topic at all relevant levels.* Torture injuries may require rehabilitation across physical, mental, legal legal, social and spiritual aspects of life. This necessarily includes different services and administrative authorities. It can be extremely challenging both for the person requiring different services and the professional trying to provide and coordinate these. Accessible and interdisciplinary communities of practice are therefore of great importance, as highlighted by a

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[4] Upon completing the study, we presented these recommendations in a series of consultations with about 30 individuals from relevant public, private and humanitarian institutions, including some whom had partaken in the study and the rest being first invited to comment on our findings. Chatham House Rules applied. In these consultations, there was broad consensus for the need to include the topic of torture in educational programmes and capacity-building, and for a national plan of action. The significance of communities of practice was also broadly recognised, albeit with different weightings in terms of how these should or could be institutionalised and made available to relevant stakeholders. We suggest this recommendation in particular as a topic for further research and discussion.

majority of our participants. In response to this finding, we suggest that specialised and interdisciplinary competency about torture rehabilitation, as regards all levels of service, should be strengthened and gathered in one or more institutionalised communities of practice that supports existent and decentralised services.

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Looking for stability: Experiences of rehabilitation for Congolese survivors of torture in Athens and the role of the Congolese community in their support

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Key points of interest

- Survivors of torture from Democratic Republic of Congo (DRC) felt their rehabilitation was incomplete without stable accommodation, refugee status and employment.
- Whilst many survivors did not trust other Congolese people, the local community could still support their rehabilitation by assisting with their integration in Athens.
- A synergic, participatory approach is recommended in collaboration between organisations and policy-makers and the local Congolese community.

Abstract

Introduction: This study explored the experiences of rehabilitation for male Congolese survivors of torture living in Athens, as well as the potential role of the wider Congolese community in Athens in supporting rehabilitation.

Methods: In-depth interviews with survivors of torture attending a rehabilitation clinic and key informant interviews with representatives of the wider Congolese community in Athens. Data was thematically analysed to construct and develop codes and themes.

Results: 19 survivors and 10 key informants were interviewed. For many survivors, rehabilitation was an unclear concept. Despite the appreciation for services received at the clinic and the amelioration of physical and psychological symptoms, survivors felt rehabilitation was incomplete as it did not meet their accommodation needs nor provide stability through granting refugee status. Survivors were wary of trusting other Congolese people after expe-

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riencing torture and did not always associate themselves with the local Congolese community. The role of local Congolese leaders and organisations was not seen as replacing the clinical element of rehabilitation but aiding in practical issues such as information sharing and integration, especially in partnership with other organisations.

Discussion: Systemic shortcomings in Greece, including poor access to accommodation and insecure asylum status, impeded processes of rehabilitation. Many participants found themselves navigating an unstable and unpredictable landscape in their journey towards "feeling whole again". The role of the wider Congolese community in Athens in supporting rehabilitation remains complex and a lack of trust threatens social cohesion. Nonetheless, the willingness of the community to be more proactive should not be ignored by organisations and policy-makers.

Keywords: torture survivors, rehabilitation, Greece, Congolese, asylum seekers, refugees.

Introduction

UNHCR has estimated that between 5 and 35 percent of refugees are torture victims (OHCHR, 2017). Increased migratory flows to Europe have highlighted the need for a rehabilitation response to meet the needs of survivors of torture (SoT). This is especially relevant in the current Greek context, where migration is increasing (UNHCR, 2020a), and survivors of torture and ill-treatment are often not recognised, lacking access to the rehabilitation services they desperately need (Bourmpoulas, 2019; MSF, 2017)

Following the implementation of the EU-Turkey statement in 2016, Greece has become a country of slow transit and containment (Episkopou et al., 2019). Those who have gone through border procedures and had their geographical restrictions lifted gain the right to freedom of movement within the borders of Greece, but asylum procedures can take years.

The regional asylum offices and asylum units in the wider Attica region received the second highest number of applications across Greece during 2019 (Asylum Service, 2020), and Athens hosts the highest number of asylum seekers and refugees in UNHCR-supported accommodation (UNHCR, 2020b).

In 2019, 233 asylum seekers were registered as victims of torture, rape or other serious forms of violence or exploitation (AIDA, 2020). This number concerns only the applicants who disclosed their torture history at registration; there is no data available on applicants identified at a later stage of their asylum claim. This number, however, appears significantly low considering the 77.285 asylum applications in 2019 (Asylum Service, 2020), or even the lowest estimated prevalence of torture in the general refugee population of 5 percent according to UNHCR (OHCHR, 2017). While survivors of torture are included in the list of vulnerabilities recognised by Greek law, identification and subsequent provision of support is not always guaranteed (AIDA, 2020). In addition, according to Greek asylum law (L. 4636/2019), certification of survivors of torture should be done by a public hospital or by an adequately trained doctor within a public-sector health care service provider. As of October 2020, no such provisions exist within the national health system.

In 2019, the DRC was the third most common country of origin for people arriving through Greece's islands (UNHCR, 2020a). The political situation in DRC has been characterised by instability and conflict since independence, which has in turn led to people fleeing the country. An increase in human rights abuses, sexual violence and torture has been documented (Freedom from Torture, 2018; UKFCO, 2018).

Men make up the majority of the adult migratory flows to Greece (UNHCR, 2020a). Single males are frequently classified as "not vulnerable" by default, which leads to difficulties in accessing support services, particularly for mental health and issues relating to torture (Arsenijević, 2018; MSF, 2016, 2017).

The study aimed to understand more about the perceptions of the rehabilitation of male Congolese survivors of torture in Greece, and whether the Congolese community in Athens has a role to play in supporting their rehabilitation through informing and improving services and strengthening community links.

Methods

Study Design

A qualitative exploratory approach was used in this study, with data collection taking place between June and September 2019. This study involved in-depth interviews (IDIs) with selected survivors receiving rehabilitation services and Congolese key informants living in Athens.

Study Setting

Many rehabilitation programs adopt a multidisciplinary approach when working with survivors of torture (Jaranson & Quiroga, 2011; Persson & Gard, 2013, ODIHR/CTI, 2018).

In 2013, the Greek Council for Refugees (GCR) and the Babel Day Centre for the Mental Health of Migrants and Refugees (Babel) began implementing the Program for the Rehabilitation of Survivors of Torture "Prometheus" in Athens. Babel specialises in psychological support for refugees and migrants; GCR in legal and social support. The program provides holistic services including legal, social, psychological and medical support. Babel and GCR have cooperated with several actors experienced in the field of the rehabilitation: DIGNITY - Danish Institute against Torture, the Centre for Trauma, Asylum and Refugees (University of Essex), REDRESS and the Human Rights Foundation of Turkey.

In October 2014, Médecins Sans Frontières (MSF) began collaborating with the consortium, providing medical, mental health, social and physiotherapy services to SoT (the MSF clinic). Interdisciplinary collaboration is the core of this partnership. There is no public specialised support program for SoT.

Concerning the definition of SoT, MSF follows the ICRC definition of torture and ill-treatment (ICRC, 2016), while GCR applies the definition of UNCAT (UN General Assembly, 1984). As a result, the beneficiary cohort across the three services does not always overlap. This study focuses on the MSF clinic cohort.

Approximately 1030 individuals from 47 different nationalities have been seen in the MSF clinic since October 2014, with those from DRC comprising 26.2% of the overall beneficiaries.

Study Population

Two groups were included in the study. The first consisted of key informants from the Congolese community in Athens, recruited using snowball sampling, who held formal or informal positions of leadership and/or influence and were involved with community organisations. The second consisted of male, Congolese SoT actively enrolled at the MSF clinic, including SoT also receiving services from Babel and GCR. Purposive sampling was used to sample survivors. Taking into consideration the availability of potential participants who had seasonal work and recommendations from the MSF clinic therapeutic team, 33 survivors were informed about the study. Six refused to participate, and eight were not in Athens.

Data Collection

The principal investigator (PI) and two co-investigators conducted the interviews. The PI did not interview survivors to whom she had directly provided social work services, to avoid therapeutic misconception. No other investigator was providing services to participants. In-depth interviews were conducted in French, Lingala or Greek with three translators assisting the investigators who did not speak French. All interviews were conducted in person, apart from one key informant interview which was conducted over Skype.

Data Analysis

Thematic analysis was conducted, and data was analysed inductively, with coding generation through examination, and in turn, the development of main themes from the information contained within. The process of analysis followed the six steps presented by Braun and Clarke (2006, p. 87).

Ethical Considerations

This study was approved by the Médecins Sans Frontières Ethics Review Board, Geneva, Switzerland. Verbal informed consent was taken from all survivors. Verbal consent was deemed appropriate in this context as those who have experienced torture or who are in the process of applying for asylum are often cautious of signing their names on official documents. Key informants gave written consent but were not required to write their full name on the consent form, as an additional step to preserve anonymity. Information sheets and informed consent forms were provided in French.

Official job profiles of the key informants have been omitted, to prevent individuals from being identified. Survivors were not asked to talk about their individual experiences of torture to avoid re-traumatisation. Participants were offered and/or provided with additional psychosocial support if they requested.

Results

Study Population

Interviews were conducted with 19 survivors and 10 key informants.[1] All interviewees were Congolese, and all were male apart from one key informant. The average age of key informants and survivors was 36 and 35 years respectively. Of the 19 survivors, 16 were homeless or residing in insecure accommodation when they arrived in Athens, and at the time of the interviews, 10 were still homeless or in insecure accommodation. Sixteen survivors and two key informants were unemployed. Of the 19 survivors, 13 were waiting for a decision on their asylum claim or their claim had been rejected. Six out of ten key informants had residence permits or were naturalised Greek citizens.

Experiences of Rehabilitation

"What is rehabilitation?" understandings of the rehabilitation process: Multiple participants expressed confusion when asked to discuss the term "rehabilitation," even if they were currently receiving rehabilitation services. The word was often misunderstood or confused with the restoration of furniture or buildings and not linked to the rehabilitation of a person.

Several survivors described rehabilitation as the support they received after their

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experiences of torture and listed multi-disciplinary team members including medical doctors, physiotherapists, psychologists, social workers, psychiatrists and lawyers. Key informants focused more on the need for mental health support when the concept of rehabilitation was mentioned: "*I mostly see [rehabilitation] as a psychological support, someone to talk to about their problems and then gradually someone to follow them, with advice, with medication, depending on their condition*" (Key Informant 2). Many survivors described rehabilitation as the desire for a change in their mental and physical symptoms, improved health and overall life circumstances. One survivor saw rehabilitation as having three parts: "*Health is first part of it [rehabilitation]. Then the second part is good living conditions. Then the third part is being protected [legally]*" (Survivor 3). Ultimately, rehabilitation for survivors of torture was about being healthy, whole and being able to function again in their everyday life.

Rehabilitation and improved health: Survivors described how their physical and mental health had improved as a result of the rehabilitation services they received in Athens: "*At one time I couldn't be with other people, I was isolated. I was crying and I was also thinking of my family… but that has been reduced*" (Survivor 9).

> *"Before I had difficulty sleeping, I was constantly angry. But today there is no anger in me anymore. I can sleep. I had a problem with my back. When my physiotherapist asked me to evaluate the pain, he gave me a scale from zero to four, I think. When I came here, my pain level was even above three; but today it's less than two. That's what I call rehabilitation"* (Survivor 13).

A relationship based on trust with those providing care was described by survivors as a key part of seeing an improvement in their health status, their ability to interact again with others and to receive support:

> *"Without the psychologists, the social workers; maybe I would be already dead. […] They can't give you money, they don't give you food, but they show you respect. This helps. When you go there, you expose all your problems. I had problems; I had many problems in my head… Every time I had an interview with a psychologist or a social worker, I felt relieved"* (Survivor 14).

Rehabilitation as stability: An overarching theme of participants' expectations and experiences of rehabilitation was the need for stability, relating to asylum, housing and integration in Greek society. Survivors were at different stages in their asylum process, whereas most key informants had been in Greece for many years and had residency or Greek citizenship. Survivors saw their legal status as essential for moving forward in life and believed being granted asylum would enhance their rehabilitation. Many had waited years for the outcome of their asylum interviews.

> *"The biggest rehabilitation is to take someone to safety, grant him international protection so that he can say: 'I am safe, and I cannot be deported to my country.' And after that, for me, it's to integrate someone in the society and treat him as a human being, so that he can find a job"* (Survivor 9).

All survivors expressed fears around their living conditions, asylum papers, employment, family or their health. They described feeling insecure and being unable to make long-term plans. These concerns threatened the rehabilitation process.

> *"We can't say that we are rehabilitated 100 percent because the lack of jobs makes us very ill, mentally and physically. The way we are living you just can't say that we have been rehabilitated 100 percent"* (Survivor 5).

> *"I was hopeful at the beginning, but I'm still not OK. How can I be OK in a country where I don't have any papers? You don't know what will happen, and then what if I get rejected and they put me in prison? That's why I'm scared. I'm scared of going to prison again. I've never been in prison here, but I think of what happened in my country"* (Survivor 8).

The waiting process was, for many survivors, preventing them from feeling stable, secure and well: "*As long as I remain like this, doing nothing… all the time I spend waiting for the decision I have a lot of thoughts and that hurts me a lot*" (Survivor 17).

This key informant explained how rehabilitation went beyond papers:

> *"Rehabilitation doesn't only have to do with papers. Rehabilitation has to do with overcoming what happened to [them] before, or if [they] cannot overcome it, to at least gain something… the person might say that 'I am very strong,' 'I am still alive' and 'I can go on with my life'"* (Key Informant 8).

Another challenge to rehabilitation from the perspective of the survivors was living in poor-quality, shared accommodation or being homeless: "*So, the rehabilitation that we are looking for, how will it happen when I can't even pay for my rent? Eating? Don't even talk about it*" (Survivor 4).

Integration into Greek society was a challenge for all the survivors, and key informants also reflected upon obstacles relating to the language and culture. Not speaking English or Greek meant that many survivors were unable to be involved in activities or benefit from services. "*I can be referred to a hospital, but I cannot go because there is no translator, there is a problem with the language*" (Survivor 5). Others were unable to access services such as language classes that would help them overcome this obstacle. "*I registered for [Greek] lessons. But they give the lessons in English, Greek or Arabic. Not in French. So, I started, first day, second day: I didn't understand anything. I left*" (Survivor 6).

Being unable to access work was also a challenge for many who felt unable to fulfil their role as "breadwinners": "*I have a social worker, I have a doctor, I have a psychologist and a psychiatrist. But the problem is that despite everything they've given me, without a job, how can I live?*" (Survivor 10)

Participants described how men should be strong and self-reliant; past torture experiences along with their present inability to cover even their basic needs or support family members back in Congo, threatened that identity even more. *"I was thinking to myself , 'What's the point in staying alive? I am not productive; I am not producing anything yet… What's the point in staying alive?'"* (Survivor 14)

The importance of employment and subsequent integration was unanimously recognised by key informants as an essential step for rehabilitation:

> *"[Employment] changes the person. He will step away from his community and the five or ten people he knows in Babel, MSF, or GCR. He will go to work, he will socialise, and he will see other things. He will get into a rhythm. He will start waking up in the morning, he will have an occupation, he will feel better in his body… These are the practices we need to look for if we want to work with*

> *this vulnerable population"* (Key Informant 8).

The Role of the Formal and Informal Congolese Community in Rehabilitation: "What can the association do for me?"

Community knowledge of rehabilitation: Participants were asked whether they thought the Congolese community could be involved in supporting SoT in Athens, and how this support could be given.

Many key informants were unaware or reluctant to discuss issues surrounding torture. There was also a limited knowledge of programmes supporting SoT, although most were aware of individual services such as language classes or mental health support.

Key informants also stressed the reluctance to share psychological difficulties due to torture out of fear and embarrassment:

> *"No, we do not discuss [torture]. If it has reached the physical, bodily level then there might be a discussion, but the other level, the psychology, it is not discussed and is underestimated"* (Key Informant 9).

Lack of participation in the formal community association was attributed to lack of time, lack of interest or a lack of immediate gain. Poor attendance also meant that there were few occasions to "reach out" to others.

Trusting other Congolese people: Being able to trust others was a huge challenge for many survivors and prevented them from seeking support from and interacting with other Congolese people in Athens.

> *"Since I left my country… to trust someone? [My social worker] asked me if I wanted a Congolese interpreter and I said no. I refused. I spoke in French. I prefer having someone Moroccan, not someone Congolese"* (Survivor 8).

The formal community association was described with ambivalence by survivors. It is an association with paid registration, although support is offered freely to registered members and non-members alike. For some, it was a place of unification, but others described a division between Congolese migrants who had settled many years ago and those who had fled seeking asylum. A fear of people gossiping and talking about them also led survivors to be reluctant to share and seek support from other Congolese people in Athens. A few survivors preferred associating with other French-speaking Africans and purposely avoided other Congolese people as there are "*no secrets*" amongst Congolese. Participants were also concerned about being identified and potentially tortured again, and key informants and survivors shared anecdotes of information travelling back to Africa:

> *"I don't want [another Congolese person] to know what happened to me. My fear is that he will tell somebody else, somebody else, somebody else, until maybe my country will be informed and look for me"* (Key Informant 3).

Whilst there was some support for the idea that the community could support Congolese SoT, the issue of trust and the fear of talking about torture remained a challenge, particularly from the perspective of the survivors.

Potential role of Congolese community members in supporting rehabilitation: Word of mouth was an important way for information about rehabilitation services to spread. Many survivors were directed to supporting services (including rehabilitation) by other Congolese people, and key informants explained how they are already employing strategies of disseminating information, in person and online, as individuals or through the association. They additionally described how their influential role within the community could aid the spread of information about rehabilitation services

Key informants saw a potential role in providing support and working with other community organisations including associations and churches to raise the issue of survivors of torture amongst Congolese people living in Athens and inform them about available services. They described the need for the organisations offering rehabilitation services to open up to the wider community, so that they could benefit from transfer of knowledge and be able to successfully orient people who needed help.

> *"Meeting with the community, meeting with the churches, seminars inviting people who have been beneficiaries of those projects, who have been through this process and they have been, quote unquote, healed, and rehabilitated"* (Key Informant 8).

Despite the overall reluctance to share their experiences with Congolese people, some survivors expressed a willingness to discuss their positive experiences of rehabilitation with others.

Key informants pointed out that the community in general did not have the same skills as specialist organisations, thus would not be able to substitute a rehabilitation program in its entirety.

> *"The community does not have the capacity to play this role, do you understand? They don't have the capacity to play the role of the psychologist or the psychiatrist, because they haven't studied psychology. They cannot play this role"* (Key Informant 10).

However, the need for the community to address the newly emerging needs of Congolese in Athens was recognized.

> *"That's what we want in the community, a change of mentality. Because it's not only the person who might want to tell you something, what are you going to do with this information? If the mentality changes, then tomorrow, regardless of gender, people could find someone to confide in"* (Key Informant 5).

Discussion

This study explored the perceptions and experiences of rehabilitation from the perspective of male Congolese survivors of torture attending a rehabilitation clinic in Athens, and from members of the formal and informal Congolese community. We also wanted to understand if -and how- local Congolese community members could support the rehabilitation of SoT.

Rehabilitation was an unclear concept to many survivors, despite their direct experience of services. This could be an issue of health literacy, as described in Riggs et al. (2016), as an unknown concept that has the potential to include expectations that will remain unmet. This lack of clarity highlights the importance of the intake process in rehabilitation programs such as the one in this study, to ensure that beneficiaries understand the services themselves and the objectives of care. It also demonstrates the potential for a joint, participatory definition of rehabilitation and well-being that could inform future service provision (Bragin et al., 2014).

Survivors' main expectations of rehabilitation were improved physical and mental health (Persson & Gard, 2013). This is no surprise. However, the study further highlights the importance of a secure and stable context –politically, legally, socially, economically– for the rehabilitation process. Rehabilitation thus extends beyond physical and mental health, to include aspects of the social and material environment such as safety, security, independence, refugee status and social integration.

Survivors in this study clearly stated the need for a calm and stable environment. The consequences of insecurity, unpredictability and the lengthy wait for asylum on the mental health of migrants and refugees in Greece have been previously documented (Bjertrup et al., 2018, Womersley et al., 2018) and our findings support the conclusion that rehabilitation should include these factors. A lack of proper reception conditions and the absence of integration planning at a national level in Greece are creating enormous uncertainty and instability for asylum seekers and refugees (AIDA, 2020). This is especially poignant for SoT, as torture is characterised by a loss of control and safety (Fabri, 2001), which is mirrored in the conditions of their everyday life, inciting feelings of powerlessness and loss of personal agency (Merkord, 2001). Rehabilitation goes beyond focusing on the torture experience and becomes a response to the uncertainty and unpredictability of the state and asylum system.

Survivors also described how torture and then their subsequent living and employment situation in Athens made them feel that their identity as men was challenged as they were not fulfilling their roles and obligations as fathers, sons and husbands. Men being overlooked within the refugee population (Arsenijević, 2018, Neikirk, 2017) illustrates not so much a problematic of gender but the systemic quantification and categorization of vulnerability as a pre-requisite to receive supporting services within the refugee context (Papadopoulos & Gionakis, 2018). This study did not explore issues of masculinity and fatherhood in-depth, but there is a definite need for awareness on the perspectives of refugee men and fathers, especially in survivors of torture.

Destruction of social links is a direct aim and consequence of torture, and the restoration of trust in others is an integral part of the rehabilitation process (ODIHR/CTI, 2018). Most of the survivors described how the care they received gradually restored their capacity to trust others. Lack of trust was also presented as a deterrent to sharing their experiences with other Congolese; which brings us to the issue of community involvement. Studies have indicated that "*a lack of ties with ethnic and host communities can be a serious source of stress*" for migrants (Dow, 2011, p. 181); however, as we have seen, originating from the same country is not enough to constitute a functional community, especially for those who have been tortured by compatriots. Refugees may belong to several different communities, not necessarily restricted by language or nationality, with an importance placed on the definition coming from the community itself (Mitchell & Correa-Velez, 2009). Papadopoulos (2019a) underlines the same idea, while talking about the assumptions and heterodetermination that humanitarian organisations, as representatives of a "dominant" narrative, may fall into. We do not intend to force the notion of a shared group upon beneficiaries of the clinic (Episkopou et al., 2018), nor insist that they disclose the horrific details of torture with others, but instead wish to reflect on ideas of belonging and possible ways of finding sanctuary and stability in shared experience (Papadopoulos, 1999).

Involving Congolese community organisations, churches or associations in a country such as Greece where current services are limited and overstretched could improve service provision, enable more people to be reached and mitigate the potential isolation that survivors can face. The potential for community members to aid in the provision of mental health support services has been studied (Williams & Thompson, 2010), as has their role in specific services for SoT (Kotsze et al., 2017). Our results show, however, that divisions and lack of trust between Congolese people living in Athens in terms of social status, employment and migration experience would make this extremely challenging. Key informants acknowledged that there was a need for specialised support and that they did not feel able to provide this, beyond linking people to services or the support provided by religious leaders. The suggestion from several key informants to introduce SoT services to community members at meetings was also reassuring. There was strong motivation and willingness from the formal Congolese association to learn more and maintain its function as an information hub that could direct and advise its members about service provision in Athens. Our findings support the recommendation that organizations should share knowledge, experiences and know-how, and allow communities the space to self-identify without assumptions of homogeneity on the organisations' part.

Likewise, homogeneity should not be assumed about SoT (Cullinan, 2001). Rehabilitation is a dynamic process that requires a holistic, personalised approach (UNCAT, 2012), taking into consideration the "*complexity, uniqueness and totality*" of the person (Papadopoulos & Gionakis, 2018, p. 6; Papadopoulos, 2015). There is no question of whether the destabilising conditions presented by the participants of this study are potentially re-traumatising; the issue is what is required from a rehabilitation program to empower people in a disempowering environment such as Athens.

Focus should not be on "trauma" and "recovery" in a polarised "from-to" discourse, but on a holistic view of the individual, including both adversity and resilience, informed by the wider socio-political context that SoT and professionals operate in (Papadopoulos, 2019a, 2019b). Rehabilitation from the physical and psychological trauma of the past cannot be detached from the current living conditions and the limited prospect of integration for Congolese males in Greece. Accommodation or vocational training should be considered as part of local advocacy and strategy planning to develop meaningful partnerships for the direct or indirect coverage of survivors' needs. Medical and non-medical organisations should also consider the risk of isolation that many survivors are facing and encourage the creation of safe spaces, collective activities and opportunities to participate in society as an equal member as part of the holistic rehabilitation process.

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Note on author's passing

Dr. Gianfranco De Maio was a valued member of MSF since 2001. He was project coordi-nator for the rehabilitation centre for torture survivors in Rome, as well as technical refer-ent of the Brussels operational centre for the rehabilitation of survivors of torture, abuse and intentional violence in support of the projects in Athens, Mexico City, Rome and other places along the migration routes. He untimely passed away in June 2020, leaving behind a legacy of dedication and solidarity. His presence, knowledge and insight will be missed by all.

The torture doctors. Human rights crimes and the road to justice.

Steven. H. Miles.
Georgetown University Press. 2020

By Pau Pérez-Sales*

Professor Steven Miles, in his recently published and long-awaited book, reviews the many ways in which a doctor may be complicit with torture.

Medical complicity has been an inherent part of the history of torture, in particular in the 20th century and with the beginning of contemporary forms of torture under French colonial rule in Algeria.

Professor Miles defines a torture doctor as: *a licensed physician who directly and indirectly puts (a) medical knowledge or skills or (b) the authorities, duties or privileges conferred by the medical license in the service of «torture» or «cruel, inhuman or degrading treatment or punishment» as such terms are understood in international law.*

He develops a catalogue of the ways that a health professional can be involved in torture practices. They can be summarised (chapters 1 to 4 and annex) into four categories:

1. Using their medical or psychological expertise to, directly or indirectly, inflict torture (e.g. medical or surgical procedures on the detainee, denial of analgesia, designing of physical or psychological torture methods, exploring or treating a patient in front of his or her torturers without privacy, allowing coercion and otherwise breaking privacy).
2. Performance of pseudo-medical or pseudo-psychological procedures considered as torture (e.g. forced anal examinations to determine alleged homosexuality, virginity tests, psychological tests to humiliate or discredit a victim, use of medical or psychiatric facilities to conceal the torture or as a form of torture in itself).
3. Writing medical records or carrying out examinations that ignore or distort essential information for the documentation of torture. For instance, the use of diagnoses that justify isolation of a person, using euphemisms that underestimate injuries or symptoms to show that they are banal or mild or superficial examinations or carrying out examinations that include irrelevant information. Also, documentation of facts that do not exist or have been manipulated; destruction of relevant clinical information; signing death certificates attributing the death to causes other than torture; destruction of evidence in autopsies; disclosure of information given during medical acts among others.
4. Conducting human medical or psychological research with prisoners without consent or without respecting the principles of research ethics.

Each one of these practices has occurred, and continues to occur, worldwide.

In Spain, the place from where this review is written, the works of Eva Forest (1987), who began collecting testimonies of torture in the Basque Country in the mid-1970s, documented the fundamental role of forensic doctors in cover-ups. In 1981, by way of an example case among many, Dr Esteban Muruetagoiena died after nine days of physical and

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psychological torture at the Guardia Civil facilities in San Sebastian and Madrid. The official autopsy certifies a natural death by a heart attack. The forensic certificate written following the death of Mikel Zabalza at the hands of the Civil Guard, tortured at the Intxaurrondo barracks in November 1985 reported: «death by immersion». It gave credence to the Civil Guard's version that during transportation, while handcuffed, Zabalza tried to escape and drowned while trying to cross the Bidasoa River. An independent inquiry by Danish forensic doctors supported the family's thesis that he had died due to torture by wet asphyxiation («bathtub») and that the body was subsequently transported close to the river. On that occasion, the European Parliament issued a statement expressing its concern about the role of forensic doctors in Spain and demanding that they comply with the minimum standards required of forensic services in any, allegedly democratic, European country. The case was finally dismissed and archived in 2009. Since then, there has been little change regarding the role of official forensic doctors in Spain, as academic reports (some of them published in Torture Journal) show (Morentin et al., 2008; Petersen et al., 2002; Petersen & Morentin, 2017, 2019) . There is extensive documentation, by way of another country example, on the role of doctors during the dictatorship in Chile. Doctors were directly involved, whether in uniform or not, in raids, accusations, denouncements or by direct execution of torture, as an Amnesty International (1983) fact-finding mission showed. Others took advantage of their political position to expel their colleagues from hospitals and to take over chairs and positions of service. The Chilean Truth and Reconciliation report (CNVR, 1991a, 1991b) also describes the issuing of forensic documents that were falsified by doctors. However, in a fascinating book, Rivas (1990) showed how the Chilean Medical Association was not able to prosecute those doctors, even under the restored democratic rule and instead preferred to look "the other way." Further, the Argentinian Never More report from the National Commission on the Disappearance of Persons (CONADEP, 1984) describes the conniving practice of doctors in the care of prisoners and detainees and the concealment of torture without legal consequences for those involved. Similar cases can be found in Uruguay (Bloche, 1986; SERPAJ, 1989) , Brazil (Arquidiocesis de Sao Paulo, 1985), Paraguay (Boccia et al., 2006), Peru (HRW, 1997) or Venezuela (Petersen, 1990), among others.

For several decades now, Mexico has been the country in Latin America where the role of forensic science has been most determinant in covering up the use of torture. The reports that denounce the fraudulent use of the Istanbul Protocol (IP) to cover up torture cases have been the subject of academic papers and reports. A recently published study analyzing 54 Istanbul Protocol reports carried out by official medical and psychological forensic experts by the Attorney General's Office (Fiscalía General de la República), shows how the IP has been used fraudulently to cover up torture practices (Grupo Independientes, 2020). The authors insist on the need for deontological and legal measures and demand that forensic services in Mexico are made independent[1].

Unfortunately, in Latin America, the data shows that the determining factor for its occurrence was, in most cases, the doctors' identification with the cause of the institution, sharing their values and aims in regarding torture as a «lesser evil» to protect society from danger and criminality. This adds to coercion or fear

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[1] http://www.psicosocial.net/

of negative evaluation by the institution, and, in a minority of cases, an inadequate understanding of medical ethics. However, according to documentation and studies, empathy with perpetrators is the rule.

Those Latin American examples are similar to the many examples collected and detailed by Professor Steven Miles. He draws an «atlas» of torture doctors that shows that physicians are a «necessary» part of modern torture in at least one hundred countries, including in democracies. He details in chapter 6 carefully documented examples using sources in different languages and from different contexts. He makes a particular case for the United Kingdom (chapter 7) and the role of the British Medical Association in failing to take action when confronted with well-documented cases. This chapter parallels what happened with the American Psychiatric Association regarding Guantanamo and the Israeli Medical Association concerning the torture of Palestinian detainees, including minors (Yudkin, 2009). Chapter 10 brilliantly uncovers the disappointing role of the World Medical Association in compelling cases paralelling a similar situation that has recently occurred at the World Psychiatric Association, where a statement to forbid psychiatrists from participating in the interrogation of detainees took more than three years to obtain approval (Pérez-Sales et al., 2018).

Professor Miles also reviews the fight for accountability with a particular focus on US policies and the ongoing efforts to combat medical complicity. For most doctors who do not work with torture survivors, torture is probably a minor problem that occurs in «small, far and distant» countries – something almost exotic. It is certainly not, for them, something to worry about in a democratic country. Furthermore, in torture practices, doctors would usually only be involved when there is no other option and surely are the "weakest element" in the chain of professionals that make torture and impunity possible. It would not be fair to make them accountable. But professor Miles shows that this is a naïve viewpoint. The author finally concludes that impunity is the rule, something that he finds «profoundly disturbing».

This book, a necessary read, confronts courts, medical boards and professional associations and asks for an end to this practice of looking the other way. We encourage the readers to navigate its pages and take action. When one doctor is part of a torturing system, all doctors are concerned.

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EMDR as an evidence-based therapy for trauma – A reply to the Independent Forensic Expert Group's statement on conversion therapy.

Oliver Piedfort Marin[1], Isabel Fernandez[2] and Carol Miles[3]

In the Volume 30 of the Torture Journal, the Independent Forensic Expert Group (IFEG, 2020a) made a "Statement on Conversion Therapy," based on Josina Bothe's very detailed report "It's torture, not therapy" (Bothe, 2020). In the US the common terminology now is Sexual Orientation Change Efforts (SOCE) since the terminology should not give the impression that it is a therapy. The authors of this paper have included Eye Movement Desensitization and Reprocessing (EMDR) therapy (Shapiro, 2018) among the practices performed "to create change in an individual's sexual orientation."

The Statement of the IFEG sheds light on a critical problem for many individuals, adults and children. Bothe's data must have been very difficult to obtain, even in countries where conversion "therapy" is legal. We strongly support the commitment of the IFEG and of Josina Bothe, in fighting conversion "therapy" (SOCE) that goes definitively against human rights.

We are impressed by this important work which highlights that many methods are used to coerce people into becoming heterosexual, from physical torture to misuse of medication or psychotherapy. This includes psychotherapies that have excellent effects on ICD-10 recognized psychopathology, such as EMDR therapy. Nevertheless, we would like to draw your attention to inaccuracies in several statements in the Bothe's research and express our objection about how EMDR therapy is mentioned in the statement of the IFEG.

By way of introduction, EMDR therapy belongs to the wide range of psychotherapies which are categorized in the statement under "talk therapy or psychotherapy" (IFEG, 2020a, p.66) along psychodynamic, cognitive-behavioral, systemic psychotherapy, and others. EMDR therapy is recommended by major health authorities around the world, to treat post-traumatic stress disorder (PTSD), including PTSD resulting from torture (APA, 2004; VA/DoD, 2017; DNSCGMHC, 2003; ISTSS, 2018). The World Health Organization recommends EMDR therapy for the treatment of PTSD for children, adolescents, and adults (beside trauma-focused cognitive behavioral therapy) (WHO, 2013).

First of all, we would like to state strongly that EMDR Europe Association and EMDR International Association (EMDRIA) do not consider non-heterosexual orientations as pathology under any circumstances. The Code

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of Ethics of EMDR Europe[1] explicitly states that: *"Therapists should respect individual, cultural and role differences, including (but not exclusively) those involving age, disability, education, ethnicity, gender, language, national origin, race, religion, sexual orientation, marital or family status and socio-economic status. They should avoid any action that will violate or diminish the human, legal and civil rights of clients or others who may be affected."* The policies of EMDRIA[2] are also very clear in stating that EMDRIA *"does not believe LGBTQIA individuals are in need of mental health treatment by virtue of their sexual orientation and gender identity. Therefore, the use of EMDR therapy in any SOCE program or other similar intervention is inappropriate and outside the norms and values of the EMDR International Association. The EMDR International Association prohibits the use of EMDR therapy for this purpose by its Members, Certified Therapists, Approved Consultants, Credit Providers, and Approved Training Providers."*

Furthermore, the sources which led to IFEG's statement about EMDR are two patients' personal testimonies that appeared in newspapers (IFEG, 2020b). Although these experiences are for us a cause of deep concern, these sources are not scientific and lack the quality of the rest of Bothe's report. These two clinicians are not members of any EMDR Association and do not abide by the EMDR Europe or EMDRIA's Code of Ethics. We are alarmed that these two cases are being used to form a conclusion that EMDR therapy could be a form of torture. This is, in fact, the opposite of everything that EMDR therapy and the clinicians who use it properly stand for.

One of these two cases refers to a psychiatrist from Switzerland providing "psychotherapy" including misusing EMDR for SOCE. The Swiss EMDR Association was aware of this situation and one of its board members of the time and actual Vice-President of EMDR Europe made a clear statement in the press that it was a misuse of EMDR therapy. (Bauman, 2019). This information is missing from Bothe's data base.

Nonetheless, listing EMDR in this context precisely exposes it as possible conversion "therapy", while it is the therapists' misuse and unethical behavior not EMDR, that violates human rights.

The statement highlights how many psychotherapies (and medications) are in fact *misused* by specific groups or individuals working outside of the ethical code of their professional organization or outside the law in some countries. The issue is not the method but rather so-called psychotherapists or other individuals misusing a method. We believe that this point of attention might be missing in the statement. As a matter of fact, EMDR – very much a client-centered psychotherapy – is one of the few therapies where the therapist's intervention during the sessions is minimal because the reprocessing of traumatic experiences is normally led by the patient.

In conclusion, EMDR Europe and EMDRIA strongly fight against the view that EMDR could be used as conversion "therapy" or SOCE. The statement of the IFEG, based on only two cases, could actually be severely detrimental to the reputation of EMDR therapy and to the confidence of patients for EMDR therapy. We want to make sure that EMDR therapy will continue to be provided with confidence to survivors of trauma, including survivors of torture, such as torture produced by conversion processes. Confidence in the method and in the clinician is needed

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[1] https://emdr-europe.org/about/mission-vision-and-values/ (2020, November 18)

[2] https://www.emdria.org/about-emdria/emdr-international-association-policies/ (2020, November 18)

in order to overcome the sequala of traumatic experiences.

We support the efforts to fight against any form of coercion and against any misuse of recognized psychotherapies. The focus on the people performing torture should not be overlooked by a focus on the psychotherapy method that they inappropriately use.

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Response to EMDR European and international associations letter.

Asger Kjærum[1]

The following is a response by the International Rehabilitation Council for Torture Victims (IRCT) to the criticism expressed by EMDR International Association and EMDR Europe Association in relation to our report and the Statement issued by the Independent Forensic Group (IFEG), which describe how the use of conversion therapy can be prohibited under the global ban on torture and ill-treatment.

We would like to thank the EMDR International Association and EMDR Europe Association for its strong and principled position against conversion therapy and for the specific points of criticism expressed in its letter to the Torture Journal.

We understand the criticism to contain the following elements:

1. The two instances of EMDR being used in conversion therapy are not scientific and are not sufficient to conclude that EMDR therapy could be a form of torture.
2. That the strong condemnation from the Swiss EMDR Association in relation to one of the two cases was not included in our report.
3. That the report focuses on methods rather than their unethical misuse in conversion therapy and the practitioners responsible for this.

In relation to point 1, our report is very clear and explicit in describing the methodology applied in identifying examples of conversion therapy and that the aim of the report is to create a global overview of the issue not to raise individual cases. Considering this context and the general absence of judicial consideration of the claims made by victims, we have relied on the stories as present by the individual victims. In relation to EMDR, we believe that the two cases, whose facts have not been challenged, are a clear indication that EMDR has been and therefore could be used in conversion therapy.

In relation to point 2, we are very pleased to note the response by the Swiss EMDR Association, which also seems to confirm that the case described in our report did in fact take place. Our report is not intending to criticise specific authorities or professional groups nor to map their responses to instances of conversion therapy. We therefore see no reason why the response by the Swiss EMDR Association or any other authority in any of the countries covered by the report would be included in the report.

In relation to point 3, we believe that this criticism has no grounding in the content of the report and in addition illustrates a fundamental misunderstanding of human rights law and the prohibition of torture and ill-treatment. As the report shows, torture and ill-treatment is often perpetrated through the abuse of otherwise legitimate acts and the discriminatory targeting of groups and individuals. Human rights violations are caused by human action and inaction, not the mere existence of tools of methods that can potentially be utilised for inflicting severe physical or mental pain or suffering. Therefore, the report dedicates several chapters to perpetrators and the role of the State.

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Finally, we greatly appreciate that the EMDR International Association and EMDR Europe Association are concerned about how their methodology featuring in a report about torture will be perceived by potential clients. However, the sad reality is that much of the torture that takes place in this world is committed through the unethical use of otherwise legal tools and methods – sticks, electric wires and cables, music, water etc. Therefore, the biggest focus of our work and the very reason we wrote the report in question is to document how such tools and methods and being illegally repurposed in a way that inflicts severe pain and suffering on the people exposed to it.

We therefore hope that this response will address any further concern that the EMDR International Association and EMDR Europe Association may have so they can shift their focus back to the strong and principled advocacy against conversion therapy.

Call for papers. Special section of Torture Journal: Journal on Rehabilitation of Torture Victims and Prevention of Torture

Enforced Disappearances

Pau Pérez-Sales - Editor-in-Chief, Torture Journal

Guest Editors: Mariana Castilla (Collective Against Torture and Impunity) & Bernard Duhaime (Université du Québec à Montréal, Member of the United Nations Working Group on Enforced or Involuntary Disappearances)

Background

Enforced disappearances imply multiple and continuous violations of various human rights, including the right to due process and judicial protection, the right to life, to personal integrity and to legal personality. In various regions of the world, this practice seeks to generate a state of anxiety, insecurity and fear in society. When committed as a systematic attack against the civilian population enforced disappearances also constitute a form of crime against humanity.

The UN General Assembly has indicated that "[a]ny act of enforced disappearance (…) constitutes a violation of the rules of international law guaranteeing, (…) the right not to be subjected to torture and other cruel, inhuman or degrading treatment or punishment" (art. 1.2, UNGA Res 47/133). Indeed, as reiterated by regional human rights tribunals, this type of detention of an individual can constitute a form of torture (ej. Inter-American Court, Santa Barbara Peasant Community v Peru). In addition, in many instances of disappearances, victims are the object of specific acts of torture with the objective of punishing, questioning or obtaining confessions from them.

Moreover, a State "cannot restrict the right to know the truth about the fate and the whereabouts of the disappeared as such restriction only adds to, and prolongs, the continuous torture inflicted upon the relatives" (A/HRC/16/48). Accordingly, in addition to the disappeared person, his or her relative can also be a victim of torture.

While this year marks the 40th anniversary of the creation of the United Nations Working Group on Enforced or Involuntary Disappearances and the 10th anniversary of the entry into force of the International Convention for the Protection of All Persons from Enforced Disappearance, the coming special edition of the Torture Journal seeks to explore further some of these issues from an interdisciplinary perspective. Indeed, additional academic contributions are required for example to better understand how impunity in this context can generate such violations, how the States actions or omissions can re-victimize relatives of disappeared persons, or how investigative methodology should take these factors into account.

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