# TORTURE 28

Journal on Rehabilitation of Torture Victims and



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

#### **TORTURE**

#### Journal on Rehabilitation of Torture Victims and Prevention of Torture

Published by the International Rehabilitation Council for Torture Victims (IRCT), Copenhagen, Denmark. TORTURE is indexed and included in MEDLINE. Citations from the articles indexed, the indexing terms and the English abstracts printed in the journal will be included in the databases.

#### Volume 30, No 2, 2020 ISBN 1018-8185

The Journal has been published since 1991 as Torture - Quarterly Journal on Rehabilitation of Torture Victims and Prevention of Torture, and was relaunched as Torture from 2004, as an international scientific core field journal on torture.

#### **Editor in Chief**

Pau Pérez-Sales, MD, PhD

#### **Editorial Assistant**

Chris Dominev, LL.M

#### **Editorial advisory board**

Bernard L. Duhaime, B.C.L., LL.B., LL.M. Gavin Oxsburgh, PhD Hans Draminsky Petersen, MD Jens Modvig, MD, PhD Jim Jaranson, MD, MA, MPH John W. Schiemann, PhD, MA José Quiroga, MD Lenin Raghuvanshi, BAMS Mariana Castilla, MSc Nora Sveaass, PhD S. Megan Berthold, PhD, LCSW Steven H. Miles, MD Tania Herbert, DClinPsy

#### Guest editor - Physiotherapy for torture survivors Fric Weerts

#### Editorial support in this issue

Steven H. Miles, MD Naila Kosar Eleanor Currie

#### Correspondence to

IRCT

Vesterbrogade 149, building 4, 3rd floor, 1620 Copenhagen V, Denmark Telephone: +45 44 40 18 30 Email: publications@irct.org

#### Subscription

http://irct.org/media-and-resources/publications#torture-journal The Journal is free of charge.

The views expressed herein are those of the authors and can therefore in no way be taken to reflect the official opinion of the IRCT.

Front page: Mogens Andersen, Denmark Layout by Pedro López Andradas Printed in Lithuania by KOPA.

#### **Content**

#### **Editorial**

Impact of the COVID-19 pandemic on work with torture survivors: Clinical and community perspectives

Pau Pérez-Sales 3

#### **Review Article**

The potential of epigenetic methods to provide evidence of torture Paula Suárez-López 19

#### Special Section. Physiotherapy for torture survivors - Part 1

Guest Editor: Eric Weerts

Painful memories: Challenges in trauma-focused therapy for torture survivors with PTSD and chronic pain - a narrative review

Iselin Dibaj, Joar Øveraas Halvorsen, Leif Edward Ottesen Kennair and Håkon Inge Stenmark 35

The effects of a combined psychotherapy and physiotherapy group treatment program for survivors of torture incarcerated in an adult prison in Kurdistan, Iraq: A pilot study

April Gamble, Ahmed M. Amin Ahmed, Salah Hassan Rahim and Jeff Hartman 58

The impact of Basic Body Awareness Therapy on balance and quality of life in survivors of hunger strike with Wernicke Korsakoff Syndrome

Hamiyet Yüce and Tanju Bahrilli 77

#### Research Article

The risk of sanctions following visits by monitoring bodies; a study conducted in Albania and Honduras

Marie Brasholt, Brenda van den Bergh, Erinda Bllaca, Alba Mejía, Marie My Warborg Larsen, Anne Katrine Graudal Levinsen and Jens Modvig 89

#### **Debate**

Ethical criteria when a (potential) perpetrator asks a human rights organization to defend their case based on the forensic documentation of alleged torture. How shall we proceed?

Sara López Martín 104

Responses by: Juliet Cohen, Henry Shue, Elizabet Lira and Onder Ozkalipci Final response by Sara López Martín 126

#### **Book Review**

An Overview of Torture Prevention Systems in Russia, Lithuania, Sweden and Norway

Tania Herbert 129

#### Letter to the Editor

Torture based on discrimination in Chile. The hunger strike of Mapuche political prisoners and the case of machi Celestino Cordova.

Jesús Antona Bustos 131

Call for papers 135

Call for applications 137

# Impact of the COVID-19 pandemic on work with torture survivors: Clinical and community perspectives

#### Pau Pérez-Sales\*

The COVID 19 pandemic is not only changing the social and political landscape but also bringing about important changes in human rights and in work with torture survivors<sup>1</sup>, some of which we noted in a first analysis in the last issue (Pérez-Sales, 2020).

Since the first reported cases, there have been a very large number of academic publications on the etiology and impact of COVID-19. Of particular note is the COVID-19 Resource Center launched by The Lancet series, which provides up-to-date information regarding medical impact and treatment<sup>2</sup>. For Mental Health and Psychosocial Work (MHPSS), the open-access on-line monographic issue of Psychological Trauma, an APA-sponsored journal, contains more than 150 peer-reviewed papers<sup>3</sup>. The family of PLOS journals offers free access

to all COVID-related papers, with an important focus on MHPPS elements<sup>4</sup>. Research Gate has also opened a dedicated space on COVID-19<sup>5</sup> with thousands of papers from peer-reviewed journals covering almost all aspects of relevant science.

Some of these have been very premature publications, containing preliminary data that has subsequently been disproved, and which has led to questions surrounding the guarantees offered by fast-track publishing that many scientific journals have opened in response to COVID-19. The considerable quantity of papers requires significant effort to collate the information that is essential and useful for a practitioner. In particular, there is still very little scientific output regarding the impact on the rehabilitation of torture survivors (SoT). We will try, in this editorial, to advance some preliminary reflections and stimulate further research.

# 1 For an extensive and comprehensive review of the human rights challenges posed by the COVID-19 crisis, see Ferstman & Fagan (2020), Ayala (2020)

#### Crises exacerbate pre-existing inequality gaps

In June and July this year, the IRCT, as a network of centres for the care of victims of torture, carried out a diagnosis of the situation and an analysis of the practices being carried out by their partner centres to deal with the

<sup>2</sup> https://www.thelancet.com/coronaviru

<sup>3</sup> The papers cover potential mental health effects of COVID-19, resilience and positive psychology, living with isolation and uncertainty, covid-19 and pre-existing conditions, children and youth, substance use disorders, suicide, moral injury, vicarious trauma and interventions in health care providers, interpersonal violence, age and disability, impact on refugees, incarcerated, and undocumented people, impact on women and sexual minorities, fostering resilience in communities and interventions.

<sup>\*)</sup> Editor-in-Chief.
Correspondence to: pauperez@runbox.com

<sup>4</sup> https://collections.plos.org/covid-19#sectionsocial-issues.

At the time of closing this editorial, a total of 2392 articles on psychological impact from 114 different countries were available, and a total of 2129 meta-analyses on all kinds of topics related to medical and psychological aspects of the COVID-19.

pandemic (IRCT, personal communication). Around 40 centres were directly involved in the survey. In analysing the different experiences, two contrasting realities were observed.

On the one hand, we note the experiences of Sub-Saharan African centres, such as Terres Nouvelles or Fédicongo in the DRC, CAPREC in Senegal or the Trauma Center in Cameroon as examples from organisations in the Global South. For them, the pandemic has placed many torture survivors, and especially refugees and asylum seekers, who live in the informal economy, on the edge of physical survival. Lockdown measures have, in fact, removed their already scarce opportunities to work: temporary agricultural employment, small informal factories or workshops, street vending or domestic work. These organisations provide vivid depictions of individuals in situations of homelessness or confined in shelter; in which essential survival elements are lacking. They describe experiences of starvation and survivors of torture (SoT) resorting to criminal activity or sex work as forms of survival, or an increase in alcohol consumption as a way to escape from reality. In many countries of the Global South, the COVID-19 pandemic is evolving into what was once the Hunger-AIDS complex (De Waal & Whiteside, 2003),<sup>6,7</sup> and, in this respect, torture survivors are one of the most vulnerable populations. COVID-19 has also meant a lack of access to medical or psychosocial support and freezing of legal processes, including asylum proceedings. In the face of this, centres describe a lack of resources, and emergency measures taken including provision of pre-paid phone cards to some of those most vulnerable in order to avoid losing contact with them, or seeking themselves food support from charities that are already overburdened and overflowing.

These reports sharply contrast with the challenges described by the centres based in the Global North. In their communications, they echo the challenges maintaining the continuity of activities in the context of lockdown: making use of the latest technology (centres in Sweden, Switzerland, Germany, or the UK); the feasibility of telephone counselling, or combining face-to-face interviews with video conferencing; the use of self-help apps; ensuring confidentiality and security in internet communications; the challenges in integrating work with cultural mediators and translators into on-line counselling; and the ethical dilemmas posed by these emerging contexts. These early experiences, along with experiences from the Global South, suggest that, pending sufficient data, suggest that it is possible to maintain forensic evaluations, although with some restrictions (Freedom from Torture, SiR[a], CSU-Zimbabwe, CCTI-Mexico), to provide psychological support and counselling (Rescue Alternatives Liberia), and in some cases, even to maintain on-line family and group therapy (Restart Lebanon). There are also on-line ma-

<sup>6</sup> A survey with around 3000 families in rural poor areas of Bangladesh, showed that the median monthly family income fell from US\$212 at baseline to \$59 during lockdown, and the proportion of families earning less than \$1-90 per day increased by a 200%. Food insecurity increased by 52%. (Hamadani et al., 2020).

<sup>7</sup> Some authors already speak openly about the COVID World Food Crisis and warn that a sustainable plan is not being articulated on a global scale and the consequences could be devastating (Fleetwood, 2020)

terials related to tele-psychotherapy that can be an essential aid to the centres<sup>8,9</sup>.

Some of the partner centres report being very aware of a pyramid of MHPSS interventions; although they are used to providing highly-specialised care and delegating the lower layers of the pyramid to partner organisations, this context has required them to act flexibly and take on atypical tasks related to shelter, food, clothing, communications, access to medication etc. <sup>10,11</sup> The cancellation of therapeutic activities or the temporary disappearance of patients from the consultation room only means, in many cases, that there are other similar or more severe issues to be addressed, and that the organisation must also temporarily shift to other priorities.

#### Psychosocial perspective: the case of Lesvos

The situation observed in the Moría refugee camp in Lesvos (Greece) paradigmatically demonstrates the dynamics of the pandemic,

and the multiple levels and perspectives that are interpolated from a psychosocial perspective. On the island of Lesvos, there was an estimated population of 15,000 people seeking international protection, most of them Afghan nationals but also a number from other areas of the world. They had become stranded in limbo caused by the Greek government's unilateral decision, in March 2020, to suspend all asylum application procedures, which they subsequently recommenced with new requirements, which most of the refugees in the camp could not meet. Among these conditions, documentation of the psychological impact of torture was no longer accepted in hearings for protection assessment. The population was living in extreme conditions of overcrowding, unhealthy conditions, precarious nutrition and with a lack of access to clean water. Violence of all kinds and in particular gender-based violence was prevalent, and refugees faced a situation of global abandonment (Eleftherakos et al., 2018; OXFAM, 2019), in contexts of fear, isolation and lack of social support and community networks (Episkopou et al., 2019). Refugees lacked medical care, and official sources scarcely provided information about COVID-19 that instead mostly came from self-organised groups among refugees with the support of international NGOs (OXFAM, 2020; Greek Council for Refugees, 2020). In this context, there was a steady increase over time in the local population of Lesvos, of those who considered that migrants were not only a threat to the island's economy, but were also responsible for the increase in crime (Annon, 2020) and a threat to the very health of its inhabitants. This situation remained highly tense, but without any outbreaks, because to date there had been no positive cases of COVID-19 on the island as it had been in lockdown and therefore isolated from the mainland. In

<sup>8</sup> For a trans-theoretical comprehensive perspective on challenges in tele-psychotherapy, including current evidences and best practices see an Special Issue of the Journal of Psychotherapy Integration, freely accessible on-line (https:// www.apa.org/pubs/journals/special/inttelepsychotherapy-age-covid-19-pdf) and McDonald et al., (2020).

<sup>9</sup> For a metanalysis on ethical challenges in on-line therapy see Stoll et al., (2020)

<sup>10</sup> Especially interesting is a report on difficulties found by Tamil SoT in UK during the COVID-19 crisis (IT]P, 2020)

<sup>11</sup> An example is Freedom from Torture's Emergency Relief Fund, with small grants of 200 to 2000 pounds to support torture survivors or front-line organizations, or the COVID-19 Resources website by Heal Torture, with hundreds of materials, links and resources for torture survivors specific to COVID-19 (https://healtorture.org/resource/covid-19-resources). The Center for Victims of Torture (CVT) also has a website with Mental Health Resources in different languages (https://www.cvt.org/COVID-English).

Table 1. Security and military perspective prevails over psychosocial and community perspective	
Refugees	Local population
ENVIRONMENT fostering a lack	FEAR conditions
of control and uncertainty	
Extreme conditions - Overcrowding	Fear of foreigners in Greece
Lack of medical services	Fear of the refugee population of the disease
No reliable information	Fear of the refugee population of other refugees
No trusted source of information	
Community organisation not allowed	

the last weeks of August and early September however, some symptomatic cases began to appear, and the government decided to forcibly confine and mass test the entire population of the Moría camp, despite the serious issues with reliability of the tests available and the risk to which the population was exposed with the quarantine.12 These decisions generated fear and conflict, because the process and the way it was put into action was neither seen nor developed as a health intervention, but rather as an action of military confinement. As soon as the results of the tests had arrived, the army entered the camp, located the entire family of the person who had tested positive and moved them, in full view of everyone, to a closed area outside of the camp. These actions caused panic. On the one hand, the families themselves who were transferred were terrified because in most cases they did not have any symptoms and were forced to live with people who did have symptoms. On the other hand, neighbouring families were alarmed by the military deployment and the knowledge that they had been living close to a family who had had COVID-19 contact.

Not surprisingly, after a few days, there were riots and attempts to escape from the confinement area, to which the police and military responded with harsh crackdown measures<sup>13</sup>. Eventually, the entire refugee camp burned down in what was, speculatively, a desperate act by the refugees themselves to try and force a move from the lockdown camp. Fear, misinformation, rumours, accumulated hopelessness, trauma, poverty and military responses rather than human rights-based responses to victims of war, torture, exile and loss and who found themselves embroiled in the COVID-19 crisis made up the flame that set the mixture alight.

#### Making the excluded invisible

COVID-19 has led, at a global level, to the invisibility of victims of torture due to reasons including:

 The situation of the pandemic has meant, in most countries, the complete or partial suspension of monitoring visits to detention

<sup>12</sup> See MSF report: https://www.msf.org/ greek-police-enforce-unwarranted-and-cruelquarantine-moria-camp

<sup>13 12</sup> September 2020. Moria migrants teargassed by Greek police in protest over new camp (https://www.bbc.com/news/worldeurope-54131212). Riot police deployed to new Lesbos refugee camp after fire (https://edition. cnn.com/2020/09/11/europe/lesbos-fire-migantsmoria-camp-intl/index.html).

centres<sup>14</sup>, without any epidemiological justification.

- In most detention centres, family visits have been suspended, which, in addition to the psychological impact on the detainees, increases the possibility of abuse.
- Many legal activities are suspended, including some involving guarantees and safeguards for detainees or trials for human rights violations<sup>15</sup>. In other cases, trials continue, but with violations of the right to adequate documentation and defence in cases<sup>16</sup>
- Some associations that look after victims of torture are forced to restrict their activities to a minimum, leaving victims without necessary elements of protection.
- The right to rehabilitation risks becoming a secondary concern in government budgetary planning.

A priority task for those working with torture victims will be to develop strategies to prevent such invisibility and to maintain monitoring activities of potential rights violations in closed institutions. Anti-torture organisations such as the CCTI in Mexico or Restart in Lebanon have made public statements challenging their governments on this issue.

# Abuse of power under health-based derogations

In various national legal systems, exceptional measures have been adopted that have effectively restricted freedoms: of assembly, demonstration and expression. The act of protest itself is penalised or criminalised. Exceptional powers are given to the police and to the army to prevent the spread of the disease and contagion, and this gives rise, in many contexts, to indiscriminate police action<sup>17</sup>. Recent cases of torture and even death of citizens in different countries due to abuse of power are consequences of these policies that use COVID-19 as a guise to establish undemocratic forms of government, or that require the police to control preventative health measures without clear rules. Moreover, the confinement situation itself has increased the prevalence of all forms of violence.

Furthermore, the use of apps to control population movement and to trace persons with positive COVID tests has raised concern from organisations like Amnesty International and others<sup>18</sup>.

<sup>14</sup> In a survey in 24 African countries regarding National Prevention Mechanism to prisons during COVID-19, in 11 all visits were forbidden, in 10 were partially restricted or limited and only in 3 there were no limitations (Muntingh, 2020)

<sup>15</sup> One example is the suspension of restorative justice processes in Colombia and the difficulties in resuming them virtually (Sandoval, 2020)

<sup>16</sup> Of particular relevance is the report by the Helen Bamber Foundation and Freedom for Torture on limited access to justice due to COVID measures adopted in relation to Pre-Decision National Referral Mechanism ('NRM'), Applications to extend time, Review proceedings and Appeals (Helen Bamber Foundation & Freedom for torture, 2020).

<sup>17</sup> A number of reports exist. One example, among many, is the National Human Rights Commission of Nigeria, in a press release dated 14th April 2020, reported 33 cases of torture (in two cases ending in death) due to unlawful application of lockdown measures by police and army (Oboirien, 2020). Similar data comes from the National Coalition for Human Rights Defenders in Uganda (https://www.independent.co.ug/escalation-of-torture-in-covid-19-lockdown/. For global data see Anderton (2020).

<sup>18</sup> https://www.amnesty.org/en/latest/news/2020/06/bahrain-kuwait-norway-contact-tracing-apps-danger-for-privacy/; https://www.amnesty.org/en/latest/news/2020/04/covid-19-surveillance-threat-to-your-rights/; https://www.amnesty.org.uk/

# Legislative and administrative measures, and protection of fundamental freedoms

There is undeniable concern that COVID-19 has represented a step backwards in global freedoms at the international level (Council of Europe, 2020). Some 30 countries have decreed states of emergency, alarm or disaster that have served to reduce freedoms. In some cases, these measures have no clear legal basis and are contrary to the international human rights framework. The debate is not so much about their necessity, but rather about their lawfulness, proportionality and duration (Lebret, 2020). There are a vast number of Statements by national, international and supranational bodies with recommendations to States, both in relation to fundamental rights and to groups at particular risk. The International Justice Resource Center maintains a comprehensive database on all of them which is freely accessible and is the most appropriate source of reference<sup>19</sup>.

#### COVID-19 and detention settings

Especially relevant to this matter is the UNODC, WHO, UNAIDS and OHCHR joint statement on COVID-19 in prisons and other closed settings<sup>20</sup>. Jointly, these interna-

tional organisations urge political leaders to: (1) Reduce overcrowding, limiting the deprivation of liberty, including pre-trial detention, to a measure of last resort, and enhance efforts to resort to non-custodial measures (2) Close compulsory detention and rehabilitation centres, where people suspected of using drugs or engaging in sex work are retained or detained (3) Ensure health and safety measures that are respectful with human dignity, irrespective of any state of emergency, and at the same level that all the population of the country. (4) Provide unrestricted access to prevention measures and treatment of HIV, tuberculosis, hepatitis and opioid dependence (5) Ensure that restrictions that may be imposed due to COVID-19 are necessary, evidence-informed, proportionate (i.e. the least restrictive option) and non-arbitrary. The disruptive impact of such measures should be actively mitigated, such as through enhanced access to telephones or digital communications if visits are limited. Legal safeguards, including the right to legal representation, as well as the access of external inspection bodies to places of deprivation of liberty, must continue to be fully respected.

The Association for the Prevention of Torture (APT) has launched a website with an information hub on the conditions of persons deprived of liberty during COVID-19 worldwide. Data can be searched according to country, relevant institution or body, thematic issue, place of deprivation of liberty, and situation of vulnerability<sup>21</sup>. At closure of this editorial, the database provided more than 2200 news and reports on torture, COVID and detention centres.

press-releases/uk-privacy-must-not-be-anothercasualty-virus.

<sup>19</sup> The database includes, when closing this editorial, more than 200 statements from the 56 United Nations special procedures, 10 U.N. human rights treaty bodies, three principal regional human rights systems (each with various components), and their respective "parent" intergovernmental organisations. They urge governments to act to respect human rights during the pandemic. https://ijrcenter.org/covid-19-guidance-from-supranational-human-rights-bodies/

<sup>20</sup> https://www.who.int/news-room/detail/13-05-2020-unodc-who-unaids-and-ohchr-jointstatement-on-covid-19-in-prisons-and-other-

closed-settings

<sup>21</sup> https://datastudio.google.com/reporting/ c686bea7-3152-4dd2-b483-fce072f3ddbf/page/ UkoKB

Epidemiological data, where available, shows that in many countries, there are far more cases of COVID in detention centres than in the population-at-large<sup>22</sup>. The measures proposed by international bodies, including the release of prisoners, should not be considered as compassionate or gracious measures. International Human Rights Law emphasises the "special position of the guarantor" in which states find themselves concerning the rights of people in prison, with a duty to guarantee the health of prisoners and fulfil all health measures, such as those of social distancing (Coyle, 2008; Penal Reform International & Essex Human Rights Center, 2017; United Nations High Commissioner for Human Rights, 2005; WHO-EU, 2007). However, in overcrowded prisons, this can be impossible to achieve. Putting human beings at risk of death, especially when more than half of whom, in most countries, are in pretrial detention and not even convicted, is unacceptable. As some authors have pointed out, denial of proper medical care can amount to torture (Center for Human Rights & Humanitarian Law, 2014; SRT, 2013). Moreover, if there is an increased death rate in prisons and the state does not take any measures to prevent it, the authorities could be prosecuted under international law.

A controversial measure taken by some states, which is particulary prevalent in the United States, is to put migrants with symptoms of COVID-19 in prolonged solitary confinement, which can extend to months

in duration<sup>23</sup>. Furthermore, a Physicians for Human Rights (PHR) report has documented cases of forced family separation as part of COVID-19 prevention measures that have no medical justification. Detained migrant parents are faced with forced separation from their children, some as young as six months old and breastfeeding, allegedly to prevent their children from being exposed to coronavirus in adult detention centres potentially experiencing outbreaks. In both solitary confinement and forced family separation, organisations claim that migrants are submitted to situations amounting to torture<sup>24</sup>. The UN Working Group on Alternatives to Detention has issued a specific and very detailed report on COVID-19 and Immigration Detention (WGAD, 2020). Several guidelines have been developed for the management of the COVID-19 epidemic in detention centres. The undisputed reference text is the Guide for Detention Centres of the US Center for Disease Control and Prevention<sup>25</sup> (CDC). There are also specific guidelines on institutional measures to reduce the risk of COVID-19 in prisons (Tulloch, 2020), as well as guidelines for monitoring the situation of COVID-19 in detention centres (ODIHR & APT, 2000). As supple-

<sup>22</sup> The National Campaign against Torture in India reported that 26% of jails in the country had reported COVID-19 cases by August 2020. All prisons were overcrowded, no isolation measures applied and no health care provided, in a situation that was considered by the NGO as amounting to torture (NCAT, 2020)

<sup>23</sup> Research by the International Consortium of Investigative Journalist documented 8,488 incident reports of people kept in solitary confinement for having COVID-19 symptoms, with more than 50% describing stays that lasted longer than 15 days. ICIJ identified 187 cases in which a detainee was held for more than six months. In 32 of those cases, the detainee was confined in solitary for a year or more (see full report at https://theintercept.com/2019/05/21/ice-solitary-confinement-immigration-detention/).

<sup>24</sup> https://phr.org/our-work/resources/forced-family-separation-during-covid-19-preventing-torture-and-inhumane-treatment-in-crisis/

<sup>25</sup> https://www.cdc.gov/coronavirus/2019-ncov/ community/correction-detention/guidancecorrectional-detention.html

mentary material to this editorial, we include a short-list of essential topics to be covered in detention centre monitoring, with a focus on COVID.

#### The individual perspective

#### Population-at-large

There is, as explained in the introduction, a plethora of detailed materials on the physical and psychological impacts of COVID-19 on people with the disease both symptomatic and asymptomatic,, on the community in general and more specifically on the community in lockdown. The reader can draw on these sources. To summarise the main findings thus far:

COVID-19 causes a multi-systemic disease involving almost all body organs. During the most acute phase of the disease, delirium, anxiety, or confusion occurs in about 40% to 50% of cases<sup>26</sup>. There is however, at the time of writing, insufficient epidemiological data on psychological symptoms in asymptomatic COVID-19 positive patients.

As for the general population, studies in areas of a high prevalence of COVID-19 (China, US), suggest the presence of anxiety symptoms in around 30% of the population, and depression in around 15%. This proportion increases to almost double in health personnel. Between 35% and 50% of professionals present moderate to severe symptoms of post-traumatic stress<sup>27</sup>. There is scarce data on the impact of lockdown, but the best available review studies point to a high frequency

#### Victims of torture

There are, at the moment, no specific studies on victims of torture and COVID-19. What follows are some insights on positive and negative effects of the COVID pandemic from clinical experience and discussion with colleagues with no more pretense than to serve as an aid and stimulus for future research.

#### Psychosocial elements

Firstly, victims of torture, who often live in socially marginalised conditions, are at a much greater risk of contracting COVID. This risk exists in addition to the linguistic difficulties they may encounter in understanding norms and regulations, maintaining social distance due to inadequate sheltering and having poor access to the health system on equal terms with the rest of the population. There are, in addition, other specific psychosocial elements (Table 2)

of negative emotions, depressive symptoms and post-traumatic stress (Brooks et al., 2020).<sup>28</sup>

<sup>26</sup> For a free monthly updated review see https:// www.uptodate.com/contents/coronavirus-disease-2019-covid-19-psychiatric-illness

<sup>27</sup> For a review on impact on health workers and measures for prevention of traumatic symptoms, see Kisely et al. (2020) and Lai et al., (2020).

In a review of 24 studies on the impact of quarantine in ten different countries from 2003 to 2014, high numbers of post-traumatic stress symptoms, confusion, and anger were found. This is added to increasing fear, depression, emotional exhaustion, frustration and irritability. These lead, if prolonged in time, to an increase in avoidance behaviors and avoiding others, increase in alcohol usage, suicide attempts, increase in hypochondriac and somatic symptoms and domestic violence. The severity of symptoms related to death rates in affected population (i.e Ebola outbreaks) and economic hardship due to lockdown. The authors strongly recommend limiting lockdown periods to a minimum duration necessary, provide clear information on expected length and public campaigns explaining the rationale of the measure, appeals to altruism and health-related messages to improve wellbeing (Brooks et al., 2020).

#### Clinical aspects

There are some specific elements in the experiences of victims of torture in which parallels can be drawn between the impact of COVID-19 cases and its medical and psychological implications with situations of torture or enforced disappearance:

- 1. The pandemic has meant, for many people (victims, therapists and families), a close **contact with death** as an immediate, direct and present reality. In countries with a high mortality rate, ultimately everyone knows someone who has died. It is, in these cases, not an abstract thought, experienced secondhand through media sources, but rather a reality, experienced through neighbours, relatives and friends. Furthermore, for many victims, this can
- mean remembering painful moments in their lives, reawakening the fear of death itself or the fear of pain and illness linked to torture. Many victims have recounted how lockdown has reminded them of prison and confinement.
- 2. On the other hand, the **disease and the threat** posed by COVID-19 **are invis- ible.** It is both everywhere and nowhere.
  For some SoT, this makes it possible, paradoxically, to deny its existence. In other words, what is not seen simply does not exist, or so they believe. For other SoT, on the contrary, this means seeing the threat everywhere. The unseen enemy is, for them, omnipresent. A polarity of emotions is thus created. Survivors just as the broader population- tread, at a certain point, a crossroads between those

**Table 2.** Psychosocial factors to check and consider in supporting torture survivors during COVID-19 crisis.

- 1. Absence of essential elements of support: food, clothing
- 2. Loss of contact with supporting institutions due to lack of or inability to pay for telephone, transport or other means of keeping in contact.
- 3. No access to specific COVID-19 tests or medical care
- 4. No access to PPE or other equipment that allow mobility and safety
- 5. Cultural understanding of the need for social distance measures and practical strategies to make them possible
- 6. Impact of rumours, fake news or unscientific aetiological hypotheses
- 7. Fear of infecting family members (children, older adults...)
- 8. People who are or have been in contact with infected people managing expectations and practical measures to ease anxiety
- Impossibility and lack of ritual elements of mourning linked to culture and alternatives from sources of traditional healing.
- 10. Impact of home lockdown, quarantine and specifically the impact of loneliness
- 11. Barriers to news about what is happening in the country of origin facing alarming news
- 12. Absence of news about family members
- 13. Impact of the delay in legal procedures
- 14. Procedures that do not have all the legal safeguards and generate helplessness
- 15. Forced or voluntary family separation, due to COVID-19, and especially when children and older adults are involved.

- who move in a state of psychological denial and with a sense of invulnerability, and those who live in constant vigilance and fear. One of the tasks of support from health professionals is to work on a realistic perspective between helplessness and fear on one side and omnipotence and carelessness on the other.
- 3. Furthermore, for some victims and their relatives, illness and death constitute new losses that follow previous losses – instances of grief stacked upon each other - which therefore sometimes remain unresolved. Moreover, COVID-19, in many cases, has meant individuals suffering losses without a body to mourn. Healthcare measures have prevented loved ones from being at the patient's side at the time of death, possibly entailing feelings of remorse and guilt. They also have prevented wakes and funerals. For many people, it has been impossible to say goodbye to the deceased relative, friend or loved one. For the deceased person themself, it has also been a death in solitude. In some places, like in New York, we have even seen images of mass graves that remind us of the experience of many victims of torture and enforced disappearance. These are specific elements to be considered.
- 4. This situation might deepen, for a large part of VoT, inherent beliefs of **insecurity and distrust** in the world. Living in a threatening world, where new fears only add to those felt previously, added, in this case, to an uncertain and unpredictable future, not least because of illness but also because of economic, social and political uncertainty. These only increase the need for trust and a sense of finitude. Trauma and crisis become cyclical in life.
- The unique circumstances of COVID can increase feelings of remorse and guilt

- that augment similar pre-existing sensitivities. This involves guilt felt due to present circumstances, because the person had, for example, been unable to take care of their parents, to be by their side, because they had been unable to secure their suffering loved one a place in a hospital, or simply did not understand the severity of the symptoms. Guilt, in this case, is added to previous feelings of guilt and may be linked to a feeling of being unable to protect the family during political persecution, perhaps because of the effects of militancy, personal choices, or because the person had to flee, thus leaving the family in a critical economic situation.
- 6. Furthermore, there may be a burden derived from the idea that there should be a "vital justice" when a community faces death. The youngest, the most valuable, or those who fought the most, should, it is said, never be the ones to die. Death should be reserved for perpetrators. Feelings of, "I am the one who should have died, instead of my brother, my son or my father". It is difficult to make sense of deaths experienced as absurd and unjust. This has often been part of the experience of victims of torture or enforced disappearance. And it is now part of the experience of COVID-19 affected communities. In contexts of therapy, it may be discussed with survivors that human beings have far less control over their life than that which we are usually taught and that this may be a source of anguish or a source of wisdom. In many countries, this will mean looking to one's own god and spirituality. In others, it means accepting reality as something inevitable that we must shoulder in order to move forward and learning to life in uncertainty. The victims, who have already experienced

TORTURE Volume 30, Number 2, 2020

- these feelings and dilemmas on other occasions, perhaps have much to teach the population, and this role of sharing their experience can be a healing one.
- 7. Moreover, for young SoT, a form of "empathetic horror" is sometimes perceived in cases of people who, because of their age or their personal situation, may have never considered that death could affect them, and now see that the person who died was of a similar age, and may experience feelings of "that could have been me". This is a shattering experience.
- 8. For some VoTs, the experiences they have lived through allow them to develop a more resilient outlook than that of the general population. It has not been uncommon to see many VoTs who are far more resilient than the professionals with whom they work. In the COVID crisis, the level of suffering and pain is often incomparable to that that was once suffered from torture and prison. Furthermore, there is far more than the person is able to do taking into account the absolute defenselessness experienced in torture.
- 9. The COVID-19 crisis has forced peopleand VoTs are no exception- to be more aware of human relationships, of the people we live with and how we relate to them, and to become cognisent of one's strengths and weaknesses. While for some people, this has meant a period of calm, for others, it has meant anguish, especially for those who may have been balancing their shortcomings with work, activism or hyperactivity. The crisis has also given rise, in some cases, to the need to make critical decisions in a short time, which has led to emotional overload.
- 10. The pandemic also has brought about an increase in violence. The data is incontrovertible. Gender-based violence,

- family breakdowns and violence against children and the elderly have increased since the lockdown began (Anderton, 2020; Hamadani et al., 2020; IFRC, 2020; Peterman & Donnell, 2020; UN Women, 2020). Fear sometimes brings cohesion. In other situations, it generates division and fracture among more general issues, both in organisations and other social groups. Social psychology dictates that there is a period, usually 4 to 6 weeks, of a particular "honeymoon", when solidarity and possibilities of facing problems in a communitarian way dominate. After that, for many reasons too lengthy and complex to review here, signs of lack of solidarity gradually appear. A challenge is how to prolong and sustain support networks and solidarity responses in the face of exhaustion, uncertainty and tiredness.
- 11. Finally, there is the most critical factor: **loneliness**. For many people, and this includes many family members, who are older people, the experience of the pandemic has been further served to increase challenges of communication, isolation and loneliness<sup>29</sup>. Loneliness has been recently documented as a neglected condition that severely increases mortality and mental health problems in the population-at-large (Cacioppo et al., 2015; Holt-Lunstad et al., 2015).

<sup>29</sup> In a study based on telephone calls to the general population in a COVID-19 confinement situation (n=432) in Hong Kong, it was found that 60% presented symptoms of anxiety or depression and that the perception of loneliness was the main predictor of psychological distress, regardless of the size of the social network (Tso & Park, 2020).

#### **Table 3.** Interventions of support

- 1. Develop self-help systems: (a) adapt brochures or guides with advice from the many existing ones (b) try group interventions via on-line that create virtual communities in which patients can share how they are coping, their needs and develop forms of mutual support (c) introduce, where possible, apps with programs of emotional regulation, stress management, anger management and others, from the many currently available\*
- 2. Strength mutual support actions: common pots, home help by volunteers and others.
- 3. Address mourning and especially mourning associated with the premature death of healthy people
- 4. Address mourning for the loss of people who were social leaders in the struggle of the victims or for human rights and which have a relevant collective impact
- Address psychosocial problems associated with the lockdown. Ensure support for basic needs, especially for older adults. Adopt strategies to support people who are particularly vulnerable in their families or communities
- 6. Manage risk of detention or deportation
- 7. Address Conflicts within family and community. Saturation of personal relationships.
- 8. Address loneliness and Fear
- 9. Monitor possible situations of gender violence, violence against children or older adults.

One of the paradoxes of COVID is the experience of social saturation and forced coexistence for some people faced with the experiences of loneliness and lack of support of others.

In this context, the experience of torture victims can provide valuable lessons about how to deal with the demands of this crisis. Hopefully, from the rehabilitation centres, VoT will not be seen only as fragile members of society to be protected, but as people who have faced hunger, loneliness, displacement and trauma and in many cases have developed wisdom and individual and collective practices from which the society can learn today.

In this issue, we present the first part of a Special Section on Physiotherapy for Torture Survivors, with the help of Eric Weerts, Guest Editor, as a response to a call-for-papers that had a very significant response.

Inge Genefke, in one of her first writings on the rehabilitation of torture victims wrote: "Torture may be characterized as physical and/or psychological; most commonly victims have been exposed to both forms of torture. As a consequence hereof, the treatment specially designed for torture victims is a combination of psychotherapy and physiotherapy, commonly known as multi disciplinary treatment" (Danneskiold-Samsøe et al., 2007). The treatment of torture victims at the RCT center in Copenhagen was based on five

<sup>\*</sup> There are hundreds of apps freely available for patients. A good selection can be found in these non-commercial reliable websites

https://www.nhs.uk/apps-library/category/mental-health/;

https://psychiatry.ucsf.edu/copingresources/apps;

https://nycwell.cityofnewyork.us/en/covid-19-digital-mental-health-resources/

pillars, the second of which was "Simultaneous start of both physical and mental treatment with physiotherapy as an important element of the physical treatment". Physiotherapy was always one of the fundamental elements of the therapeutic programs that the IRCT promoted throughout the world which was more or less universally adopted (Bloch, 1988; Kastrup et al., 1986; Reid & Strong, 1988). It was also considered synonymous with the treatment of physical symptoms and one of a number of historically important areas in work with torture survivors.

Unfortunately, there has been minimal research tradition in physiotherapy, and after almost forty years of work with VoT, physiotherapy has gradually declined as a discipline within organisations, until it became an accessorial subject within general health care. Several factors have likely played a role in this. On the one hand, there was a trend within various IRCT centres, especially in Latin America, that so much emphasis on physiotherapy represented a biomedical and depoliticised model of treatment for victims. In contrast, these centers advocated community-based or psychosocial approaches with a much clearer political focus that understood the therapy with torture survivors as part of a global political fight of which the survivor was still part. On the other hand, research on pain management showed the need for multidisciplinary approaches and that physiotherapy alone, in its classical sense, was insufficient. The use of massage, hydrotherapy or postural therapies were shown to be ineffective if they were not part of an overall integrated treatment that used body manipulation as a therapeutic element within body-based psysiotherapy or somatosensory therapies. Finally, the very challenges encountered by professionals in producing academic research to probe its usefulness and refute the claim that physiotherapy requires high resource investments as compared with community approaches in environments where resources are scarce. In this Special Section we have attempted to discuss contemporary ways of understanding physiotherapy work with torture survivors, discussion on indicators of efficacy and increase and strengthen the number of studies available to support its use as part of multidisciplinary programs. The work received, however, has placed more emphasis on protocols and education than on outcomes.

In this issue, Iselin Dibaj, Joar Halvorsen, Leif Ottesen Kennair and Håkon Stenmark contribute a narrative review on challenges in trauma-focused therapy for torture survivors with PTSD and chronic pain, showing that there is still not enough support to the widely accepted assumption that addressing trauma can improve chronic pain. April Gamble, Salah Hassan Rahim, Ahmed M. Amin Ahmed and Jeff Hartman present the results of a pilot study on the Effects of a Combined Psychotherapy and Physiotherapy Group Treatment Program for Survivors of Torture with very preliminary, although promising results. Especially interesting is that the intervention is done with incarcerated survivors in an Adult Prison in Iraq, showing the feasibility of working in complex contexts. Tanju Bahrilli and Hamiyet Yüce present a study on Basic Body Awareness Therapy in hunger strike victims with Wernicke Korsakoff Syndrome, showing improvement in different quality of life indicators in survivors that had been severely handicapped for years.

Overall the three papers presented here will help the reader to capture that while physiotherapy might not be a generalised treatment for all torture survivors as it was initially proposed in the early works in the 1980s, there are specific profiles of survivors that might benefit from physiotherapy as an adjunctive treatment, especially if this is combined and integrated

within psychotherapy work. The discipline must evolve to better define who can benefit, which the best combinations are and how outcomes can be reliably measured.

Additionally, Paula Suárez-López presents a review on the potential of epigenetic methods to provide evidence of torture. Genetic markers, now still at an early stage of development, show enormous potential to detect long-term and trans-generational impacts of chronic trauma in general. The question addressed here is whether there can be specific markers for torture as a shattering trauma experience. The author suggests that there is a strong potential for that.

Marie Brasholt, Brenda van den Bergh, Erinda Bllaca, Alba Mejía, Marie MyWarborg Larsen, Anne Katrine Graudal Levinsen, and Jens Modvig present results on a study conducted in Albania and Honduras on the risk of sanctions following visits by monitoring bodies to detention centers, that shows that this is a relevant and neglected area in the prevention of torture. The results are alarming and show that a very significant percentage of people interviewed suffer some kind of harassment or reprisal following the visits.

The reader will also find a Debate section. Sara López poses a complex question: What are the ethical dilemma and proposed criteria when a (potential) perpetrator asks for forensic documentation of his own alleged torture. The author proposes three criteria that can be applied by forensic experts and documenting organizations. Four world-leading authors, Juliet Cohen (Head of Doctors at Freedom from Torture, UK), Elizabeth Lira (Professor of Psychology at Universidad Alberto Hurtado, Chile), Henry Shue (Professor of Philosophy at Oxford University, UK) and Onder Ozkalipci (Forensic Expert, Turkey), provide insights on the proposal with a final wrap-up and answer from the author.

As the reader will see, this issue includes multiple and complex themes, which we are sure will stimulate reflection and debate.

#### References

- Anderton, C. H. (2020). The other virus: Covid-19 and violence against civilians. *Peace Economics, Peace Science and Public Policy*, 0(0). https://doi.org/10.1515/peps-2020-0039
- Annon. (2020). Chapel near notorious Moria camp on Lesvos repeated desecrated by irregular migrants.
- Ayala, C. (2020). Challenges that the Covid-19 Pandemic Poses to the Rule of Law, Democracy, and Human Rights. SSRN Electronic Journal. https://doi.org/10.2139/ssrn.3638158
- Bloch, I. (1988). Physiotherapy and the Rehabilitation of Torture Victims. *Clinical Management*, 8(3), 26–29.
- Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, 395(march), 912–920.
- Cacioppo, S., Grippo, A. J., London, S., Goossens, L., & Cacioppo, J. T. (2015). Loneliness: Clinical Import and Interventions. *Perspectives on Psychological Science*, 10(2), 238–249. https://doi.org/10.1177/1745691615570616
- Center for Human Rights & Humanitarian Law. (2014). Torture in Healthcare Settings: Reflections on the Special Rapporteur on Torture's 2013 Thematic Repport. Washington Collegue & Law.
- Council of Europe. (2020). Respecting democracy, rule of law and human rights in the framework of the COVID-19 sanitary crisis A toolkit for member states, April.
- Coyle, A. (2008). The treatment of prisoners: International standards and case law. *Legal and Criminological Psychology*, 13(2), 219–230. https://doi.org/10.1348/135532508X284284
- De Waal, A., & Whiteside, A. (2003). New variant famine: AIDS and food crisis in southern Africa. *Lancet*, *362*(9391), 1234–1237. https://doi. org/10.1016/S0140-6736(03)14548-5
- Eleftherakos, C., Van Den Boogaard, W., Barry, D., Severy, N., Kotsioni, I., & Roland-Gosselin, L. (2018). "I prefer dying fast than dying slowly", how institutional abuse worsens the mental health of stranded Syrian, Afghan and Congolese migrants on Lesbos island following the implementation of EU-Turkey deal. Conflict and Health, 12(1), 1–11. https://doi.org/10.1186/ s13031-018-0172-y

- Episkopou, M., Venables, E., Whitehouse, K., Eleftherakos, C., Zamatto, F., De Bartolome Gisbert, F., Severy, N., Barry, D., & Van Den Bergh, R. (2019). In island containment: A qualitative exploration of social support systems among asylum seekers in a mental health care programme on Lesvos Island, Greece. *Conflict* and Health, 13(1), 1–14. https://doi.org/10.1186/ s13031-019-0218-9
- Ferstman, C., & Fagan, A. (ed). (2020). Covid-19, Law and Human Rights: Essex Dialogues A. In *medRxiv* (Vol. 91, Issue 1). https://doi. org/10.5526/xgeg-xs42
- Fleetwood, J. (2020). Social justice, food loss, and the sustainable development goals in the era of COVID-19. *Sustainability (Switzerland)*, 12(12). https://doi.org/10.3390/su12125027
- Hamadani, J. D., Hasan, M. I., Baldi, A. J., Hossain, S. J., Shiraji, S., Bhuiyan, M. S. A., Mehrin, S. F., Fisher, J., Tofail, F., Tipu, S. M. M. U., Grantham-McGregor, S., Biggs, B.-A., Braat, S., & Pasricha, S.-R. (2020). Immediate impact of stay-at-home orders to control COVID-19 transmission on socioeconomic conditions, food insecurity, mental health, and intimate partner violence in Bangladeshi women and their families: an interrupted time series. *The Lancet Global Health*, 20, 1–10. https://doi.org/https:// doi.org/10.1016/S2214-109X(20)30366-1
- Helen Bamber Foundation, & Freedom for torture. (2020). The Courts, Tribunals and the Covid-19 Public Health Crisis. Interim recommendations on safeguarding vulnerable people in the context of remote international protection and human trafficking/modern slavery legal casework. http://www.helenbamber.org/wp-content/uploads/2020/05/Tribunals-courts-and-COVID-recommendations-Final.pdf
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and Social Isolation as Risk Factors for Mortality. Perspectives on Psychological Science, 10(2), 227– 237. https://doi.org/10.1177/1745691614568352
- IFRC. (2020). Prevention and response to sexual and gender-based violence in COVID-19. 2600(20), 12. https://reliefweb.int/sites/reliefweb.int/files/ resources/IFRC-SGBV-COVID-19-Technical-Guidance-Note-FINAL\_14May.pdf
- ITJP. (2020). A life not worth living? Coping with COVID-19. The experiences of torture survivors in the United Kingdom (Vol. 16, Issue 2). https://doi. org/10.1177/095394680301600201
- Kastrup, M., Lunde, I., Ortmann, J., & Genefke, I. K. (1986). Mental consequences of torture: The Method of Rehabilitation at a Rehabilitation

- Centre at Copenhagen. *Indian Journal of Psychiatry*, 28(3), 225–229.
- Kisely, S., Warren, N., McMahon, L., Dalais, C., Henry, I., & Siskind, D. (2020). Occurrence, prevention, and management of the psychological effects of emerging virus outbreaks on healthcare workers: rapid review and meta-analysis. BMf (Clinical Research Ed.), 369, m1642. https://doi. org/10.1136/bmj.m1642
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. *JAMA Network Open*, 3(3), e203976. https://doi.org/10.1001/jamanetworkopen.2020.3976
- Lebret, A. (2020). COVID-19 pandemic and derogation to human rights. *Journal of Law and the Biosciences*, 7(1), 1–15. https://doi.org/10.1093/jlb/lsaa015
- McDonald, A., Eccles, J. A., Fallahkhair, S., & Critchley, H. D. (2020). Online psychotherapy: trailblazing digital healthcare. *BJPsych Bulletin*, 44(2), 60–66. https://doi.org/10.1192/bjb.2019.66
- Muntingh, L. M. (2020). Africa, Prisons and COVID-19 Lukas. Journal of Human Rights Practice, 1–9. https://doi.org/10.1093/jhuman/huaa031
- NCAT. (2020). The Status of COVID 19 in Indian Prisons.
- Oboirien, K. M. (2020). The act of torture and inhuman treatment as human rights violations during COVID-19 in Nigeria. SSRN, 1–20.
- ODIHR, & APT. (2000). Monitoring Places of Detention through the COVID-19 Pandemic.
- OXFAM. Greek Council Refugees. (2020). No-Rights Zone. How people in need of protection are being denied crucial access to legal information and assistance in the Greek islands' EU 'hotspot' camps (Issue December).
- OXFAM. (2019). Vulnerable and abandoned OXFAM MEDIA BRIEFING (Issue January). www.oxfam. org
- Penal Reform International, & Essex Human Rights Center. (2017). Essex paper 3. Initial guidance on the interpretation and implementation of the UN Nelson Mandela Rules (Issue April 2016).
- Pérez-Sales, P. (2020). COVID-19 and Torture. *Torture Journal*, 30(1), 3–4.
- Peterman, A., & Donnell, M. O. (2020). COVID-19 and Violence against Women and Children A Second Research Round Up (Issue September). https:// www.cgdev.org/publication/covid-19-andviolence-against-women-and-children-secondresearch-round

TORTURE Volume 30, Number 2, 2020

- Reid, J. C., & Strong, T. (1988). Rehabilitation of refugee victims of torture and trauma: Principles and service provision in New South Wales. *Medical Journal of Australia*, 148(7), 340–346. https://doi.org/10.5694/j.1326-5377.1988. tb133735.x
- Sandoval, C. (2020). Victims' Participation in Times of Covid-19 in Transitional Justice Accountability Mechanisms: What is Needed for Virtual Hearings to Fulfil this Right?The Case of Colombia and the Special Jurisdiction for Peace. In *Covid-19*, *Law and Human Rights* (pp. 77–95). https://doi.org/10.5526/xgeg-xs42\_010
- SRT. (2013). Applying the torture and ill-treatment protection framework in health-care settings (A/ HRC/22/53) (Issue February).
- Stoll, J., Müller, J. A., & Trachsel, M. (2020). Ethical Issues in Online Psychotherapy: A Narrative Review. Frontiers in Psychiatry, 10(February), 1–16. https://doi.org/10.3389/fpsyt.2019.00993
- Tso, I. F., & Park, S. (2020). Alarming levels of psychiatric symptoms and the role of loneliness during the COVID-19 epidemic: A case study of Hong Kong. *Psychiatry Research*, 293(August), 113423. https://doi.org/10.1016/j.psychres.2020.113423
- Tulloch, O. (2020). Risks and mitigation strategies for COVID-19 in prisons (April 2020) (Issue April). www.socialscienceinaction.org
- UN Women. (2020). COVID-19 and ending violence against women and girls. *United Nations*, 10. https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2020/issue-brief-covid-19-and-ending-violence-against-women-and-girls-en.pdf?la=en&vs=5006
- United Nations High Commissioner for Human Rights. (2005). Human Rights and Prisons. Manual on Human Rights Training for Prison Officials.
- WGAD. (2020). COVID-19 & Immigration Detention:
  What Can Governments and Other Stakeholders
  Do?
- WHO-EU. (2007). Health in prisons. A WHO Guide to the essentials in prison health. WHO.

# TORTURE Volume 30, Number 2, 2020

# The potential of epigenetic methods to provide evidence of torture

Paula Suárez-López, PhD\*

#### Key points of interest

- Epigenetic marks are DNA modifications that affect gene activity without altering the underlying genetic information.
- Changes in epigenetic marks are associated with traumatic experiences.
- Methods that analyse epigenetic marks have the potential to contribute to the medico-legal documentation of torture. This potential should be explored.

#### **Abstract**

Introduction: The last five decades have witnessed a transition from brutal forms of physical torture to other physical and psychological methods that do not leave marks on the body. Providing evidence of these types of torture is often a challenge. Finding biological markers of torture would potentially contribute to solve this problem.

Methods: Scientific literature review.

Results: Methods to analyse certain biological marks present in the genetic material (the DNA), called epigenetic marks, have been

developed in recent years. These marks can change in response to environmental factors, but these changes do not alter the genetic information contained in the DNA. Changes in epigenetic marks have been correlated with traumatic stress. Given that torture is an extreme form of trauma, this article argues that torture may also be associated with epigenetic changes.

Discussion: Epigenetic methods offer a new tool that might be useful for the medico-legal documentation of cases of torture. Given that these methods have not been used for this purpose yet, they should be tested. Whether they have potential to contribute to determine the severity of suffering, establish a severity threshold or design strategies for the rehabilitation of torture survivors is discussed. The advantages and limitations of these methods, as well as ethical implications, must be taken into account.

*Keywords*: severity of suffering, trauma, torture biomarkers, epigenetics, DNA methylation.

#### Introduction

A main element of the definition of torture in international human rights law instruments is the severity of physical or mental pain or suffering (Convention against Torture and

Correspondence to: paula\_suarez\_lopez@hotmail.com

 <sup>\*)</sup> Human Rights Centre, University of Essex, United Kingdom.
 Correspondence to: paula suarez lopez@

Other Cruel, Inhuman or Degrading Treatment or Punishment, 1984; Rome Statute, 1997). The importance of the term "severity" resides in that, despite the fact that it has no legal definition, is a major criteria used in judicial decisions to determine whether the treatment suffered by a person amounts to torture or not.1 However, UN treaty bodies interpret that the legal distinction between torture and inhuman or degrading treatment bears little relevance,<sup>2</sup> a view supported by research indicating that the severity of mental suffering inflicted by torture and other forms of ill-treatment is similar (Başoğlu et al., 2007). It has been proposed, therefore, that a common severity threshold should apply to both torture and cruel or inhuman treatment (Rodley & Pollard, 2009). With the exception of certain acts generally considered torture per se due to the intensity of suffering inflicted<sup>3</sup> (Maculan, 2015), it is necessary to evaluate whether the degree of severity reaches the common threshold to determine whether an act falls within the prohibition of torture and other ill-treatment.

Despite the fact that it is outlawed in most states, torture is still widespread in many countries (Amnesty International, 2018). Many forms of torture hardly leave any mark on the body (Greenberg, 2015; Petersen & Morentin, 2019; Rejali, 2007; Ron, 1997). The absence

of physical proof hampers prosecution of perpetrators and leaves victims with scant possibilities to get justice, reparation and redress. It is therefore of paramount importance to find ways to prove torture when it leaves no visible signs on the body. Epigenetic changes, which are modifications of the DNA that do not affect the genetic information contained in it (Gibney & Nolan, 2010), are associated with traumatic events (reviewed by Vinkers et al., 2015; Zannas et al., 2015). Here, it is hypothesised that torture, usually an extremely traumatic experience, can also be associated with epigenetic changes.

#### Methods

Several interesting reviews on the epigenetics of trauma and post-traumatic stress disorder (PTSD) have already been published (Heinzelmann & Gill, 2013; Sheerin et al., 2017; Vinkers et al., 2015; Zannas et al., 2015). This article has selected examples that illustrate how previous work on the epigenetics of trauma can inform future work on torture. To find out whether analyses of epigenetic changes in torture victims have been reported, searches included the scientific bibliographic databases PubMed (https://www.ncbi.nlm. nih.gov/pubmed) and Google Scholar (https:// scholar.google.com/), using each of the terms "torture," "refugee," "asylum seeker," "displaced person," "displaced population," and "war victim" in combination with the term "epigenetics" or in separate combinations with the following terms, which refer to different types of epigenetic marks: "DNA methylation," "histone mark," "histone modification," "histone methylation," "histone acetylation," "histone ubiquitination or ubiquitylation," "histone sumoylation," and "histone phosphorylation".

See e. g. ECHR. (1978). Ireland v the United Kingdom, 5310/71, §167.

<sup>2</sup> UN Committee Against Torture, General Comment No. 2: Implementation of Article 2 by States parties (2008), §§3-6; UN Human Rights Committee, General Comment No. 20: Article 7 (Prohibition of Torture, or Other Cruel, Inhuman or Degrading Treatment or Punishment) (1992), §§3-4, 8-9, 14.

ECHR. (2003). Aktaş v Turkey, 24351/94, §319;
 ECHR. (1997). Aydin v Turkey, 23178/94, §§83,
 86.

# TORTURE Volume 30, Number 2, 2020

# The difficulty of measuring the severity of suffering

An absolute degree of pain or suffering that sets the threshold for torture and other illtreatment has not been established (Maculan, 2015), given that there is no objective method to measure pain or suffering and there is an enormous variation in physical pain sensitivity and mental suffering between different people (Başoğlu et al., 1997; Fillingim, 2005; Reves, 2007). Factors related to torture itself, its physical effects and the general context in which it is inflicted also have to be taken into account (Maculan, 2015; Pérez-Sales, 2017; Reyes, 2007; Rodley & Pollard, 2009). It is difficult to reconcile the complexity of measuring the severity of pain or suffering with the legal need for certainty in understanding where the threshold for severe pain or suffering is. There is a continuum in severity from the mildest forms of humiliation to the most atrocious forms of torture. It might seem arbitrary to set the threshold at a particular level, but at the same time it would be useful to set a loose boundary beyond which any treatment is considered impermissible. Some leeway would allow taking into account all the factors mentioned above.

#### Torture that leaves no permanent marks

There is a vast array of torture methods that do not leave permanent marks on the body, either because they do not produce them or because the marks disappear in a relatively short time. These techniques include positional stress, exhaustion exercises, sleep deprivation, hooding, sensory deprivation or sensory overload, exposure to cold or hot temperatures, waterboarding, several forms of beating (for example, with rubber hose or sandbags), and electrotorture, which can produce intense physical pain, mental suffering and sometimes permanent physical or

psychological damage (Carinci et al., 2010; Rejali, 2007; Williams & Amris, 2017). Although psychological torture can sometimes also cause physical pain, it does not result in visible physical marks (Reyes, 2007). Examples of psychological torture methods are humiliation, death threats, mock executions, threats that another person will be killed or tortured, witnessing torture of others, solitary confinement, violation of taboos, and forced betrayal (Carinci et al., 2010; McColl, Bhui, & Jones, 2012; Reyes, 2007).

We tend to be more horrified by torture involving physical cruelty, but the methods mentioned above can cause a similar level of distress (Başoğlu et al., 2007; Pérez-Sales, 2017). For instance, torture survivors often describe that witnessing torture of family members, or the threat of torturing them, is at least as distressing as being tortured themselves (Başoğlu et al., 2007; Pérez-Sales, 2017). From the 1970s, countries like the United States, Israel and Spain, among many others, have moved from scarring physical torture to techniques that leave no permanent marks (Greenberg, 2015; Petersen & Morentin, 2019; Rejali, 2007; Ron, 1997). In terms of proving the existence of a human rights violation, this absence of marks poses a considerable challenge.

#### Psychological effects of torture

The experience of extreme suffering that represents any type of torture has an emotional and psychological impact on the victim, which can result in mental health sequelae (Masmas et al., 2008; Rasmussen et al., 2011; Reyes, 2007; Steel et al., 2009). Survivors range from those experiencing a small impact and showing no difference in mental health relative to the general population to those suffering severe psychiatric disorders (Başoğlu et al., 1994; Kelly, 2011; Pérez-Sales, 2017). The psychological sequelae of torture depend

on the survivor's age, gender, resilience, preparedness for torture and interpretation of meaning, in addition to social, cultural and political factors (Başoğlu et al., 1997; Reyes, 2007). The torturing environment and the combination of several torture methods also influence the psychological effects (Pérez-Sales et al., 2016). Torturers want to cause fear, anxiety, distress and a feeling of helplessness in their victims, in order to break them psychologically. This can cause cognitive, behavioural and emotional problems (Campbell, 2007; Carinci et al., 2010; Turner & Gorst-Unsworth, 1990). Some of the most common psychological effects are irritability, sleeplessness, memory and concentration impairment, re-experiencing the trauma, avoidance of anything recalling the torture events, anxiety, depression, suicidal thoughts, mistrust of others, and depersonalisation (feeling detached from one's body) (Carinci et al., 2010; Reyes, 2007; Turner & Gorst-Unsworth, 1990).

Even if torture does not result in mental health symptoms in some survivors, it is a traumatic event. The severity of trauma depends on the emotional impact that torture has on the survivor, measured as the degree of distress and perception of loss of control, that is, the feeling of being at the mercy of others (Başoğlu et al., 2007; Reyes, 2007). The most prevalent trauma-related disorders among torture survivors are major depression and PTSD. It is not unusual for a survivor to have more than one disorder or to transition from one to another (Carinci et al., 2010; Nickerson et al., 2017; Weisleder & Rublee, 2018). Most survivors suffer depression, which has been associated with the experience of loss resulting from torture. It can be loss of parts of the body, physical health, bodily functions, family, work or credibility (Turner & Gorst-Unsworth, 1990).

The most frequent psychiatric disorder in torture survivors is post-traumatic stress disorder (PTSD) (Carinci et al., 2010), with considerably higher prevalence than in the general population (Başoğlu et al., 1994; Jaranson et al., 2004; Masmas et al., 2008; Van Ommeren et al., 2001). It is important to stress that not developing PTSD does not mean that the person has not been tortured (Pérez-Sales, 2017). Neither does PTSD, nor other longterm mental health sequelae, such as depression, reflect the severity of the treatment. Some people subjected to extremely harsh torture may not develop PTSD, whereas some people subjected to milder forms of torture may develop it. However, the severity of mental suffering correlates with greater likelihood of developing PTSD and depression (Başoğlu et al., 2007). Despite the fact that it is currently impossible to distinguish PTSD associated with torture from PTSD caused by other traumatic events, a PTSD diagnosis in a survivor is consistent with severe mental suffering and, together with other evidence, can be used to support torture claims (Reyes, 2007). Overall, any torture method causes traumatic stress, which often results in long-term psychological and mental health sequelae, with profound effects on the survivor's life (Carinci et al., 2010).

# The need for biological markers when torture leaves no physical marks

The idea behind the transition to torture that leaves no permanent physical marks is that if there are no visible marks, the perpetrators will easily evade accountability. These torture methods leave the survivor, and the families of those who do not survive the experience, with little evidence to claim justice, reparation and redress. Torture that leaves no marks has little visual and public impact (Rejali, 2007), resulting in less pressure on states to change

their laws, policies and practices. In addition, many stealth techniques do not require any technology at all and go undetected easily (Rejali, 2007). It is far more difficult to prevent, monitor, detect and prosecute nomarks torture than torture that causes physical injuries. The same problems exist when physical torture leaves marks but they have disappeared by the time the survivor is examined by a health professional. Furthermore, the narrative of torture survivors is often "circuitous, devious and evasive" rather than linear (Roth, 2013, p. 335). Torture, as an extremely distressing event, is particularly difficult to recount (Gorman, 2001). Survivors' testimonies can at times show inconsistencies and may not be able to provide precise details about the date, location or perpetrators. This can be the consequence, for instance, of the circumstances of torture, such as if the victim was blindfolded, of memory impairment resulting from physical or psychological damage caused by torture, or of fear of putting themselves or others at risk (McColl et al., 2012).

Psychological assessments are of paramount importance in documenting torture allegations and in evaluating the severity of suffering and the effects of torture in mental health (Campbell, 2007). However, the absence of physical signs and often witnesses, together with difficulty in providing a clear narrative of the torture events, often puts into question the credibility of torture allegations. In the last two decades, several tools to assess the consistency of torture narratives have been developed, including the guidelines of the Istanbul Protocol (2004). Credibility assessments can be the only evidence that many survivors have to support their legal cases (Pérez-Sales, 2017), but judges can refuse to accept them (Good, 2004). In addition, there can be considerable variation in the level of credibility determined by different observers, even when there is physical evidence of torture (Petersen & Morentin, 2019). Credibility assessments, then, are relevant to support torture allegations, but often are not sufficient by themselves. Also, psychological assessments can occasionally be manipulated, especially if the expert is not independent.<sup>4</sup>

In the light of all of the above, an important challenge is to obtain additional evidence of torture, especially when there are no physical marks. Pérez-Sales (2017) points to the necessity of finding biological markers associated with psychological torture and that can discriminate, if possible, torture from other types of trauma. The idea is to find specific and objective evidence of torture and of the severity of its effects (Pérez-Sales, 2017)). Given that torture affects brain functioning, methods that analyse brain structure or neural activity have the potential to provide relevant information. Research using neuroimaging techniques has shown that the volume of the hippocampus is reduced in people with PTSD in comparison with traumatised people without PTSD and non-traumatised controls (Karl et al., 2006; Kolassa & Elbert, 2007). However, these findings have to be interpreted with caution, given that differences in hippocampal volume may result from genetic risk factors for PTSD (Gilbertson et al., 2002; Zhang et al., 2014). Analyses of neural activity suggest that individuals with PTSD, including torture survivors, show specific activation patterns in response to disturbing stimuli (Adenauer et al., 2010; Catani et al., 2009). These results are promising, but neural activity patterns are not always reproducible and are sometimes difficult to interpret (Nash et al., 2014). Moreover, neuroimaging

<sup>4</sup> See, for example, Inter-American Commission on Human Rights. (2018). Olivier Acuña Barba v Mexico, Updated petition, No. P463-05/Case 13.432.

procedures are expensive and require specialised equipment to which, depending on the context, torture survivors may not have access.

The levels of cortisol, a steroid hormone involved in stress responses, are altered in people who have suffered trauma (Steudte-Schmiedgen et al., 2016). Although a study of cortisol levels included torture survivors, it was not designed to test a correlation of cortisol levels with torture (Gola et al., 2012). Therefore, changes in cortisol levels are associated with trauma, but an association with torture has not been established yet. Altogether, it can be concluded that no specific biological markers of torture have been found so far. It is, therefore, of paramount importance to find new ways to document cases of torture when there are no visible signs on the body. In the next section, the potential of stateof-the-art molecular biology techniques, in particular epigenetic methods, to provide evidence of torture is analysed.

# The potential of epigenetic marks as biological markers of torture

What are epigenetic marks?

Our genetic information is encoded in our DNA, which can be understood as containing a language (the genetic code). The set of genes of an organism (the genome) can be understood as a handbook of life written in this language. Your DNA contains the instructions to make you and not any other person or any other living being. But you are not only what your genes determine; you are the result of the interaction between your genes and the environment, between your genes and your experiences (Tiffon, 2018). We can understand a gene as an instruction. For example, we have a gene with the instruction to make insulin, which is involved in sugar metabolism and the control of blood sugar levels (Röder et al., 2016). A genetic change — what is

called a mutation, that is, a change that affects the information contained in the gene - in the insulin gene can render insulin inactive, leading to diabetes (Nishi & Nanjo, 2011). Instructions that are absolutely essential for life are given constantly, whereas other instructions are given at a particular moment, under particular circumstances or at particular places. For example, the insulin gene is only active in certain pancreatic cells (Röder et al., 2016). Instructions can be given in many different ways: genes can be expressed (active) or silent (inactive) and changes in gene activity can be sudden or slow and gradual, slight or massive, long-lasting or transient. Thus, gene expression can be fine-tuned in a very dynamic way.

Epigenetics refers to features of the DNA that affect gene activity without changing its genetic information. Epigenetic marks are elements that are bound to the DNA and can be added or removed readily. We can understand epigenetic marks as tags that give orders to modulate gene expression (Gibney & Nolan, 2010). There are tags that make genes more active and tags that reduce their activity or turn them silent. The type, number and position of epigenetic marks in a gene determine gene activity. There are several types of epigenetic marks. Some of them directly bind the DNA, whereas others bind components associated with the DNA called histones (Gibney & Nolan, 2010). The main mark directly bound to the DNA is called DNA methylation, which is a stable epigenetic mark that reduces or silences gene expression (Jaenisch & Bird, 2003). For example, expression of the insulin gene is regulated by DNA methylation, such that this gene is expressed only in the pancreatic cells in which the gene is not methylated, allowing the gene to be active (Kuroda et al., 2009). Epigenetic change, that is, the addition or removal of epigenetic marks, is a natural process that contributes to the regulation of gene expression (Gibney & Nolan, 2010). There is clear evidence that gene expression can change in response to environmental factors, such as temperature or nutrition. The environment affects gene expression in part through epigenetic changes (Cavalli & Heard, 2019; Jaenisch & Bird, 2003).

Stress and trauma are associated with epigenetic changes

Numerous studies have found that epigenetic changes, in particular in DNA methylation, are associated with stress and trauma. Some of these investigations have analysed methylation in the whole set of genes, whereas others have analysed methylation in specific genes that are involved in responses to stress or trauma (reviewed by Vinkers et al., 2015; Zannas et al., 2015). The main candidate genes analysed in relation to traumatic stress are those with the instructions to produce the glucocorticoid receptor and the serotonin transporter. The glucocorticoid receptor binds steroid hormones, mainly cortisol, and is involved in responses to stress and, in mice, in the regulation of anxiety, aggression and cognitive performance (de Kloet et al., 2005). The serotonin transporter is involved in the function of serotonin, a neurotransmitter, which has been related to depressive disorders (Nautiyal & Hen, 2017). Most research on the epigenetics of trauma has been performed on patients with PTSD in order to identify genetic risk factors for this disorder (Sheerin et al., 2017; Zannas et al., 2015). Although differences in DNA methylation between patients with PTSD and trauma-exposed controls without PTSD have been detected in several genes (Sheerin et al., 2017; Zannas et al., 2015), the design of these studies does not allow concluding whether the epigenetic changes result from the trauma experienced.

A number of studies show a correlation between certain epigenetic marks in adults and childhood trauma, including early parental loss, physical and sexual abuse (reviewed by Vinkers et al., 2015). Not only does this show that traumatic stress is associated with epigenetic changes, it also suggests that these changes persist for years. In a study of DNA methylation levels in the glucocorticoid receptor gene in adults with mental disorders, higher methylation levels were found in persons that had been sexually abused during childhood compared to non-sexually abused persons (Perroud et al., 2011). Similarly, physical abuse, physical neglect, emotional abuse and emotional neglect during childhood were associated with high methylation levels in this gene. This study also found a correlation between increased severity of sexual abuse and increased DNA methylation, and between more abuses and increased methylation in the glucocorticoid receptor gene, suggesting that high levels of certain epigenetic marks might be used not only as biological markers of trauma, but also as indicators of the objective severity of the abuse.

These results, which were obtained using blood samples, extend previous work done with brain samples of suicide victims with a history of childhood abuse, which also showed higher methylation levels in the glucocorticoid receptor gene than those of non-abused suicide victims (McGowan et al., 2009). As blood samples show similar results to brain samples, it is not necessary to use brain samples for this type of research, and, therefore, it is possible to study epigenetic changes in living persons. Increased methylation of the glucocorticoid receptor gene is associated with reduced expression of this gene in the brain, which suggests that these epigenetic changes result in changes in gene activity that can affect the response to stress (McGowan et al., 2009). Research from a different group has found that higher methylation levels of the glucocorticoid receptor gene are associated with clinical severity in borderline personality disorder patients with a history of childhood trauma (Martín-Blanco et al., 2014). Therefore, at least two studies have found correlations between methylation of this gene and severity, although in one case severity refers to the treatment and, in the other, it refers to clinical symptoms.

Studies of epigenetic marks in other genes, including the serotonin transporter gene, have also shown an association of epigenetic changes with childhood trauma (H.-J. Kang et al., 2013; Vijayendran et al., 2012), although other studies have not found such correlation (Marzi et al., 2018; Wankerl et al., 2014). Several analyses of DNA methylation in the whole human genome have found higher or lower levels of methylation in numerous genes in individuals who had suffered childhood abuse in comparison with control individuals who had not experienced trauma (reviewed by Vinkers et al., 2015). In addition to these reports of exposure to trauma in early life, several studies have shown associations between alterations in methylation levels of several genes and war-related PTSD in veterans (Kang et al, 2019; Kim et al., 2017; Rusiecki et al., 2012; Yehuda et al., 2015), suggesting that trauma in adult life also correlates with DNA methylation changes.

In some cases, different studies have revealed epigenetic changes in different parts of the same gene. However, the methods used differ between studies and therefore the results are not directly comparable, which might explain some of the differences found (Vinkers et al., 2015). Although not all studies have found correlations between changes in DNA methylation and traumatic stress, and there is not always consistency between studies, there is increasing evidence support-

ing this correlation. Two types of experiments give strong support to the idea that stress and trauma induce epigenetic changes. On the one hand, experiments in rats showed that reduced maternal care increases methylation of the glucocorticoid receptor gene in the offspring (Weaver et al., 2004). On the other hand, high methylation of genes involved in the regulation of sleep/wake cycles results from acute sleep deprivation in humans (Cedernaes et al., 2015). The field of epigenetics is young and rapidly evolving. Although many findings need further confirmation or development, it is a field with a very promising future.

Can epigenetic methods be used to provide evidence of torture?

The association of epigenetic changes with traumatic and stressful events has led to naming these changes "molecular scars" (Tsankova et al., 2006, p. 523). Given that torture is an extreme form of trauma, it is conceivable that it is also associated with this type of scars in the victim's DNA. It would be feasible, then, to test whether torture survivors show stress- or trauma-related epigenetic changes. The fact that changes in DNA methylation can be detected in adults after a history of childhood trauma (McGowan et al., 2009; Perroud et al., 2011), suggests that traumatic events may be traced in the DNA after several decades. Therefore, if such marks were associated with torture, it might be possible to detect them years after the torture event took place. Molecular scars might persist for a longer time than some physical scars and might be present in survivors of torture that leaves no other visible marks. Epigenetic methods, therefore, have the potential to provide scientific evidence of, or consistent with, torture even if years have passed and physical marks have disappeared or never existed.

Despite this potential, systematic bibliographic searches did not retrieve any report on the use of epigenetic methods to detect associations of epigenetic changes with torture. The searches retrieved a number of articles dealing with the epigenetics of traumatised individuals, some of whom had experienced torture, but none of these articles specifically addressed potential links of epigenetic changes with torture. The present article argues that it is worth testing whether these links exist and, if this were the case, whether the changes associated with torture can be distinguished from those associated with other types of trauma.

### Advantages and limitations of epigenetic methods and ethical considerations

The use of DNA analyses has meant a remarkable improvement for forensic genetics not only in criminal, but also in human rights investigations (Kirschner & Hannibal, 1994; Williams & Wienroth, 2017). Forensic epigenetics is an emerging area of forensics that is already being used to try to determine, using biological samples, the age of a person and to differentiate between identical twins (Vidaki & Kayser, 2018). It would be worth testing whether this area can be extended to the documentation of torture. The idea would not be to replace other forms of evidence already available, but to provide additional proofs consistent with the torture suffered, especially when there is no other physical evidence. If epigenetic methods were useful to provide evidence of torture, they might be considered in the future for inclusion in the Istanbul Protocol.

Taking into account that different environmental factors result in epigenetic changes in different genes (Jaenisch & Bird, 2003), it can be speculated that different types of torture might be associated with epigenetic changes in different sets of genes. Similar to DNA methyl-

ation changes in genes involved in sleep/wake cycles caused by sleep deprivation (Cedernaes et al., 2015), it can be hypothesised, for instance, that positional stress might affect genes involved in muscle function, and death threats or torture threats might affect genes involved in fear responses. Perhaps, then, certain epigenetic changes might be distinctive of particular torture methods, whereas changes in genes involved in general responses to trauma would not be distinctive of torture. Other epigenetic marks, in addition to DNA methylation, might be explored. For example, changes in histone acetylation have been linked to major depression, memory impairment and cognitive problems (Penney and Tsai, 2014; Uchida et al., 2018), which are common sequelae of torture. Although we are still far from understanding the effect of trauma-associated epigenetic changes on health, physiology and behaviour, future research may shed light on this and therefore open avenues to help mitigate the effects of trauma in torture survivors, contributing to their rehabilitation.

Higher levels of DNA methylation have been associated with the severity of trauma-related clinical symptoms. It would be possible to test whether different levels of suffering correlate with higher or lower levels of epigenetic marks to try to determine the severity of torture. However, even if epigenetic methods could give a measure of the severity of suffering, it would not be easy to establish a severity threshold because there is a continuous gradation of severity from the mildest forms of degrading treatment to the cruellest forms of psychological and physical torture (Başoğlu et al., 2007). A question that needs to be answered is whether the epigenetic changes are associated with the traumatic event itself or with the mental suffering caused by the event. Traumatic stress is related to subjective severity rather than objective severity and, therefore, is not directly caused by the torture event itself, but by its perceived stressfulness and uncontrollability (Başoğlu et al., 2007). In this regard, not all torture survivors experience mental disorders (Kelly, 2011). Similarly, it can be hypothesised that epigenetic alterations might not be present in every tortured person. It is not inconceivable that, in the future, the presence of certain epigenetic changes might indicate a prohibited treatment, whereas their absence would not necessarily mean that torture has not been inflicted. As the Istanbul Protocol states (§ 161), absence of evidence does not mean evidence of absence.

It is worth noting, although this will not be considered in depth here, that there is extensive literature on the intergenerational transmission of trauma effects, including the impact of parental torture on children (Bowers & Yehuda, 2016; Daud et al., 2005; Dekel & Goldblatt, 2008; Plant et al., 2018; Sangalang & Vang, 2016). Evidence that epigenetic marks can be inherited is also increasing (Skvortsova et al., 2018). In humans, there is controversy over whether the transmission of epigenetic marks across generations occurs through the germline or through environmental or cultural effects (Horsthemke, 2018). Even with this caveat in mind, a few studies have explored the association of epigenetic marks with the transmission of trauma and stress to the offspring, albeit with conflicting results (Ramo-Fernández et al., 2019; Yehuda et al., 2014; Yehuda et al., 2016). This field of research, identified as a priority in the context of torture (Pérez-Sales et al, 2017), deserves further attention.

An important limitation of the epigenetic analyses of trauma performed so far, with the exception of some experiments performed in animals and sleep deprivation experiments, is that only correlations have been found. It is difficult to establish a causal relationship between trauma and epigenetic changes in

human beings. Given that it is ethically inadmissible to subject people to traumatic experiences, let alone to torture, for scientific purposes, establishing whether epigenetic changes result from torture would be challenging. In addition, the task of associating epigenetic marks specifically with torture, rather than with other traumatic events in a particular survivor, may find the same problems as associating PTSD with torture. For example, in the case of refugees who have experienced torture, the process of migration very often involves traumatic events, and this makes virtually impossible to discern whether PTSD is the result of torture or other traumas (Rasmussen et al., 2011). Nevertheless, epigenetic changes might still provide evidence consistent with torture, which would be helpful when there is no other physical proof. Another limitation is that epigenetic methods, in principle, cannot determine the time when the epigenetic changes occurred. In addition, some of the methods are expensive and require specialised equipment, but DNA technologies evolve rapidly and become cheaper in a relatively short time. Also, the epigenetic changes associated with trauma are usually small and not always reproducible or statistically robust (Houtepen et al., 2018; Vinkers et al., 2015), which might limit their validity as biomarkers. It would be necessary to establish laboratory standards in order to ensure the effectiveness of the investigations and the robustness and reliability of the results.

Epigenetic marks can vary across tissues, but the type of tissue samples that can be obtained from living individuals is limited. Samples that have been used for trauma-related epigenetic analyses include saliva and buccal epithelial cells, which can be collected by non-invasive and painless methods, and blood (Vinkers et al., 2015). It is not known how the results obtained in these tissues cor-

relate with other tissues, such as the brain, although the results obtained for the glucocorticoid receptor gene in blood seem consistent with those obtained in the brain (McGowan et al., 2009; Perroud et al., 2011). The type of samples that can be used would not be a limitation when torture results in death, as long as samples can be collected from the victim, since epigenetic changes associated with early-life trauma can be detected post-mortem (Labonté et al., 2012; McGowan et al., 2009).

The same ethical concerns as in any scientific research done with human samples have to be taken into account. All the bioethics principles, such as those established in the Declaration of Helsinki (2013) and in the Convention on Human Rights and Biomedicine (1997), must be respected. These include, for instance, avoiding all unnecessary physical and mental suffering; obtaining free and informed consent; and allowing the subjects to withdraw from the experiments or withdraw their consent when desired. It is essential to bear in mind that torture survivors can be especially vulnerable and, therefore, the highest ethical standards must be observed. Also, re-traumatisation must be avoided and the collection of samples must be done using the least invasive procedure. For example, saliva samples would be preferable to blood samples. The methods to analyse some epigenetic marks, such as DNA methylation, involve revealing at least part of the DNA sequence (the genetic information) of the subject. Torture survivors must be protected from the use against them of their genetic and epigenetic information revealed by these methods. It will also be crucial to guarantee data privacy and confidentiality of all information collected from torture survivors, including genetic and epigenetic information.

Finally, before epigenetic methods can be used to provide evidence of torture, extensive discussions with different experts, including epigenetics scientists, health professionals specialised in the assessment and treatment of torture survivors, forensic scientists, bioethicists, and legal experts must be undertaken. Also, it would be essential to take into account the perspective of torture survivors, as they would be the direct beneficiaries of the application of these scientific methods.

#### Conclusion

It is often difficult to prove that a person has been tortured when there are no physical marks. Finding biological markers of this extremely traumatic experience would be crucial to provide proof of torture in these cases. So far, no such markers have been found. Methods to detect epigenetic changes in the DNA offer a novel technology that may be tested for this purpose. Epigenetic changes have been associated with several types of traumatic stress. Using the DNA of torture victims, it should be possible to determine whether there are differences in epigenetic marks between them and people who have not been tortured, as well as between torture victims and people who have suffered other types of traumatic stress, that is to say, whether there are epigenetic marks that are distinctive of torture. Whether these methods can be used to determine the severity of the traumatic stress associated with torture or other forms of ill-treatment is at least a theoretical possibility. It can be concluded that epigenetic methods have the potential to provide evidence of torture and perhaps determine its severity. However, caution must be exercised to avoid overpromising. Whether this potential will be realised is not known, but given the necessity to prove torture, especially when there are no physical marks, it would be worth testing it. The interpretation of results will have to take into account the limitations of these methods. A scrupulous respect for

the bioethical principles that regulate scientific research using human samples will also be essential.

If torture left marks in the DNA, revealing these marks would be useful for the medico-legal documentation of torture. Torturers would find much more difficult to evade accountability and potential perpetrators would be more likely to refrain from torturing. Biological markers of torture would contribute to provide justice, reparation, remedy, redress, and perhaps rehabilitation to survivors and families of victims. If epigenetic marks of torture were found, this would show that torture affects our very biological essence, the DNA carrying the genetic information that makes us human. This would lend further support to the absolute prohibition of torture and perhaps would help to refine the definition of torture on the basis of scientific evidence.

#### **Acknowledgements**

Carla Ferstman for critical comments on the manuscript, Renos Papadopoulos for discussing with me the complex psychological effects of torture, and the Editor-in-Chief and two anonymous reviewers for their help in improving the manuscript.

#### References

- Adenauer, H., Pinösch, S., Catani, C., Gola, H., Keil, J., Kißler, J., & Neuner, F. (2010). Early processing of threat cues in posttraumatic stress disorder—Evidence for a cortical vigilanceavoidance reaction. *Biological Psychiatry*, 68(5), 451-458. doi: 10.1016/j.biopsych.2010.05.015
- Amnesty International. (2018). Amnesty International report 2017/18: The state of the world's human rights. London: Amnesty International.
- Başoğlu, M., Livanou, M., & Crnobarić, C. (2007). Torture vs other cruel, inhuman, and degrading treatment: Is the distinction real or apparent? Archives of General Psychiatry, 64(3), 277-285. doi: 10.1001/archpsyc.64.3.277
- Başoğlu, M., Mineka, S., Paker, M., Aker, T., Livanou, M., & Gök, Ş. (1997). Psychological preparedness for trauma as a protective factor in survivors of torture. Psychological Medicine, 27(6), 1421-1433. doi: 10.1017/s0033291797005679
- Başoğlu, M., Paker, M., Paker, Ö., Özmen, E., Marks, I., Incesu, C., . . . Sarimurat, N. (1994). Psychological effects of torture: A comparison of tortured with nontortured political activists in Turkey. American Journal of Psychiatry, 151, 76-81. https://ajp.psychiatryonline.org/
- Bowers, M. E., & Yehuda, R. (2016). Intergenerational transmission of stress in humans. *Neuropsychopharmacology*, 41(1), 232-244. doi: 10.1038/npp.2015.247
- Campbell, T. A. (2007). Psychological assessment, diagnosis, and treatment of torture survivors: A review. *Clinical Psychology Review*, *27*(5), 628-641. doi: 10.1016/j.cpr.2007.02.003
- Carinci, A. J., Mehta, P., & Christo, P. J. (2010).
  Chronic pain in torture victims. Current Pain and Headache Reports, 14(2), 73-79. doi: 10.1007/s11916-010-0101-2
- Catani, C., Adenauer, H., Keil, J., Gola, H., & Neuner, F. (2009). Pattern of cortical activation during processing of aversive stimuli in traumatized survivors of war and torture. European Archives of Psychiatry and Clinical Neuroscience, 259(6), 340-351. doi: 10.1007/s00406-009-0006-4
- Cavalli, G., & Heard, E. (2019). Advances in epigenetics link genetics to the environment and disease. *Nature*, 571(7766), 489-499. doi: 10.1038/s41586-019-1411-0
- Cedernaes, J., Osler, M. E., Voisin, S., Broman, J.-E., Vogel, H., Dickson, S. L., . . . Benedict, C. (2015). Acute sleep loss induces tissue-specific epigenetic and transcriptional alterations to circadian clock genes in men. *The Journal of*

- Clinical Endocrinology & Metabolism, 100(9), E1255-E1261. doi: 10.1210/jc.2015-2284
- Convention for the Protection of Human Rights and Dignity of the Human Being with Regard to the Application of Biology and Medicine: Convention on Human Rights and Biomedicine, 1997.
- Daud, A., Skoglund, E., & Rydelius, P.-A. (2005). Children in families of torture victims: Transgenerational transmission of parents' traumatic experiences to their children. *International Journal of Social Welfare*, 14(1), 23-32. doi: 10.1111/j.1468-2397.2005.00336.x
- de Kloet, E. R., Joëls, M., & Holsboer, F. (2005). Stress and the brain: From adaptation to disease. Nature Reviews Neuroscience, 6(6), 463-475. doi: 10.1038/nrn1683
- Dekel, R., & Goldblatt, H. (2008). Is there intergenerational transmission of trauma? The case of combat veterans' children. *American Journal of Orthopsychiatry*, 78(3), 281-289. doi: 10.1037/a0013955
- Fillingim, R. B. (2005). Individual differences in pain responses. *Current Rheumatology Reports*, 7(5), 342-347. doi: 10.1007/s11926-005-0018-7
- Gibney, E. R., & Nolan, C. M. (2010). Epigenetics and gene expression. *Heredity*, 105(1), 4-13. doi: 10.1038/hdy.2010.54
- Gilbertson, M. W., Shenton, M. E., Ciszewski, A., Kasai, K., Lasko, N. B., Orr, S. P., & Pitman, R. K. (2002). Smaller hippocampal volume predicts pathologic vulnerability to psychological trauma. *Nature Neuroscience*, 5(11), 1242-1247. doi: 10.1038/nn958
- Gola, H., Engler, H., Schauer, M., Adenauer, H., Riether, C., Kolassa, S., . . . Kolassa, I.-T. (2012). Victims of rape show increased cortisol responses to trauma reminders: A study in individuals with war- and torture-related PTSD. *Psychoneuroendocrinology*, 37(2), 213-220. doi: 10.1016/j.psyneuen.2011.06.005
- Good, A. (2004). 'Undoubtedly an expert'? Anthropologists in British asylum courts. The Journal of the Royal Anthropological Institute, 10(1), 113-133. doi: 10.1111/j.1467-9655.2004.00182.x
- Gorman, W. (2001). Refugee survivors of torture: Trauma and treatment. *Professional Psychology: Research and Practice*, 32(5), 443-451. doi: 10.1037/0735-7028.32.5.443
- Greenberg, I. (2015). From surveillance to torture: The evolution of US interrogation practices during the War on Terror. *Security Journal*, 28(2), 165-183. doi: 10.1057/sj.2015.7
- Heinzelmann, M., & Gill, J. (2013). Epigenetic mechanisms shape the biological response to

- trauma and risk for PTSD: A critical review. Nursing Research and Practice, 2013, 417010. doi: 10.1155/2013/417010
- Horsthemke, B. (2018). A critical view on transgenerational epigenetic inheritance in humans. *Nature Communications*, 9(1), 2973. doi: 10.1038/s41467-018-05445-5
- Houtepen, L. C., Hardy, R., Maddock, J., Kuh, D., Anderson, E. L., Relton, C. L., . . . Howe, L. D. (2018). Childhood adversity and DNA methylation in two population-based cohorts. *Translational Psychiatry*, 8(1), 266. doi: 10.1038/ s41398-018-0307-3
- Jaenisch, R., & Bird, A. (2003). Epigenetic regulation of gene expression: How the genome integrates intrinsic and environmental signals. *Nature Genetics*, 33(Suppl), 245-254. doi: 10.1038/ ng1089
- Jaranson, J. M., Butcher, J., Halcon, L., Johnson, D. R., Robertson, C., Savik, K., . . . Westermeyer, J. (2004). Somali and Oromo refugees: Correlates of torture and trauma history. *American Journal of Public Health*, 94(4), 591-598. doi: 10.2105/aiph.94.4.591
- Kang, H.-J., Kim, J.-M., Stewart, R., Kim, S.-Y., Bae, K.-Y., Kim, S.-W., . . . . Yoon, J.-S. (2013). Association of SLC6A4 methylation with early adversity, characteristics and outcomes in depression. Progress in Neuro-Psychopharmacology and Biological Psychiatry, 44, 23-28. doi: 10.1016/j.pnpbp.2013.01.006
- Kang, J. I., Kim, T. Y., Choi, J. H., So, H. S., & Kim, S. J. (2019). Allele-specific DNA methylation level of FKBP5 is associated with post-traumatic stress disorder. Psychoneuroendocrinology, 103, 1-7. doi: 10.1016/j.psyneuen.2018.12.226
- Karl, A., Schaefer, M., Malta, L. S., Dörfel, D., Rohleder, N., & Werner, A. (2006). A metaanalysis of structural brain abnormalities in PTSD. Neuroscience & Biobehavioral Reviews, 30(7), 1004-1031. doi: 10.1016/j. neubiorev.2006.03.004
- Kelly, T. (2011). What we talk about when we talk about torture. *Humanity: An International Journal of Human Rights, Humanitarianism, and Development*, 2(2), 327-343. https://muse.jhu.edu/journal/499
- Kim, T.Y., Kim, S. J., Chung, H. G., Choi, J. H., Kim, S. H., & Kang, J. I. (2017). Epigenetic alterations of the BDNF gene in combat-related post-traumatic stress disorder. Acta Psychiatrica Scandinavica, 135(2), 170-179. doi: 10.1111/ acps.12675
- Kirschner, R. H., & Hannibal, K. E. (1994). The application of the forensic sciences to human

TORTURE Volume 30, Number 2, 2020

- rights investigations. Medicine and Law, 13, 451-460.
- Kolassa, I.-T., & Elbert, T. (2007). Structural and functional neuroplasticity in relation to traumatic stress. Current Directions in Psychological Science, 16(6), 321-325. doi: 10.1111/j.1467-8721.2007.00529.x
- Kuroda, A., Rauch, T. A., Todorov, I., Ku, H. T., Al-Abdullah, I. H., Kandeel, F., . . . Ferreri, K. (2009). Insulin gene expression is regulated by DNA methylation. *PLoS ONE*, 4(9), e6953. doi: 10.1371/journal.pone.0006953
- Labonté, B., Suderman, M., Maussion, G., Navaro, L., Yerko, V., Mahar, I., . . . Turecki, G. (2012). Genome-wide epigenetic regulation by early-life trauma. *Archives of General Psychiatry*, 69(7), 722-731. doi: 10.1001/archgenpsychiatry.2011.2287
- Maculan, E. (2015). Judicial definition of torture as a paradigm of cross-fertilisation: Combining harmonisation and expansion. *Nordic Journal of International Law*, 84(3), 456-481. doi: 10.1163/15718107-08403005
- Martín-Blanco, A., Ferrer, M., Soler, J., Salazar, J., Vega, D., Andión, O., . . . Pascual, J. C. (2014). Association between methylation of the glucocorticoid receptor gene, childhood maltreatment, and clinical severity in borderline personality disorder. *Journal of Psychiatric Research*, 57, 34-40. doi: 10.1016/j. jpsychires.2014.06.011
- Marzi, S. J., Sugden, K., Arseneault, L., Belsky, D.
  W., Burrage, J., Corcoran, D. L., . . . Caspi,
  A. (2018). Analysis of DNA methylation
  in young people: Limited evidence for an
  association between victimization stress and
  epigenetic variation in blood. *American Journal of Psychiatry*, 175(6), 517-529. doi: 10.1176/appi.
  ajp.2017.17060693
- Masmas, T. N., Møller, E., Buhmann, C., Bunch, V., Jensen, J. H., Hansen, T. N., . . . Ekstrøm, M. (2008). Asylum seekers in Denmark: A study of health status and grade of traumatization of newly arrived asylum seekers. *Torture Journal*, 18(2), 77-86.
- McColl, H., Bhui, K., & Jones, E. (2012). The role of doctors in investigation, prevention and treatment of torture. *Journal of the Royal Society of Medicine*, 105(11), 464-471. doi: 10.1258/jrsm.2012.120100
- McGowan, P. O., Sasaki, A., D'Alessio, A. C., Dymov, S., Labonté, B., Szyf, M., . . . Meaney, M. J. (2009). Epigenetic regulation of the glucocorticoid receptor in human brain associates with childhood abuse. *Nature Neuroscience*, 12(3), 342-348. doi: 10.1038/nn.2270

- Nash, M., Galatzer-Levy, I., Krystal, J. H., Duman, R., & Neumeister, A. (2014). Neurocircuitry and neuroplasticity in PTSD. In M. J. Friedman, T. M. Keane & P. A. Resick (Eds.), Handbook of PTSD: Science and practice (2nd ed.). New York: The Guilford Press.
- Nautiyal, K. M., & Hen, R. (2017). Serotonin receptors in depression: From A to B. F1000Research, 6, 123. doi: 10.12688/ f1000research.9736.1
- Nickerson, A., Schick, M., Schnyder, U., Bryant, R. A., & Morina, N. (2017). Comorbidity of posttraumatic stress disorder and depression in tortured, treatment-seeking refugees. *Journal of Traumatic Stress*, 30(4), 409-415. doi: 10.1002/ its.22205
- Nishi, M., & Nanjo, K. (2011). Insulin gene mutations and diabetes. *Journal of Diabetes Investigation*, 2(2), 92-100. doi: 10.1111/j.2040-1124.2011.00100.x
- OHCHR (2004). Istanbul Protocol: Manual on the Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. New York: United Nations (Istanbul Protocol).
- Penney, J., & Tsai, L.-H. (2014). Histone deacetylases in memory and cognition. *Science Signaling*, 7(355), re12. doi: 10.1126/scisignal.aaa0069
- Pérez-Sales, P. (2017). Psychological torture: Definition, evaluation and measurement. Abingdon: Routledge.
- Pérez-Sales, P., Navarro-Lashayas, M. A., Plaza, A., Morentin, B., & Barrios Salina, O. (2016). Incommunicado detention and torture in Spain, part III: 'Five days is enough': The concept of torturing environments. *Torture Journal*, 26(3), 21-33.
- Pérez-Sales, P., Witcombe, N., & Otero Oyague, D. (2017). Rehabilitation of torture survivors and prevention of torture: Priorities for research through a modified Delphi Study. *Torture Journal*, 27(3), 3-37. doi: 10.7146/torture.v27i3.103976
- Perroud, N., Paoloni-Giacobino, A., Prada, P., Olié, E., Salzmann, A., Nicastro, R., . . . Malafosse, A. (2011). Increased methylation of glucocorticoid receptor gene (NR3C1) in adults with a history of childhood maltreatment: A link with the severity and type of trauma. Translational Psychiatry, 1, e59. doi: 10.1038/tp.2011.60
- Petersen, H. D., & Morentin, B. (2019). Assessing the level of credibility of allegations of physical torture. Forensic Science International, 301, 263-270. doi: 10.1016/j.forsciint.2019.05.043
- Plant, D. T., Pawlby, S., Pariante, C. M., & Jones, F.W. (2018). When one childhood meets anothermaternal childhood trauma and offspring child

- psychopathology: A systematic review. *Clinical Child Psychology and Psychiatry*, 23(3), 483-500. doi: 10.1177/1359104517742186
- Ramo-Fernández, L., Boeck, C., Koenig, A. M., Schury, K., Binder, E. B., Gündel, H., . . . Kolassa, I.-T. (2019). The effects of childhood maltreatment on epigenetic regulation of stress-response associated genes: An intergenerational approach. *Scientific Reports*, 9(1), 983. doi: 10.1038/s41598-018-36689-2
- Rasmussen, A., Crager, M., Keatley, E., Keller, A. S., & Rosenfeld, B. (2011). Screening for torture: A narrative checklist comparing legal definitions in a torture treatment clinic. *Journal of Psychology*, 219(3), 143–149. doi: 10.1027/2151-2604/ a000061
- Rejali, D. (2007). *Torture and democracy*. Princeton: Princeton University Press.
- Reyes, H. (2007). The worst scars are in the mind: Psychological torture. *International Review of the Red Cross*, 89(867), 591-617.
- Röder, P. V., Wu, B., Liu, Y., & Han, W. (2016).

  Pancreatic regulation of glucose homeostasis.

  Experimental & Molecular Medicine, 48(3), e219.

  doi: 10.1038/emm.2016.6
- Rodley, N., & Pollard, M. (2009). The treatment of prisoners under international law (3rd ed.). Oxford: Oxford University Press.
- Rome Statute of the International Criminal Court, 1998, art. 7.2(e).
- Ron, J. (1997). Varying methods of state violence. International Organization, 51(2), 275-300. doi: 10.1162/002081897550366
- Roth, B. (2013). How do you know when it is torture? *Medicine and Law, 32,* 327-346. https://wafml.memberlodge.org/page-1150634
- Rusiecki, J. A., Chen, L., Srikantan, V., Zhang, L., Yan, L., Polin, M. L., & Baccarelli, A. (2012). DNA methylation in repetitive elements and post-traumatic stress disorder: a casecontrol study of US military service members. *Epigenomics*, 4(1), 29-40. doi: 10.2217/epi.11.116
- Sangalang, C. C., & Vang, C. (2017).
  Intergenerational trauma in refugee families:
  A systematic review. Journal of Immigrant and Minority Health, 19(3), 745-754. doi: 10.1007/s10903-016-0499-7
- Sheerin, C. M., Lind, M. J., Bountress, K. E., Nugent, N. R., & Amstadter, A. B. (2017). The genetics and epigenetics of PTSD: Overview, recent advances, and future directions. *Current Opinion in Psychology*, 14, 5-11. doi: 10.1016/j. copsyc.2016.09.003
- Skvortsova, K., Iovino, N., & Bogdanović, O. (2018). Functions and mechanisms of epigenetic

- inheritance in animals. *Nature Reviews Molecular Cell Biology*, 19(12), 774-790. doi: 10.1038/s41580-018-0074-2
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: A systematic review and meta-analysis. JAMA, 302(5), 537-549. doi: 10.1001/jama.2009.1132
- Steudte-Schmiedgen, S., Kirschbaum, C., Alexander, N., & Stalder, T. (2016). An integrative model linking traumatization, cortisol dysregulation and posttraumatic stress disorder: Insight from recent hair cortisol findings. *Neuroscience* & Biobehavioral Reviews, 69, 124-135. doi: 10.1016/j.neubiorev.2016.07.015
- Tiffon, C. (2018). The impact of nutrition and environmental epigenetics on human health and disease. *International Journal of Molecular Sciences*, 19(11), 3425. doi: 10.3390/ijms19113425
- Tsankova, N. M., Berton, O., Renthal, W., Kumar, A., Neve, R. L., & Nestler, E. J. (2006). Sustained hippocampal chromatin regulation in a mouse model of depression and antidepressant action. *Nature Neuroscience*, 9(4), 519-525. doi: 10.1038/ nn1659
- Turner, S., & Gorst-Unsworth, C. (1990).
  Psychological sequelae of torture: A descriptive model. The British Journal of Psychiatry, 157(4), 475-480. doi: 10.1192/bjp.157.4.475
- Uchida, S., Yamagata, H., Seki, T., & Watanabe, Y. (2018). Epigenetic mechanisms of major depression: Targeting neuronal plasticity. *Psychiatry and Clinical Neurosciences*, 72(4), 212-227. doi: 10.1111/pcn.12621
- UN Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, 1984, art. 1.1
- Van Ommeren, M., de Jong, J. T. V. M., Sharma, B., Komproe, I., Thapa, S. B., & Cardeña, E. (2001). Psychiatric disorders among tortured Bhutanese refugees in Nepal. Archives of General Psychiatry, 58(5), 475-482. doi: 10.1001/archpsyc.58.5.475
- Vidaki, A., & Kayser, M. (2018). Recent progress, methods and perspectives in forensic epigenetics. Forensic Science International. Genetics, 37, 180-195. doi: 10.1016/j.fsigen.2018.08.008
- Vijayendran, M., Beach, S. R. H., Plume, J. M., Brody, G. H., & Philibert, R. A. (2012). Effects of genotype and child abuse on DNA methylation and gene expression at the serotonin transporter. Frontiers in Psychiatry, 3, 55. doi: 10.3389/fpsyt.2012.00055
- Vinkers, C. H., Kalafateli, A. L., Rutten, B. P. F., Kas,

- M. J., Kaminsky, Z., Turner, J. D., & Boks, M. P. M. (2015). Traumatic stress and human DNA methylation: A critical review. *Epigenomics*, 7(4), 593-608. doi: 10.2217/epi.15.11
- Wankerl, M., Miller, R., Kirschbaum, C., Hennig, J., Stalder, T., & Alexander, N. (2014). Effects of genetic and early environmental risk factors for depression on serotonin transporter expression and methylation profiles. *Translational Psychiatry*, 4(6), e402. doi: 10.1038/tp.2014.37
- Weaver, I. C. G., Cervoni, N., Champagne, F. A., D'Alessio, A. C., Sharma, S., Seckl, J. R., . . . Meaney, M. J. (2004). Epigenetic programming by maternal behavior. *Nature Neuroscience*, 7(8), 847-854. doi: 10.1038/nn1276
- Weisleder, P., & Rublee, C. (2018). The neuropsychological consequences of armed conflicts and torture. Current Neurology and Neuroscience Reports, 18(3), 9. doi: 10.1007/ s11910-018-0818-6
- Williams, A. C. d. C., & Amris, K. (2017).
  Treatment of persistent pain from torture:
  Review and commentary. Medicine,
  Conflict and Survival, 33(1), 60-81. doi:
  10.1080/13623699.2016.1242050
- Williams, R., & Wienroth, M. (2017). Social and ethical aspects of forensic genetics: A critical review. *Forensic Science Review*, 29(2), 146-169. http://forensicsciencereview.com
- WMA. (2013). World Medical Association Declaration of Helsinki: Ethical Principles for Medical Research Involving Human Subjects. JAMA, 310(20), 2191. doi: 10.1001/jama.2013.281053
- Yehuda, R., Daskalakis, N. P., Lehrner, A., Desarnaud, F., Bader, H. N., Makotkine, I., . . . Meaney, M. J. (2014). Influences of maternal and paternal PTSD on epigenetic regulation of the glucocorticoid receptor gene in Holocaust survivor offspring. American Journal of Psychiatry, 171(8), 872-880. doi: 10.1176/appi. ajp.2014.13121571
- Yehuda, R., Flory, J. D., Bierer, L. M., Henn-Haase, C., Lehrner, A., Desarnaud, F., . . . Meaney, M. J. (2015). Lower methylation of glucocorticoid receptor gene promoter 1<sub>F</sub> in peripheral blood of veterans with posttraumatic stress disorder. *Biological Psychiatry*, 77(4), 356-364. doi: 10.1016/j.biopsych.2014.02.006
- Yehuda, R., Daskalakis, N. P., Bierer, L. M., Bader,
  H. N., Klengel, T., Holsboer, F., & Binder,
  E. B. (2016). Holocaust exposure induced intergenerational effects on *FKBP5* methylation. *Biological Psychiatry*, 80(5), 372-380. doi: 10.1016/j.biopsych.2015.08.005

- Zannas, A. S., Provençal, N., & Binder, E. B. (2015). Epigenetics of posttraumatic stress disorder: Current evidence, challenges, and future directions. *Biological Psychiatry*, 78(5), 327-335. doi: 10.1016/j.biopsych.2015.04.003
- Zhang, L., Benedek, D. M., Fullerton, C. S., Forsten,
  R. D., Naifeh, J. A., Li, X. X., . . . Ursano,
  R. J. (2014). PTSD risk is associated with
  BDNF Val66Met and BDNF overexpression.
  Molecular Psychiatry, 19(1), 8-10. doi: 10.1038/mp.2012.180

### Painful memories: Challenges in traumafocused therapy for torture survivors with PTSD and chronic pain – a narrative review

Iselin Dibaj, Cand.psychol.<sup>1</sup>, Joar Øveraas Halvorsen, Cand.psychol., PhD<sup>2</sup>, Leif Edward Ottesen Kennair, Cand.psychol., PhD<sup>3</sup>, Håkon Inge Stenmark, Cand.psychol. PhD<sup>4</sup>

#### Key points of interest

- PTSD and chronic pain share mutually maintaining factors and are common in survivors of torture.
- Pain-related avoidance, kinesiophobia and pain catastrophization might mediate the relationship between PTSD and chronic pain but are not directly targeted in trauma-focused therapy. These mutually maintaining factors might function as moderating variables in trauma-focused treatment, in addition to contextual factors.

#### Abstract

Introduction: PTSD and chronic pain are disorders that researchers increasingly acknowledge to be risk factors that overlap and their comorbidity is associated with poorer treatment outcomes. This review focuses on torture survivors due to the high prevalence of comorbidity in this group, as well as how PTSD and chronic pain might develop, interact and mutually maintain each other.

Results and discussion: An overview of PTSD and chronic pain studies of torture survivors is presented. Treatment studies for torture survivors with PTSD are scarce and have been discouraging. Studies in other patient populations and theoretical models of maintaining factors within the cognitive-behavioral paradigm are presented, and focused around how interactions between PTSD and chronic pain might mitigate treatment of both disorders. Mutually maintaining factors between chronic pain and PTSD are presented as potential barriers to healing, and clinical implications involve suggestions for clinicians with intention to overcome these barriers in trauma-focused treatment of torture survivors.

The knowledge base on how chronic pain and PTSD interact within the context of torture is still very limited. Torture is a potent risk factor in itself for both chronic pain and

Methods: A narrative review of empirical studies and theoretical models regarding chronic pain and PTSD in torture survivors, informed by studies conducted in other contexts

Oslo University Hospital, Norway Correspondence to: iselin.dibaj@gmail.com

Regional unit for trauma treatment, Nidaros DPS, St. Olavs University Hospital

<sup>3)</sup> Department of Psychology, Norwegian University of Science and Technology (NTNU)

Center on violence, traumatic stress and suicide prevention in Mid-Norway, St. Olavs Hospital, Trondheim University Hospital

PTSD. Studies point to complex interactions between pain and PTSD across different trauma-exposed populations, especially when the trauma includes pain. Moreover, the coping strategies that are available and might function as some form of protection during torture [e.g. dissociation, withdrawal], might conversely function to exacerbate symptoms when the survivor is in a safe rehabilitation context.

Observations combined with CPPC literature and recent developments in learning theory challenge clinical practice accordingly. Additionally, the limited knowledge base prevents us from providing clear-cut suggestions, particularly as the majority of scientific enquiry regarding chronic pain and PTSD has been conducted in other populations outside of the torture survivors group. Furthermore, cultural factors, specific needs and characteristics in this group, the human rights perspective and the socio-political context all need to be acknowledged.

Trauma-focused treatment does not appear to specifically target all the mechanisms that are supposedly interacting in maintaining chronic pain and PTSD. Interdisciplinary rehabilitation and close collaboration between physiotherapists and trauma-focused therapists are warranted.

*Keywords:* Torture survivors, chronic pain, PTSD, comorbidity, exposure therapy.

#### Introduction

Researchers have increasingly acknowledged the common co-occurrence of PTSD and chronic pain (Asmundson, 2014). Separately, both disorders can be a risk factor for the other (Liedl & Knaevelsrud, 2008), and the comorbidity [CPPC: Chronic Pain and PTSD Comorbidity] has been associated with poorer treatment outcome for PTSD (Carinci et al., 2010), with indications that successful PTSD

treatment can reduce pain, however not vice versa (Asmundson, 2014). CPPC is often considered to be difficult to treat, and an integrated treatment of chronic pain and PTSD has been suggested (Asmundson, 2014; Dibaj et al., 2017; Liedl & Knaevelsrud, 2008).

In a systematic review on trauma-focused treatment, although large effects on PTSD symptoms were found (Cusack et al., 2016), many patients do not benefit from these treatments, which are also associated with substantial drop-out rates (Imel et al., 2013). Treatment-seeking torture survivors is a group in which CPPC is particularly pertinent (Liedl & Knaevelsrud, 2008), and where PTSD treatment studies have been discouraging (Pérez-Sales, 2017). Depending on how one defines effect, systematic reviews have reached conclusions spanning from evaluating the present knowledge base as being too limited to draw conclusions (Patel et al., 2014), to concluding that specific treatments, such as NET and TF-CBT, produce moderate treatments effects (Weiss et al., 2016). No treatment works for all, and it is an important objective in clinical research to explore what works for whom. Recently, theoretical models that explore CPPC have emerged within the cognitive-behavioral framework. Within this framework, CPPC plays a key antagonistic role in trauma-focused treatment but these developments need further investigation.

A large portion of the literature focuses on contextual factors in refugee mental health, and how these can function to maintain psychological distress or as barriers to treatment at different levels (Patel et al., 2016). Nevertheless, a clinical perspective on how the interplay between PTSD and chronic pain might affect patients' potential for successful outcome in trauma-focused treatment is lacking. Several reviews have explored CPPC in other populations than torture survivors

(Afari et al., 2014; Brennstuhl et al., 2014; Kind & Otis, 2019). A recent systematic review on CPPC in refugees included a broader scope on patient characteristics and treatment effects (Rometsch et al., 2019). In this paper we aim to explore challenges and possibilities specifically for trauma-focused treatment for torture survivors with CPPC. First, we will review the relationship between torture and PTSD and chronic pain, separately. Following on, the review will focus on chronic pain and PTSD comorbidity in torture survivors, as well as in other populations. Chronic pain and PTSD comorbidity will be contextualized in a learning perspective, before reviewing theoretical models on chronic pain and PTSD comorbidity. Finally, a discussion on the results, as well as clinical suggestions regarding how these might translate into clinical practice.

### Measures

In this review, the aim is to zoom in on specific learning mechanisms in trauma-focused therapy through a critical yet pragmatic lens, where inherently the studies use PTSD and pain symptoms as outcome measures.

### Methods

In order to conduct a narrative review, PsychInfo and Researchgate were searched, using the terms "chronic pain" and "PTSD", in combination with "torture survivor", "torture victim" or "refugee", published between 2005-2019. The two first terms were also searched without the latter. Abstracts were then read and evaluated for their relevance and whether they focused on the relationship between pain and PTSD. The aim of the paper was to explore this relationship in torture survivors. However, owing to the scarcity of CPPC-focused studies in this population, the review expanded to encompass literature in other populations to help

inform the discussion. Specifically, papers that centered around mechanisms of interaction between the two conditions and defined PTSD and pain as primary outcomes were evaluated as eligible. Both theoretical models, empirical studies and clinical trials were included. Studies that focused exclusively on either PTSD or chronic pain were excluded.

### Results and discussion

# Torture and PTSD

Most torture survivors in clinical studies are refugees, a population where PTSD prevalence is higher compared to the general population (Teodorescu et al., 2015). Not surprisingly, in samples consisting only of torture survivors, the rate of PTSD is even higher: Torture experience meets all criteria associated with increased risk for PTSD: It is human-made (Frazier et. al., 2009), induces an extreme sense of uncontrollability, is prolonged in time and pain-inducing.

### Torture and Chronic Pain

The rate of chronic pain in torture survivors range from 62-92 %, the majority related to the musculoskeletal system (Carinci et al., 2010). Specific torture methods may lead to specific pain sequels that then lead to specific problems. One study found four different neuropathic pain syndromes, related to corresponding torture methods (Thomsen et al., 2000). However, the division of torture and pain into categories in this way may be considered primarily academic, as most survivors are subjected to varying torture methods, within varying time frames, frequency, at different times in the life span, and chronic pain is complex and multi-faceted. Actually, psychological torture is found to be as strongly related to pain as physical torture (Başoğlu et al., 2007). Post torture pain can be understood through nociceptive, neuropathic, nociplastic and psychological factors (Amris et al., 2019). Torture may lead to pain by all or some of these mechanisms, and this again is probably influenced by individual differences, as well as cultural and contextual factors. Although physiological pain sensations have some universal characteristics, perception and regulation of pain [and emotions] are related to culture and context, in the present as well as in the survivor's developmental learning history (Kirmayer et al., 2018). Torture may lead to local changes in pain modulation on specific body parts where the survivor has experienced torture (Prip et al., 2012; Thomsen et al., 2000). Moreover, central pain modulation can be enhanced, also in body parts not affected by torture, and that this appeared to be moderated by PTSD (Defrin et al., 2017). In the same vein, Siqveland et al. (2017) found that PTSD moderated the relationship between intentional trauma exposure and chronic pain. Flashbacks can have strong sensory qualities; thus pain can actually form part of the flashbacks. In sum, as torture is designed to inflict suffering without visual traces, chronic pain is often unrelated to actual observable injury.

Consequentially, chronic pain after torture has to be discussed on several different levels. The expression of pain and emotional distress differs between cultures. Kirmayer et al. (2018) propose an eco-social framework that highlights broader systems such as attachment, security, identity, justice and existential meaning. This perspective encompasses contextual factors, and acknowledges that the appraisal of, and response to, pain is culturally rooted. Also, how pain is communicated and understood in a clinical setting is influenced by the extent of cultural sensitivity in the particular clinical context (Kale et al., 2011). Health literacy and cultural idioms of distress are other

important factors in this regard, as it affects how a person express and understands his/ hers own pain. Refugee torture survivors face several barriers when it comes to access specialized health care, education, work opportunities and social support, which might maintain their pain, and impede healing. In a human right's rehabilitation context, the exile-related challenges form an integral part of the maintaining of pain. Moreover, whether or not the clinician is aware of the patient's torture history can affect the interpretation of the pain symptoms and the consequential choice of interventions or referral. Without knowledge of the torture experience, clinicians risk to misinterpret the pain. Many survivors do not disclose the torture experience unless asked (Amris et al., 2019). Also, outside specialized rehabilitation centers, clinicians might not have the necessary competence or interdisciplinary context to provide the necessary care. Another aspect associated as a stressor with living in exile, includes the waiting for legal recognition of the asylum claim, or issuance of a residence permit. This implies broadening the context to also include the socio-political situation in the patient's home and host country, and whether or not the perpetrators have faced a fair trial.

Another complicating factor is comorbid traumatic brain injury (TBI), as beating of the head is a common torture method (Haarbauer-Krupa et al., 2017; McColl et al., 2010). Buhman (2014) found a TBI rate of 46 % in a sample of treatment-seeking traumatized refugees, which is associated with chronic pain, also when adjusting for PTSD (Mollayeva, Cassidy, Shapiro, Mollayeva, & Colantonio, 2017). In fact, Leung et. al. (2016) found that TBI was related to altered pain perception and modulation. HowTBI might affect CPPC and its treatment warrants a review in its own right, however, this is beyond the scope of this paper.

	Results/implications	PTSD trajectory influence modulation and perception of pain.	Clinical descriptions of PTSD-chronic pain interactions. Heterogeneity in outcomes.	Pain catastrophizing mediated parts of the relationship between PTSD and chronic pain.	Rate of chronic pain was high, and asso- ciated with increased distress and PTSD, especially in women.	Treatment showed small effects on PTSD and physical functioning, as well as inconsistent effects on pain.
ools	Administration	Self-report and mechanical stimulation	Self-report and clinician rated	Self-report prior to treatment (64 % through interpreter)	Self-report and clinician rated	Self-report and physical exami- nation
Outcome tools	Chronic pain	MPQ	BPI NRS-11	BPI CSQ	SIDES IV	SF-MPQ Wong-Baker FACES Pain Rating Scale
	PTSD	PTSD Inventory DES-II	CAPS PDS	HTQ 1-4 PTCI	LEC SCID- PTSD SIDES IES	НТО
	Design/aim	Longitudinal (PTSD trajectories) and experiment, exploring the relationship between torture, pain modulation and PTSD	Case series, evaluation of combined 20 sessions NET and 10 sessions physiotherapy	Cross-sectional, exploring the mutual maintenance model	Cross-sectional, comparison of PTSD patients with/without chronic pain	Pilot Randomized Controlled Trial with wait-list control. Inte- grated 10 sessions of CBT with biofeedback combined with group physiotherapy
Population/	sample	Israeli torture survivors (control group: Non-tor- tured veterans)	Refugee torture survivors in Norway	Refugees referred to specialized torture rehabilitation center in Denmark	Refugees in outpatient psychiatric care in Norway	Kosovar torture survivors in a spe- cialized torture rehabilitation center in Kosovo
	N	103 (males only)	6 (5 male)	197 (119 male)	61 (36 male)	28 (13 female)
	Study	Defrin, Lahav & Solomon, 2017	Dibaj et al., 2017	Nordin & Perrin, 2019	Tedorescu et al., 2015	Wang et al., 2017

Table 1.

Cognitions Inventory, CSQ = Coping Strategies Questionnaire, LEC = Life Event Checklist, SCID-PTSD = Structured Clinical Interview for the DSM-IV - PTSD, SIDES Scale, PDS = Posttraumatic Diagnostic Scale, BPI = Brief Pain Inventory, NRS = Numeric Rating Scale, HTQ = Harvard Trauma Questionnaire, PTCI = Posttraumatic Abbreviations: DES = Dissociative Experience Scale, MPQ = McGill Pain Questionnaire, NET = Narrative Exposure Therapy, CAPS = Clinician-Administered PTSD = Structured Interview for Disorders of Extreme Stress, IES = Impact of Events Scale, SF-MPQ = Short Form McGill Pain Questionnaire..

# CPPC in Survivors of Torture

The empirical studies reviewed are summarized in Table 1. Both PTSD and chronic pain is highly prevalent in torture survivors (Carinci et al., 2010), and the comorbidity is associated with poorer prognosis (Jenewein et al., 2009; Sullivan & Adams, 2010; Shipherd et al., 2007). Identified risk factors for chronic distress in torture survivors include previous trauma, unemployment, lower educational status and reduced social contact (Carlsson, Mortensen & Kastrup, 2006). There seems to be consensus regarding the need for multidisciplinary rehabilitation for torture survivors (Carinci et al., 2010), where chronic pain treatment is integrated with psychological social interventions (such as Keller, 2002). Carinci et al. (2010) compare studies of chronic pain in torture survivors with and without addressing emotional problems and found favorable outcomes when the latter is incorporated.

In an experimental study with a longitudinal design, three different PTSD trajectories in torture survivors were identified; Chronic, delayed and resilient (Defrin et al., 2017). To explore differences in pain modulation, they compared the different groups to each other and to healthy age-matched controls. There were no between-group differences in pain threshold, but rather in pain perception: Thus, pain stimuli were modulated more dysfunctionally in the chronic and delayed groups, compared to the resilient and healthy groups. Furthermore, the duration of PTSD mediated the relationship, independent of duration of the trauma exposure itself. Thus, the same survivors that suffered from PTSD, also had chronic pain and dysfunctional pain modulation, however some survivors exhibited neither of these deficits.

Most clinical trials and reviews regarding torture survivors can be categorized as

either trauma-focused or multimodal (Nickerson et al., 2011). As far as we know, Multimodal treatment studies does not address the CPPC specifically, but treat them as part of an integrated biopsychosocial approach. A recent study at such a specialized multidisciplinary treatment center in Copenhagen found that pain catastrophizing mediated the relationship between pain and PTSD in torture survivors (Nordin & Perrin, 2019). Trauma-focused approaches does not necessarily target chronic pain and have been criticized to focus excessively on PTSD symptoms as an outcome measure (Patel et al., 2016). NET and TF-CBT have showed promising effects on PTSD symptoms, however whether this is generalized onto chronic pain is to our knowledge not investigated. A Cochrane review of chronic pain treatment for torture survivors found no effective treatments (Baird et al., 2017). For our purposes here, the knowledge base is even more limited, as there is a lack of studies that examine integrated or combined treatment of CPPC within the trauma-focused tradition. To our knowledge, the only studies of this kind are one RCT on CBT combined with group physiotherapy and biofeedback (Wang et al., 2016) and a case series in which NET was provided with parallel physiotherapy (Dibaj et al., 2017). In both studies, large heterogeneity in outcomes were observed, and PTSD was successfully treated in a third of the patients.

In sum, torture is a potent risk factor in itself for both chronic pain and PTSD. Also, survivors often have multiple trauma experiences (Amris et. al., 2019). Pain is related to torture on several levels, not only as part of PTSD flashbacks, nor as a purely physiological phenomenon. There are probably different pain mechanisms involved (Chimenti et al., 2018). Thus, thorough differential diagnostics and consideration of interdisciplinary treat-

ment seem crucial. In the following, we will target *regulation* of both pain and other trauma-related symptoms within a learning perspective. However, because of the scarcity of studies on CPPC within the context of torture, we will first consider some studies on CPPC in other contexts.

Empirical Studies on CPPC in Other Contexts The empirical studies reviewed are summarized in Table 2. Numerous studies have investigated CPPC (Roth et al., 2008; Wald et al., 2010). Defrin et al. (2008) found that the association between chronic pain and mental disorders was stronger for PTSD compared to depression and other anxiety-related disorders. In a large general population sample, the prevalence of chronic pain was 21 %, compared to 46 % in those who met diagnostic criteria for PTSD (Sareen et al., 2007). Partly, this link might be explained by the fact that traumatic experiences often involve physical injury. However, since a minority of trauma survivors develop PTSD in the aftermath of trauma (Santiago et al., 2013), there must be more to the story (Stam, 2007). People that have suffered trauma-related bodily injury seem to run an eight-fold higher risk for developing PTSD (Koren, Norman, Cohen, Berman, & Klein, 2005). Furthermore, catastrophizing and kinesiophobia have been found to predict pain-related disability (Guimarra et al., 2017), and PTSD is a more potent risk factor for developing pain than the experience of trauma in itself (Jenewein et al., 2009; Ciccone et al., 2005). Painrelated avoidance, fear-avoidance and pain catastrophizing have been found to mediate the relationship between chronic pain and PTSD (Åkerblom et al., 2018; Andersen et al., 2016). Moreover, Sigveland et al. (2017) found that chronic pain was mediated by PTSD and whether the trauma was intentional. Apparently, intentionality and pain act as catalysts in sensitizing pain and anxiety reactions to trauma, and at the same time, these are categorically inherent in torture. When a torture survivor with CPPC face a traumatrigger, he/she will possibly experience both pain and fear in a flashback, and a natural response could be to attempt to reduce these sensations, e.g. through avoidance or safety-behavior. This might turn into a vicious circle, as avoidance is a key behavior in both chronic pain and PTSD, which again is associated with an increase in the occurrence of flashbacks (Marx & Sloan, 2005).

PTSD has been found to contribute to more severe pain experience and greater pain-related disability (Phifer et al., 2011). Contrary to this notion, in a laboratory setting, patients with PTSD and chronic pain had actually decreased pain perception compared to patients with only chronic pain (Geuze et al., 2007). Possibly, this relates to emotional numbing or dissociation (Strigo et al., 2010). Dissociation during trauma might function to regulate intense negative affect during trauma, and might be the only possible flight for a person suffering torture. In fact, peritraumatic dissociation is found to predict PTSD symptoms in the short term in other populations (Kumpula et. al., 2011), but if this can generalize onto torture survivors remains an empirical question.

In sum, these studies point to complex interactions between pain and PTSD across different trauma-exposed populations, especially when the trauma includes pain. Torture can last for hours, days or even years. At the core of the torture experience lie intense fear and pain, in addition to a limited range of behavioral options as the victim has no control or means to escape. Moreover, the coping strategies that are available and might function as some form of protection during torture [e.g. dissociation,

				Outcome tools	tools		
					Chronic		
Study	Z	Population/sample	Design/aim	PTSD	pain	Admin.	Results/implications
Andersen et al., 2016	198 (77 male)	Cohort of whiplash injury patients	Longitudinal, comparing pain intensity and PTSD symptoms in different trajectories of recovery	HTQ-IV	NRS, PCS, ÖMPSQ	Self report and physical examination	Non-recovered patients had higher rates of pain intensity and PTSD symptoms. This relationship was mediated by fear avoidance and pain catastrophizing.
Ciccione et 104 al., 2005 (all fem	(all female)	Stratified community sample in the U.S., divided in four combinations with/without fibromyalgia and/or MDD	Longitudinal, test of PTSD, MDD and interpersonal trauma as predictors for fibromyalgia	PCL, IASP	SIP, CPGQ, Physical ex- amination	Self-report, clinician rated, telephone interview	PTSD mediated the relationship between trauma and fibromyalgia.
Defrin et al., 2008	32	Israeli with combat- or terror-related PTSD (control groups: Outpatient anxiety patients and healthy university employees)	Experiment, investigating differences in rates of chronic pain, pain threshold and intensity between subjects with PTSD, anxiety and healthy controls	SCID- PTSD, PTSD In- ventory	MPQ	Self-report, clinician rated and mechanical stimulation	PTSD was associated with higher rates of chronic pain, greater pain intensity, more pain locations and increased sensitivity to pain.
Geuze et al., 2007	24 (all male)	Dutch veterans with PTSD (control group: Veterans without PTSD)	Experiment, correlational study of neural correlates (fMR) to pain processing in veterans with/without PTSD	CAPS	Physical examination, fMRI	Clinician rated	PTSD was associated with altered pain processing, and lower sensitivity to heat pain stimuli.
Guimarra et al., 2017	433 (324 male)	Patients with traumatic injury in an orthopedic unit in Australia	Cross-sectional, investigating rate of PTSD, chronic pain and shared feature after traumatic injury	PCL-C, PCS	BPI, PSEQ, AIS, TSK, RMDG	Self-report and clinician rated	Chronic pain increased risk for PTSD, which was mediated by catastrophizing and low self-efficacy.
Jenewein, et al., 2009	323 (209 male)	Injured accident victims in a trauma ward in a Swiss hospital	Longitudinal, investigating relationship between PTSD and chronic pain across time post injury	CAPS, DTS, PDQ	VAS	Self-report and clinician rated	PTSD symptoms was associated with increased rates of pain intensity in the short term. A mutual maintenance relationship between pain and PTSD was found on the short term, but only PTSD influenced pain intensity in the long term.
Koren et al., 2005	100 (males only)	Israeli veterans with and without combat-related bodily injury	Cohort, investigating the effect of bodily injury on rate of PTSD	CAPS, PDQ	AIS	Self-report and clinician rated	Bodily injury is a risk factor for development of PTSD.

All PTSD symptoms was associated with increased rates of chronic pain, and avoidance correlated with use of opioids.	PTSD correlated with severity of depression and functional impairment.  Depressive symptoms had an effect on pain intensity, both directly and indirectly through functional impairment.	PTSD was in greater proportion associated with increased rates of chronic pain, physical innless and low quality of life compared to other psychological disorders.	Intentional trauma was associated with increased risk for PTSD and greater pain severity, and PTSD mediated this relationship however was unrelated to treatment outcome.	Most patients had short-terms effect on PTSD and pain that was not maintained after 3 months.	
Self-report A and clinician v rated	Self-report I	Interviewers I (non-clinical c setting)	Self-report I and clinician i rated r	Self-report I and clinician I rated	
SF-36, Physical examination	MPQ, PDI	ÖÖ	VAS	BPI	MPI, CPAQ, CPVI, PIPS
CAPS, PSS, TEI	PCPT	Question "Do you suffer from PTSD?"	MINI, LEC	CAPS	PDS
Cross-sectional, investigating rate of PTSD, chronic pain and use of pain medication	Cross-sectional, investigating interactions between PTSD, depression, chronic pain and functional impairment through structural equation modelling	Study of unique effects from PTSD onto physical health, pain and quality of life, using data from a community sample	Cross-sectional, comparing intentional and non-intentional trauma exposure's effect on PTSD, pain severity and treatment outcome in chronic pain patients	Case series, 4 sessions IE followed by 8 sessions of TRE	Cross-sectional, comparing chronic pain patients with/without PTSD across different facets of the Psychological Flexibility Model
General hospital medical patients in the U.S.	Chronic pain patients with accident-related pain	Community sample in Canada	Patients in a specialized pain clinic in Norway	Motor Vehicle Accident survivors in Canada	Chronic pain patients in a Swedish pain rehabili- tation center
376 (143 male)	241 (99 male)	36984	63 (23 male)	5 (females only)	315 (91 male)
Phifer et al., 2011	Roth, Geisser & Bates, 2008	Sareen et al., 2007	Siqveland, 63 (23 Ruud & male) Hauff, 2017	Wald et al., 5 2010 (f	Åkerblom et al., 2017

tionnaire, MDD = Major Depressive Disorder, PCL = PTSD Check List, IASP =Interview for Assessing Sexual and Physical Abuse, SIP = Sickness Impact Profile, CPGQ = Chronic nesiophobia, RMDG = Roland-Morris Disability Questionnaire, DTS = Davidson Trauma Scale, PDQ = Peritraumatic Dissociation Questionnaire, VAS = Visual Analog Scale, PSS = PTSD Symptom Scale, TEI = Traumatic Events Inventory, SF = Short Form, PCPT = Post-Traumatic Chronic Pain Test, PDI = Pain Disability Index, CCI = Charlson Comorbidity Abbreviations: HTQ = Harvard Trauma Questionnaire, NRS = Numeric Rating Scale, PCS = Pain Catastrophizing Scale, ÖMPSQ = Örebro Muskuloskeletal Pain Screening Ques-Pain Grade Questionnaire, SCID-PTSD = Structured Clinical Interview for the DSM-IV - PTSD, MPQ = McGill Pain Questionnaire, CAPS = Clinician-Administered PTSD Scale, fMRI = functional Magnetic Resonance Imaging, BPI = Brief Pain Inventory, PSEQ = Pain Self-Efficacy Questionnaire, AIS = Abbreviated Injury Scale, TSK = Tampa Scale of Ki-Index, MINI = Mini International Neuropsychiatric Interview, LEC = Life Events Checklist, IE = Interoceptive Exposure, TRE = Trauma-Related Exposure Therapy, PDS = Posttraumatic Diagnostic Scale, MPI = Multidimensional Pain Inventory, CPAQ = Chronic Pain Acceptance Questionnaire, CPVI = Chronic Pain Values Inventory, PIPS = Psychological Inflexibility in Pain Scale. withdrawal], might conversely function to exacerbate symptoms when the survivor is in a safe rehabilitation context.

# CPPC in a Learning Perspective

From an evolutionary perspective, both pain and anxiety function as an alarm system, signaling potential harm to the organism. Avoidant behavior is considered a natural response that optimally would decrease over time. However, in CPPC, the avoidance strategy has become excessive, as it has generalized out of proportion. When an organism responds to anxiety with a behavior that provides shortterm reduction of distress (e.g. avoidance, safety strategies) over time, the long-term consequence is sensitization, generalization and automatization of the alarm response (Pittig et al., 2018). Levy-Gigi et al. (2012) found that PTSD patients tend to overgeneralize fear responses. Similarly, these very same mechanisms have been implicated in the transition from acute into chronic pain (Hollander et. al., 2010). Thus, CPPC may be understood in terms of associative learning and conditioned fear responses to pain, as both disorders are associated with cyclical learning, sensitization and overgeneralizations of fear (López-Martínez, 2015). Sueki et al.(2014) relate this to cortical and subcortical changes in levels of processing, in individuals suffering from chronic pain as well as PTSD. Accordingly, Brewin, Gregory, Lipton and Burgess (2010) argue that PTSD may be understood as a learning disorder rather than a stress- and anxiety disorder. In this framework, chronic pain may be understood as an integral part of PTSD.

Recent developments in learning theory have moved from a habituation and extinction paradigm onto that of inhibitory learning (Craske et al., 2014). In other words, the goal in treatment of chronic pain or anxiety disorders (including PTSD) has moved from direct reduction of symptoms [habituation] to learning new responses to distress [inhibitory learning] (Brown et al., 2017). Interestingly, only thinking about movement produced pain in chronic pain patients, and this was modulated by catastrophizing, which also seemed to increase the tendency to respond to stress with dissociation (Moseley et al., 2008). Thus, catastrophizing [a response to distress] might amplify pain signals which leads to neural sensitization (López-Martínez, 2015). Taken together, these findings highlight some of the learning mechanisms that might play a role in maintenance of CPPC, through the patients' regulatory strategies when confronted with trauma-related symptoms.

## Cognitive behavioral models of CPPC

To our knowledge, The Mutual Maintenance Model (MMM) (Sharp & Harvey, 2001) was the first to examine the relationship between chronic pain and PTSD, closely followed by the Shared Vulnerability Model (Asmundson et al., 2002). In a review, Brennstuhl, Tarquinio and Montel (2015) summarized support for both theories: The onset of PTSD seem to predict the occurrence of chronic pain, while the strength of pain at the time of the trauma predicts the development of PTSD. In addition, they found that PTSD is more interrelated to pain compared to depression and other anxiety-related disorders. Both pain and PTSD seem to function both as triggers for the other disorder, as well as a maintaining factor. Accordingly, Brennstuhl et al. (2015) postulate that PTSD and chronic pain can be understood as part of the same reactive disorder, where CPPC is one potential reaction to trauma.

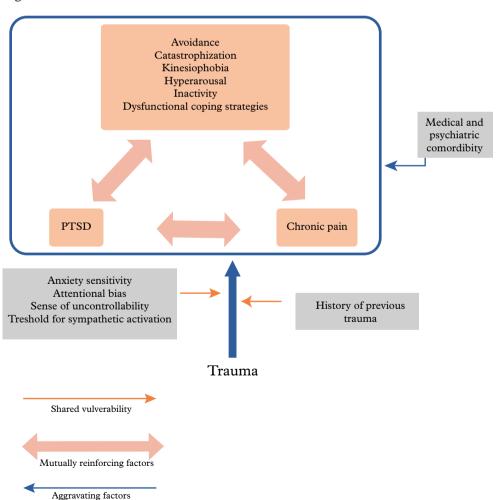
The Perpetual Avoidance Model (PAM) (Liedl & Knaevelsrud, 2008) is a fusion of the Ehlers and Clark's (2000) cognitive model of

PTSD and the Fear Avoidance Model for chronic pain (Crombez et al., 2012). The PAM is of particular relevance as it is presented and discussed within the context of refugee torture survivors. In a Western health care context, they argue that a combination of trauma-focused therapy, psychoeducation about mutual maintenance, physical activity, relaxation techniques and biofeedback might be particularly useful for refugee patients such as torture

survivors from non-Western cultures. Finally, Bosco et al. (2013) have developed a comprehensive model that integrated the three abovementioned models.

See figure 1 for an overview of mutual maintaining and shared vulnerability factors, and table 3 for a summary of CPPC models and their distinguished features.

Figure 1



## General discussion

The literature points to certain common themes that can be valuable for clinicians working with this particular patient group. PTSD can be understood as a learning disorder (Brewin et al., 2010), where pain is part of an overgeneralized fear network, either as a trigger or as part of the anxiety response. However, leading researchers in the field warn against treating pain solely as part of PTSD (Baird et al., 2017). Regardless of whether one understands the chronic pain as comorbid to, or as an integral part of, PTSD, it seems to be more challenging to treat patients for either disorder if the other is present.

The abovementioned models converge on several aspects. First, they all acknowledge avoidance and catastrophizing as key maintaining factors that should be targeted in treatment. Second, they highlight how these processes function similarly in both PTSD and chronic pain, in addition to aggravate each other. Pain and anxiety are both generalized, sensitized and made more automatic through repeated avoidance and catastrophizing. In these models, the (dys)regulation of pain and anxiety are in focus, as this is assumed to be maintaining symptoms and impeding natural recovery. This is consistent with the inhibitory learning hypothesis, where how an organism responds to anxiety, shapes the reaction over the long term. Finally, instead of focusing on habituating to pain or flashbacks, the focus in these models is placed on replacing strategies that impede recovery, to pave the way to new learning. In this framework, removing the maintaining factors of CPPC is believed to break a vicious circle where symptoms are self-sustained. Thus, inhibitory learning, or emotion regulation, is the assumed mediator between trauma-focused therapy and reduced PTSD symptoms, which in turn is believed to increase functioning and quality of life. See figure 2 for an overview over mediating and moderating variables in this context.

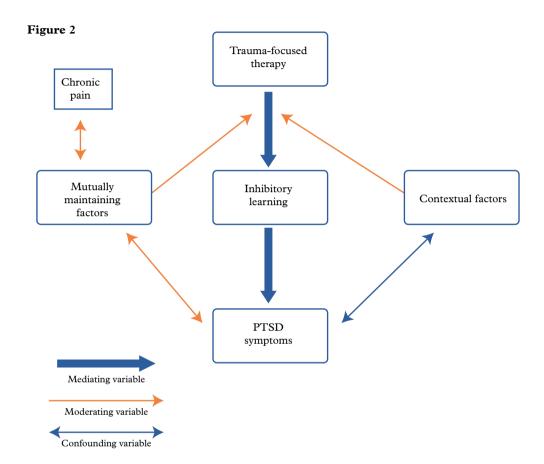
When treatment effects are poorer than expected, we tend to search for moderating variables that might explain it. Often, this lack of effect is attributed to population characteristics, cultural factors or problems with the PTSD diagnosis. While acknowledging these factors, there is also the possibility that the comorbid pain might be partly to blame. In fact, several of the mutually maintaining factors are not targeted directly in trauma-focused treatment protocols. An important notion in this regard is that PTSD treatment or cognitive-behavioral models does not include an understanding of underlying pain mechanisms. In other words, even though psychological therapies might tap into some of the shared mechanisms in chronic pain (e.g., fear-avoidance), they are not specific. Exposure for movement is not usually performed, despite the presence of kinesiophobia. Conversely, physical therapy might focus on kinesiophobia, however fall short in regard to trauma processing. In this way, when focusing on either pain or PTSD, the other comorbid disorder might function as a therapy impeding moderating factor. Thus, close collaboration between the physiotherapist and trauma-therapist might be advantageous, where physiotherapeutic evaluation could inform psychologists of relevant pain mechanisms (Chimenti et al., 2018). Moreover, to conduct exposure therapy within an array of different contexts appear to be essential for successful outcome (Craske et al., 2014). Accordingly, to integrate exposure for movement and memory content might prove fruitful.

Trauma processing are included in some, but not all, models. One perspective to understand CPPC in the context of trauma processing is that it impedes the trauma-focused therapy in one or several ways. For instance,

Table 3. Cognitive Beh	avioral Models of CPPC
Model	Distinguishing features
Mutual Maintenance Model (Sharp & Harvey, 2001)	Shared cognitive and behavioral aspects of PTSD and chronic pain function as maintaining factors for both disorders. The result is a mutually maintaining relationship between PTSD and chronic pain.
Shared Vulnerability Model (Asmundson et al., 2002)	Emphasis on a collection of personality traits as vulnerability factors for both PTSD and chronic pain. Persons high on these traits will thus be more likely to react to trauma with a heightened anxiety response and avoidant coping behavior, which increase likelihood for developing CPPC, as postulated by the <i>Mutual Maintenance Model</i> .
Perpetual Avoidance Model (Liedl & Knaev- elsrud, 2008)	Pain sensation and intrusions are appraised as acute threats, leading to dysfunctional emotion and pain regulation. Cognitive and behavioral control strategies become inflexible and context insensitive when applied over the long term, that is when threat is no longer present. As in the other models, avoidance plays a key role, as it functions to maintain both PTSD and pain. Here, it is also motivated by pain-related fear, catastrophizing and kinesiophobia.
Comprehensive Fear-Avoidance Cycle of Chronic Pain and PTSD (Bosco et al., 2013)	An integration of the Mutual Maintenance Model, Shared Vulnerability Model and Fear Avoidance Model (Vlaeyen & Linton, 2000). Chronic avoidance is emphasized as it impedes the survivors' engagement in therapeutic activity, which leads to increased catastrophizing and strengthened belief in their own inability to cope with pain/intrusion. This relationship is depicted as a self-perpetuating cycle, where chronic avoidance function as the main maintaining factor, motivated by trauma- and pain-related fear.

that the patient is afraid of feeling pain triggered when engaging in trauma processing, and avoids or drops out of treatment, or that the patient is (dys)regulating pain throughout processing. Confronting the trauma is not about enduring pain and suffering, but rather to learn new, dignified ways to relate to one's own story. Successful trauma processing is assumed to involve the patient experiencing that he/she can be in contact with the trauma memory, and still feel safe and coping.

If the experience instead is characterized by increased pain and an inability to cope with it, the new learning could perhaps become aversive rather than empowering. Another pitfall, given that the patient manage trauma processing in spite of the pain, could be that the patient is still avoiding activities that might trigger pain, and thus still maintains an avoidant coping style, which works against the exposure therapy and strengthens the mutual maintaining factors instead of breaking their



patterns. In this vein, the therapist and patient would need to work together to break this pattern throughout, in parallel or before engaging in trauma processing. Timing of trauma processing is an important clinical evaluation, that might be informed by early identification and reduction of potential barriers to exposure, preferably in an interdisciplinary context.

Another perspective on treatment of CPPC does not necessarily involve trauma processing. In the transition from habituation to inhibitory learning, the treatment focus changes from reducing fear/pain response through repeated exposure to changing the

way the patient regulates fear/pain. This entails a move away from a focus on PTSD and pain symptoms, over to how the survivor responds to and aims to regulate these aversive experiences. These [automatic] regulatory strategies are then seen as the motor in a self-sustaining system, at work to maintain and exacerbate symptoms. To break this pattern through learning new ways to regulate affect and pain appear to be the key, consistent with practices in so-called 3<sup>rd</sup> wave cognitive behavioral therapies (CBT). In this framework, processing of the trauma could be one, of several, ways

to break the pattern as this would entail less avoidance.

## Outcome Measures

The few empirical studies in this review highlight the diverging practice and use of outcome measures, where only a minority of studies used the gold standard. Arguably, few of the tools directly tap into the maintaining variables described in the abovementioned models. A few exceptions are the CSQ and TSK that measure pain catastrophizing and kinesiophobia, respectively. Otherwise, the pain outcome measures mostly focus on physiological or descriptive aspects of the pain that are not necessarily directly relevant for trauma processing. That is to say, it provides descriptive rather than functional characteristics of the pain in terms of cognitive-behavioral models. Although behavioral avoidance is covered in PTSD scales, fear-avoidance or pain-related fear is not accounted for. Clinically, it could be useful to implement outcome tools that measured these variables in addition to PTSD scales during trauma-focused therapy. Moreover, these could be used across disciplines in the treatment team. Then, both the patient and therapists would receive feedback on their treatment's progression, that perhaps might facilitate timing of interventions accordingly. Ideally, a monitoring feedback system like this ought to be integrated in an interdisciplinary rehabilitation team (Horn & Keefe, 2016).

# Clinical Reflections

Rehabilitation for torture survivors requires an interdisciplinary specialized treatment team, that work with long term medical, psychological, physical and social care that facilitates the empowerment, well-being and functioning of the survivor through collaboration with the survivor and across professions

(IRCT, 2018). Specialized, interdisciplinary torture rehabilitation centers are increasingly monitoring patients' treatment progression as well as focus on the relationship between pain and PTSD. However, this level of expertise is not available for all torture survivors, as many are met by clinicians in non-specialized health services (IRCT, 2017), including trauma-focused treatment outside an interdisciplinary context (Norwegian Red Cross, 2020). In an explorative study (Dibaj et al., 2017), it was observed that pain-related problems could impede such trauma-focused treatment in several ways, arguably serving as negative moderators directly or by reducing compliance. For instance, sitting in a chair was difficult because of physical disabilities caused by torture or recollection of trauma could trigger intense painful flashbacks. In sum, these observations combined with CPPC literature and recent developments in learning theory challenge us to adjust our clinical practice accordingly. Naturally, the limited knowledge base prevents us from providing clear-cut suggestions - however, we attempt to extract some general principles of relevance to trauma-focused therapy.

# Avoidance and kinesiophobia:

Challenges: (1) Imaginary exposure is common in trauma-focused therapies, and though it targets mental avoidance of the memory, it may not encompass avoidance of movement, pain or external triggers. (2) Kinesiophobia might make patients reluctant to fully engage in exposure or physiotherapy, and thus potentially reduce treatment effect (Dibaj et al., 2017). (3) Torture survivors often present pain in several body parts, thus physical movement will trigger both the pain and PTSD system.

Suggested interventions: (1) Psychoeduaction on mutual maintenance, and the paradoxical function of avoidance. (2) Include interoceptive exposure. If the patient is familiar with imaginal exposure, the therapist can help him/her generalize the principles onto interoceptive (Wald, 2008) and/or in vivo exposure (Craske et al., 2014). (3) Close collaboration with a physiotherapist and encourage patients to apply exposure principles while engaging in physiotherapy. The physiotherapist should know idiosyncratically how the trauma memory triggers avoidance and pain. In collaboration, shared mechanisms of pain and PTSD can be identified and form the basis for an idiosyncratic case formulation, where interoceptive and imaginary exposure is integrated with the physical therapy. The aim will be to loosen the connection between pain and trauma memory. Through psychoeducation and processing of the traumatic event we may help the survivor become aware that pain sensation in movement does not mean that he/ she is in the torture situation again. The physiotherapist could also strive to reframe physical movements as positive activity to fight connections between movement, pain and re-experiencing of torture.

# Catastrophization and coping strategies:

Challenges: (1) Expectations about one's ability to cope with pain/trauma memory seems to be maintained by chronic avoidance, and further exacerbate the pain-fear cycle as it hinders the patient to select constructive coping strategies that could have facilitated a natural recovery process (Bosco et al., 2013) (2) Appraisal of distress and coping strategies will often be related to culturally rooted beliefs, that may or may not be congruent with CBT rationale (Beck, 2016).

Suggested interventions: (1) Interventions from CBT or Interdisciplinary Pain Programs can help patients identify and modify dysfunctional beliefs. One example is to identify and replace maladaptive coping strategies. With

behavioral experiments, it is possible to investigate a belief such as "pain during exercise will make me worse". 2) Help the patient find more constructive coping strategies (see also; Linton, 2013 for a discussion on how to apply DBT emotional regulation strategies to both pain and emotional distress). (3) One could use the Cultural Formulation Interview (American Psychiatric Association, 2012) to help patients connect with familiar practices to deal with pain and suffering, such as religion. In this interview, the emphasis is placed on the formulating the patient's problem, beliefs about their health and treatment options, resources, coping strategies as well as challenges within a culturally sensitive context.

Anxiety sensitivity and attentional processes:

Challenges: Heightened awareness and attention towards potential threatening stimuli tend to increase anxiety, which enhances pain perception. This might lead to more intense pain during trauma-processing.

Suggested interventions: (1) Help patients become aware of and flexibly shift their attention, through interventions such as detached mindfulness training. (2) Teach patients relaxation techniques or other adaptive coping strategies to use in their everyday life. (3) By processing the traumatic event the patient will be able to better distinguish between trauma-related anxiety and triggers.

## Reduced activity levels:

Challenges: (1) Inactivity is related to maintenance of depression, chronic pain and PTSD. When patients are depressed, it might be more challenging for them to actually perform the planned exposure because of fatigue, lack of motivation, etc. (2) Occupational deprivation and daily life functioning might mutually maintain inactivity and depression (Morville et al., 2015).

Suggested interventions: (1) Educate patients about behavioral activation and the promotion of engagement in enjoyable activities. (2) Help patients to plan in vivo exposure tasks that also promote increased activity. (3) Plan activities with low levels of pain to counter inactivity and then gradually set up more challenging tasks. (4) Collaborate with an occupational therapist to help patients develop necessary skills to improve functioning in their daily life and re-connect with values and roles.

# To What Extent is the Literature on CPPC Relevant for Torture Survivors?

When traumatic experiences include pain, as torture clearly does, the risk for PTSD and pain-related fear increase, especially if the survivor respond to pain/anxiety cues with avoidance. Probably, many of the same learning mechanisms are involved when torture survivors develop PTSD, as is the case for the other trauma survivors included in the studies in this review. However, there are factors of particular importance when working with torture survivors. To treat torture as a violation of human rights and place the blame on those committing torture, plays an important part in psychological rehabilitation. Redemption and whether the perpetrators have faced a fair trial are other factors of importance for recovery (Smith, Patel & MacMillan, 2010). However, , reports show that a minority of survivors actually obtain their rightful redress (IRCT, 2017). Thus, treatment of posttraumatic symptoms and pain is one of several important steps in rehabilitation after torture, that aim to restore the survivor's dignity.

# Limitations

 Inherent bias in narrative review towards clinical and trauma-focused papers, including a broad discipline base and non-clinical literature.

- Inferences about the clinical applicability of these models is problematic as they have not been empirically studied in the current context.
- Caution must be taken when generalising CPPC findings amongst torture survivors due to the lack of longitudinal, empirical studies on this population. Most of the findings on CPPC regard other types of trauma (motor accidents, childhood abuse) and thereby reflect harm and context specific implications. Torture trauma sequela is distinct from other trauma experiences (de Williams & Baird, 2016) and there are many other compounding variables related to exile and displacement, such as social supports available and previous trauma history. Lastly, the psychometric instruments used in these studies are not validated cross-culturally proving problematic for generalisation (Patel et al., 2016).
- The general and vague conceptualization of chronic pain limits the analysis of determining clinically meaningful factors such as etiology or underlying pain mechanisms. Given pain management options will depend on how chronic pain interacts with PTSD, it is important to distinguish the pain mechanism. Thus, is the lack of treatment response due to the unavailability of effective treatment for a particular pain condition or comorbid PTSD?

## Reflections for Future Research:

The new classification of chronic pain in the ICD-11 (Treede et al., 2015), moves beyond descriptive diagnosis to encompass etiology and pathophysiological mechanisms. In this framework, musculoskeletal pain is differentiated from neuropathic pain, posttraumatic pain, postsurgical visceral pain, headaches, cancer pain and primary pain. For our purposes here, this is useful as it makes it pos-

sible to explore how different pain conditions might be affected by the patient's attempts at its regulation, as well as their interaction with PTSD. If we expand our knowledge about pathophysiological mechanisms, this might enable us to better refine treatment interventions for torture survivors with CPPC.

Moreover, development and validation of relevant outcome tools for torture survivors is in order (Horn & Keefe, 2016; Patel & Williams, 2014). The scarcity of cross-culturally validated psychometric tools is of importance for several reasons. Naturally, because it has implications for the validity of the assessment of torture survivors in a clinical setting and could improve the quality of clinical research data. Also, reliable data collection of torture survivors needs paves the way for system providers to organize their health services accordingly. In addition, documentation of torture and its consequences has implications beyond health care, as it is related to international human rights' work against torture as well as possibilities for the redress and persecution process which is inherent in torture rehabilitation.

Another suggestion is to investigate the theoretical models on CPPC within the context of torture. Will torture-related pain comorbid to PTSD respond to reduced fear-avoidance in the same way as e.g., chronic musculoskeletal back pain? Are the same mutual maintaining mechanisms at play when the pain is posttraumatic compared to e.g. neuropathic or primary?

One potential pathway could be to include variables such as pain catastrophizing or fear-avoidance as outcome variables in studies of CPPC. Thus, to conduct clinical trials incorporating elements from the theoretical models on CPPC. Primarily, pilot studies would be required, and if indicated, one could eventually design larger, systematic studies. Within this framework, one could investigate whether treatment effect could be

explained by factors as predicted by the theoretical models: Would more patients with CPPC respond to trauma-focused treatment if they work with mutually maintaining factors within an inhibitory learning perspective? Can this facilitate treatment by means of an increase in compliance or decrease in drop-out rates? Is treatment effect related to reduction in avoidance, catastrophization or other maintaining factors? Are there differences in effect of trauma-focused treatment with and without interventions targeting mutual maintenance? Hopefully, this could help reduce barriers to benefit from trauma-focused treatment.

# **Summary and conclusions**

In this review we have found torture to be a potent risk factor for both PTSD and chronic pain, and often both. Despite a recent upsurge in knowledge on how the two conditions interact, clinically relevant knowledge is still sparse. Whereas contextual and psychosocial factors as barriers to healing are thoroughly represented in the literature on torture rehabilitation, mutually maintaining factors are less studied as barriers for this group. In this narrative review, we have presented a clinical perspective and discussed different strategies for encompassing CPPC factors in trauma focused therapy for torture survivors that suffer from these conditions. Our hope is that this perspective will inspire clinical practice and reduce barriers to effective treatment for torture survivors.

# References

Afari, N., Ahumada, S. M., Wright, L. J., Mostoufi, S., Golnari, G., Reis, V., & Cuneo, J. G. (2014). Psychological trauma and functional somatic syndromes: A systematic review and metaanalysis. *Psychosomatic Medicine*, 76(1), 2-11. doi: 10.1097/PSY.000000000000010

Åkerblom, S., Perrin, S., Fischer, M. R., McCracken, L. M. (2018) The relationship between posttraumatic stress disorder and chronic pain in people seeking treatment for chronic pain. The

- mediating role of psychological flexibility. *Clinical Journal of Pain*, 34(6), 487-496. https://doi.org/10.1097/AJP.000000000000561
- American Psychiatric Association (2012). DSM-5: Cultural Formulation Interview. http:// www.dsm5.org/proposedrevision/Documents/ DSM5%20Draft%20CFI.pdf\_
- Amnesty International (2013). Amnesty
  International report 2013: The state of the world's
  human rights. http://files.amnesty.org/air13/
  AmnestyInternational\_AnnualReport2013\_
  complete\_en.pdf\_
- Amris, K., Lester, J. E. & de Williams, A. C. C. (2019). Pain from torture: Assessment and management. *PAIN Reports*, 4(6). https:// doi/10.1097/PR9.0000000000000794
- Andersen, T. E., Karstoft, K-I., Brink, O., & Elklit, A. (2016). Pain-catastrophizing and fear-avoidance beliefs as mediators between post-traumatic stress symptoms and pain following whiplash injury A prospective cohort study. *European Journal of Pain*, 20,1241-1252. https://doi.org/10.1002/ejp.848
- Asmundson, G. J. G., Coons, M. J., Taylor, S., & Klatz, J. (2002). PTSD and the experience of pain: Research and clinical implications of shared vulnerability and mutual maintenance models. *Canadian Journal of Psychiatry*, 47, 903-907. https://doi.org/10.1177/070674370204701004
- Asmundson, G. J. G. (2014). The emotional and physical pains of trauma: Contemporary and innovative approaches for treating co-occurring PTSD and chronic pain. *Depression and Anxiety*, 31(9), 717-720. https://doi.org/10.1002/da.22285
- Baird, E., de Williams, A. C. C., Hearn, L., & Amris, K. (2017). Interventions for treating persistent pain in survivors of torture. Cochrane Database of Systematic Reviews (8). https://doi. org/10.1002/14651858.CD012051.pub2
- Başoğlu, M., Livanou, M., & Crnobarić, C. (2007). Torture vs other cruel, inhuman, and degrading treatment: Is the distinction real or apparent? Archives of General Psychiatry, 64(3), 277-285. https://doi.org/10.1001/archpsyc.64.3.277
- Beck, A. (2016). Transcultural Cognitive Behaviour Therapy for Anxiety and Depression: A Practical Guide. Taylor & Francis
- Bosco, M. A., Gallinati, J. L., & Clark, M. E. (2013). Conceptualizing and Treating Comorbid Chronic Pain and PTSD. Pain Research and Treatment. https://doi.org/10.1155/2013/174728
- Brennstuhl, M. J., Tarquinio, C., & Montel, S. (2014). Chronic Pain and PTSD: Evolving Views on Their Comorbidity. Perspectives on Psychiatric Care, 51(4), 295-304. https://doi.org/10.1111/

- ppc.12093
- Brewin, C. R., Gregory, J. D., Lipton, M., & Burgess, N. (2010). Intrusive Images in Psychological Disorders: Characteristics, Neural Mechanisms, and Treatment Implications. *Psychological Review*, 117(1), 210-232. https://doi.org/10.1037/ a0018113
- Brown, L. A., LeBeau, R. T., Chat, K-Y. & Craske, M. G. (2016). Associative learning versus fear habituation as predictors of long-term extinction retention. *Cognition & emotion*, 31(4), 687-698. https://doi.org/10.1080/02699931.2016.1158695
- Buhmann, C. (2014). Traumatized refugees: Morbidity, treatment and predictors of outcome. *Danish Medical Journal*, 61(8): B4871.
- Carinci, A. J., Mehta, P., & Christo, P. J. (2010). Chronic Pain in Torture Victims. *Current Pain and Headache Reports*, 14(2), 73-79. https://doi.org/10.1007/s11916-010-0101-2
- Carlsson, J. M., Mortensen, E. M., & Kastrup, M. (2006). Predictors of mental health and quality of life in male tortured refugees. *Nordic Journal of Psychiatry*, 60(1), 51-57. https://doi. org/10.1080/08039480500504982
- Chimenti, R. L., Frey-Law, L. A., & Sluka, K. A. (2018). A mechanism-based approach to physical therapist management of pain. *Physical Therapy*, 98(5), 302-314, https://doi.org/10.1093/ptj/pzy030
- Ciccone, D. S., Elliott, D. K., Chandler, H. K., Nayak, S., & Raphael, K. G. (2005). Sexual and physical abuse in women with fibromyalgia syndrome: a test of the trauma hypothesis. Clinical Journal of Pain, 21, 378-386. https://doi. org/10.1097/01.ajp.0000149796.08746.ea.
- Craske, M. G., Treanor, M., Conway, C., Zbozinek, T., & Vervliet, B. (2014). Maximizing Exposure Therapy: An inhibitory learning approach. *Behaviour Research and Therapy*, 58, 10-23. doi:10.1016/j.brat.2014.04.006
- Crombez, G., Eccleston, C., Van Damme, S., Vlaeyen, J. W., & Karoly, P. (2012). Fear-avoidance model of chronic pain: The next generation. *Clinical Journal of Pain*, 28(6), 475-483. https://doi. org/10.1097/AJP.0b013e3182385392
- Cusack, K., Jonas, D. E., Forneris, C. A., Wines, C., Sonis, J., Middleton, J. C., . . . Gaynes, B. N. (2016). Psychological treatments for adults with posttraumatic stress disorder: A systematic review and meta-analysis. *Clinical Psychology Review*, 43, 128-141. https://doi.org/10.1016/j. cpr.2015.10.003
- de Williams, A. C. C., & Baird, E. (2016). Special Considerations for the Treatment of Pain from Torture and War. Current Anesthesiology Reports,

- 6(4), 319-326. https://doi.org/10.1007/s40140-016-0187-0
- de Williams, A. C. C. & van der Merwe, J. (2013). The psychological impact of torture. *British Journal of Pain*, 7(2), 101-106. https://doi.org/10.1177/2049463713483596
- Defrin, R., Ginzburg, K., Solomon, Z., Polad, E., Bloch, M., Govezensky, M., & Schreiber, S. (2008). Quantitative testing of pain perception in subjects with PTSD — Implications for the mechanism of the coexistence between PTSD and chronic pain. *Pain*, 138(2), 450-459. https:// doi.org/10.1016/j.pain.2008.05.006
- Defrin, R., Lahav, Y., & Solomon, Z. (2017).

  Dysfunctional Pain Modulation in Torture
  Survivors: The Mediating Effect of PTSD.
  Journal of Pain, 1, 1-10. https://doi.org/10.1016/j.
  jpain.2016.09.005Ehlers, A., & Clark, D. (2000).
  A cognitive model of persistent posttraumatic
  stress disorder. Behaviour Research and Therapy,
  15(3), 319-345. https://doi.org/10.1016/S00057967%2899%2900123-0
- Dibaj, I., Halvorsen, J. O., Kennair, L. E. O., & Stenmark, H. I. (2017). An Evaluation of Combined Narrative Exposure Therapy and Physiotherapy for Comorbid PTSD and Chronic Pain in Torture Survivors *Torture*, 27(1), 13-27. https://doi.org/10.7146/torture.v27i1.26534
- Ehlers, A., & Clark, D. (2000). A cognitive model of persistent posttraumatic stress disorder. Behaviour Research and Therapy, 8, 319-45
- Frazier, P., Anders, S., Perera, S., Tomich, P.,
  Tennen, H., Park, C., & Tashiro, T. (2009).
  Traumatic events among undergraduate students:
  Prevalence and associated symptoms. *Journal of Counseling Psychology*, 56(3), 450–460. https://doi.org/10.1037/a0016412
- Geuze, E., Westenberg, H. G., Jochims, A., de Kloet, C. S., Bohus, M., Vermetten, E., & Schmahl, C. (2007). Altered pain processing in veterans with posttraumatic stress disorder. *Archives of General Psychiatry*, 64(1), 76-85. https://doi.org/10.1001/ archpsyc.64.1.76
- Greenhalgh, T, Thorne, S, Malterud, K. (2018). Time to challenge the spurious hierarchy of systematic over narrative reviews? *European Journal of Clinical Investigation*, 48 https://doi.org/10.1111/eci.12931
- Giummarra, M. J., Casey, S. L., Devlin, A., Ioannou, L. J., Gibson, S. J., Georgiou-Karistianis, N., Jennings, P. A., Cameron, P. A., & Ponsford, J. (2017). Co-occurrence of posttraumatic stress symptoms, pain, and disability 12 months after traumatic injury. *Pain reports*, 2(5). https://doi. org/10.1097/PR9.00000000000000622

- Haarbauer-Krupa, J., Taylor, C. A., Yue, J. K., Winkler, E. A., Pirracchio, R., Cooper, S. R., . . . . Manley, G. T. (2017). Screening for Post-Traumatic Stress Disorder in a Civilian Emergency Department Population with Traumatic Brain Injury. *Journal of Neurotrauma*, 34(1), 50-58. https://doi.org/10.1089/neu.2015.4158
- Hayes, S. C., & Hofmann, S. G. (2017). The third wave of cognitive behavioral therapy and the rise of process-based care. World psychiatry: Official journal of the World Psychiatric Association (WPA), 16(3), 245–246. https://doi.org/10.1002/ wps.20442
- Hollander, M., Jong, J., Volders, S., Goossens, M., Smeets, R. & Vlaeyen, J. (2010). Fear reduction in patients with chronic pain: A learning theory perspective. Expert review of neurotherapeutics, 10(11). https://doi.org/10.1586/ern.10.115
- Horn, R., & Keefe, A. (2016). Measuring change and changing measures: The development of a torture survivor specific measure of change, *Torture*, 26(2), 19-40. https://doi.org/10.7146/torture. v26i2.108116
- Imel, Z. E., Laska, K., Jakupcak, M., & Simpson, T. L. (2013). Meta-analysis of dropout in treatments for posttraumatic stress disorder. *Journal of Consulting and Clinical Psychology*, 81(3), 394–404. https://doi.org/10.1037/ a0031474
- International Rehabilitation Council for Torture Victims (2017). People on the Move: Torture and Migration Data in the Fight against Impunity Thematic Report 2017. https://irct.org/assets/uploads/pdf\_20170906095246.pdf.
- International Rehabilitation Council for Torture Victims (2018). UNCAT Implementation Tool 2018 Providing rehabilitation to victims of torture and other ill-treatment. https://cti2024.org/content/images/CTI-Rehabilitation\_Tool5-ENG-final.pdf
- Jenewein, J., Wittmann, L., Moergeli, H., Creutzig, J., & Schnyder, U. (2009). Mutual influence of posttraumatic stress disorder symptoms and chronic pain among injured accident survivors: a longitudinal study. *Journal of Traumatic Stress*, 22(6), 540-548. https://doi.org/10.1002/jts.20453
- Kale, E., Finset, A., Eikeland, H. L., & Gulbrandsen, P. (2011). Emotional cues and concerns in hospital encounters with non-Western immigrants as compared with Norwegians: An exploratory study. *Patient Education* and Counseling, 84(3), 325-331, https://doi. org/10.1016/j.pec.2011.05.009
- Keller, A. S. (2002). Caring and advocating for

- victims of torture. *The Lancet*, 360 (Suppl), 55-56. https://doi/10.1016/S0140-6736(02)11823-X
- Kind, S., & Otis, J. D. (2019) The Interaction Between Chronic Pain and PTSD. Current Pain Headache Report, 23(12): 91. https://doi. org/10.1007/s11916-019-0828-3.
- Kirmayer, L.J., Ban, L., & Jaranson, J. (2018). Cultural logics of emotion: implications for understanding torture and its sequelae. *Torture*, 28(1), 84–100.
- Koren, D., Norman, D., Cohen, A., Berman, J., & Klein, E. M. (2005). Increased PTSD Risk With Combat-Related Injury: A Matched Comparison Study of Injured and Uninjured Soldiers Experiencing the Same Combat Events. *The American Journal of Psychiatry*, 162(2), 276-282. https://doi.org/10.1176/appi.ajp.162.2.276
- Kumpula, M., Orcutt, H., Bardeen, J. & Varkovitzky, R. (2011). Peritraumatic Dissociation and Experiential Avoidance as Prospective Predictors of Posttraumatic Stress Symptoms. *Journal of Abnormal Psychology*, 120(3), 617-627. https://doi. org/10.1037/a0023927.
- Leung, A., Shukla, S., Fallah, A., Song, D., Lin, L., Golshan, S., Tsai, A., Jak, A., Polston, G. & Lee, R. (2016). Repetitive Transcranial Magnetic Stimulation in Managing Mild Traumatic Brain Injury Related Headaches. Neuromodulation: Technology at the Neural Interface, 19: 133-141. https://doi.org/10.1111/ner.12364
- Levy-Gigi, E., Kéri, S., Myers, C. E., Lencovsky, Z., Sharvit-Benbaji, H., Orr, S. P., . . . Gluck, M.A. (2012). Individuals with posttraumatic stress disorder show a selective deficit in generalization of associative learning. *Neuropsychology*, 26(6), 758-767. https://doi.org/10.1037/a0029361
- Liedl, A., & Knaevelsrud, C. (2008). Chronic pain and PTSD: The perpetual avoidance model and its treatment implications. *Torture*, 18, 69-76.
- Linton, S. (2013). A Transdiagnostic Approach to Pain and Emotion. Journal of Applied Biobehavioral Research, 18(2), 82-103. https://doi. org/10.1111/jabr.12007
- López-Martínez, A. E. (2015). The overlap of PTSD and chronic pain: a challenge for rehabilitation interventions. *Physical Therapy Review*, 20(1), 59-61. https://doi.org/10.1179/1743288X 14Y.0000000159
- Marx, B., & Sloan, D. (2005). Peritraumatic dissociation and experiential avoidance as predictors of traumatic stress symptomatology. *Behaviour research and therapy*, 43(5), 569-83. https://doi.org/10.1016/j.brat.2004.04.004
- McColl, H., Higson-Smith, C., Gjerding, S., Omar, M. H., Rahman, B. A., Hamed, M., . . . Awad,

- Z. (2010). Rehabilitation of torture survivors in five countries: Common themes and challenges. *International Journal of Mental Health Systems*, 4(16), 4-16. https://doi.org/10.1186/1752-4458-4-16
- Merskey, H., & Bogduk, N. (1994). Classification of Chronic Pain. (2nd ed.). IASP Press.
- Mollayeva, T., Cassidy, J. D., Shapiro, C. M., Mollayeva, S., & Colantonio, A. (2017). Concussion/mild traumatic brain injury-related chronic pain in males and females: A diagnostic modelling study. *Medicine (Baltimore)*, 96(7), https://doi.org/10.1097/MD.00000000000005917
- Morville, A-L., Erlandsson, L-K., Danneskiold-Samsoe, B., Amris, K., & Eklund, M. (2015).
  Satisfaction with daily occupations amongst asylum seekers in Denmark. Scandinavian Journal of Occupational Therapy, 22(3), 207-215. https://doi.org/10.3109/11038128.2014.982702
- Moseley, G. L. Z., N., Birklein, F., Marinus, J., van Hilten, J. J., & Luomajoki, H. (2008). Thinking about movement hurts: The effect of motor imagery on pain and swelling in people with chronic arm pain. Arthritis Care & Research, 59(5), 623-631. https://doi.org/10.1002/art.23580
- Neuner, F. (2008). Stabilisierung vor Konfrontation in der Traumatherapie –Grundregel oder Mythos? *Verhaltenstherapie*, 18(2), 109-118. https://doi.org/10.1159/000134006
- Nickerson, A., Bryant, R. A., Silove, D., & Steel, Z. (2011). A critical review of psychological treatments of posttraumatic stress disorder in refugees. Clinical Psychology Review, 31(3), 399-417. https://doi.org/10.1016/j.cpr.2010.10.004
- Nordin, L, Perrin, S. (2019). Pain and posttraumatic stress disorder in refugees who survived torture: The role of pain catastrophizing and trauma-related beliefs. *European Journal of Pain*. 2019; 23: 1497–1506. https://doi.org/10.1002/ejp.1415
- Norwegian Red Cross (2020) Torturert og glemt?

  Identifsering og rehabilitering av torturutsatte i

  Norge. Oslo: Røde Kors. https://www.rodekors.
  no/globalassets/globalt/rapporter-program-avtaler/
  humanitar-analyse-rapporter/torturert-ogglemt-2020.pdf [Accessed May 2020]
- Patel, N., Kellezi, B., & de Williams, A. C. C. (2014). Psychological, social and welfare interventions for psychological health and well-being of torture survivors. *Cochrane Database Systematic Reviews*. https://doi.org/10.1002/14651858.CD009317. pub2.
- Patel, N., de Williams, A. C. C., & Kellezi, B. (2016). Reviewing outcomes of psychological interventions with torture survivors: Conceptual,

- methodological and ethical Issues. *Torture*, 26(1), 2-16. https://doi.org/10.7146/torture. v26i1.108060
- Peacock, S., & Patel, S. (2008). Cultural Influences on Pain. Reviews in Pain, 1(2), 6–9. https://doi. org/10.1177/204946370800100203
- Perez-Sales, P. (2017). Editorial: Psychotherapy for torture survivors – Suggested pathways for research. *Torture*, 27(1). https://doi.org/10.7146/ torture.v27i1.26528
- Phifer, J., Skelton, K., Weiss, T., Schwartz, A. C., Wingo, A., Gillespie, C. F., . . . Ressler, K. J. (2011). Pain symptomatology and pain medication use in civilian PTSD. *Pain*, 152(10), 2233-2240. https://doi.org/10.1016/j. pain.2011.04.019
- Pittig, A., Treanor, M., LeBeau, R. & Craske, M. G. (2018). The role of associative fear and avoidance learning in anxiety disorders: Gaps and directions for future research. *Neuroscience & Biobehavioral Reviews*, 88, 117-140. https://doi.org/10.1016/j. neubiorev.2018.03.015.
- Prip, K., Persson, A.L., & Sjölund, B. H. (2012).

  Sensory functions in the foot soles in victims of generalized torture, in victims also beaten under the feet (falanga) and in healthy controls A blinded study using quantitative sensory testing.

  BMC International Health & Human Rights, 39. https://doi.org/10.1186/1472-698X-12-39
- Quiroga, J., & Jaranson, J. M. (2005). Politicallymotivated torture and its survivors: A desk study review of the literature. *Torture (Thematic Issue)*, 15(2-3), 1-111.
- Rometsch-Ogioun El Sount, C., Windthorst, P., Denkinger, J., Ziser, K., Nikendei, C., Kindermann, D., . . . Junne, F. (2019). Chronic pain in refugees with posttraumatic stress disorder (PTSD): A systematic review on patients' characteristics and specific interventions. *Journal of Psychosomatic Research*, 118, 83-97. https://doi.org/10.1016/j.jpsychores.2018.07.014
- Roth, R. S., Geisser, M. E., & Bates, R. (2008). The relation of post-traumatic stress symptoms to depression and pain in patients with accident-related chronic pain. *The Journal of Pain*, *9*(7), 588-596. https://doi.org/10.1016/j.jpain.2008.01.333
- Santiago, P. N., Ursano, R. J., Gray, C. L., Pynoos,
  R. S., Spiegel, D., Lewis-Fernandez, R., . . .
  Fullerton, C. S. (2013). A Systematic Review of PTSD Prevalence and Trajectories in DSM-5 Defined Trauma Exposed Populations:
  Intentional and Non-Intentional Traumatic Events. PLOS One, 8(4). https://doi.org/10.1371/journal.pone.0059236

- Sareen, J., Cox, B., Stein, M., Afifi, T., Fleet, C., & Asmundson, G. J. G. (2007). Physical and mental comorbidity, disability, and suicidal behavior associated with posttraumatic stress disorder in a large community sample. *Psychosomatic Medicine*, 69, 242-248. https://doi. org/10.1097/PSY.0b013e31803146d8
- Sharp, T. J., & Harvey, A. (2001). Chronic pain and post-traumatic stress disorder: Mutual maintenance? Clinical Psychology Review, 21. https://doi.org/10.1016/s0272-7358(00)00071-4
- Shipherd, J. C., Keyes, M., Jovanovic, T., Ready, D. J., Baltzell, D., Worley, V., . . . Duncan, E. (2007). Veterans seeking treatment for posttraumatic stress disorder: What about comorbid chronic pain? Journal of Rehabilitation Research & Development, 44(2), 153-166. https://doi.org/10.1682/jrrd.2006.06.0065
- Silove, D., Ventevogel, P., & Rees, S. (2017). The contemporary refugee crisis: An overview of mental health challenges. World Psychiatry, 16(2), 130-139. https://doi.org/10.1002/wps.20438
- Siqveland, J., Ruud, T., & Hauff, E. (2017).
  Post-traumatic stress disorder moderates the relationship between trauma exposure and chronic pain. *European Journal of Psychotraumatology*, 8(1). https://doi.org/10.1080/20008198.2017.1375337
- Smith, E., Patel, N. & MacMillan, L. (2010). A remedy for torture survivors in international law: Interpreting rehabilitation. Discussion Paper. London: Medical Foundation for the Care of Victims of Torture. https://www.yumpu.com/en/ document/read/38899857/a-remedy-for-torturesurvivors-in-international-law-freedom-from-
- Stam, R. (2007). PTSD and stress sensitisation: A tale of brain and body Part 1: Human studies. *Neuroscience and Biobehavioral Reviews*, 31(4), 530-557. https://doi.org/10.1016/j. neubiorev.2006.11.010
- Strigo, I.A., Simmons, A.N., Matthews, S.C., Grimes, E.M., Allard, C.B., Reinhardt, L.E., . . . Stein, M.B., (2010). Neural correlates of altered pain response in women with posttraumatic stress disorder from intimate partner violence. Biological Psychiatry, 68(5), 442-450. https://doi.org10.1016/j.biopsych.2010.03.034
- Sueki, D. G., Dunleavy, K., Puentedura, E. J., Spielholz, N. I., & Cheng, M. S. (2014). The role of associative learning and fear in the development of chronic pain – a comparison of chronic pain and post-traumatic stress disorder. *Physical Therapy Reviews*, 19(5), 352-366. https:// doi.org/10.1179/1743288X14Y.0000000154
- Sullivan, J. L. M., & Adams, H. (2010). Psychosocial

- Treatment Techniques to Augment the Impact of Physiotherapy Interventions for Low Back Pain. *Physiotherapy Canada*, 62(3), 180-189. https://doi.org/10.3138/physio.62.3.180
- Teodorescu, D. S., Heir, T., Siqveland, J., Hauff, E., Wentzel-Larsen, T., & Lien, L. (2015). Chronic pain in multi-traumatized outpatients with a refugee background resettled in Norway: a cross-sectional study. *BMC Psychology*, *3*(7). https://doi.org/10.1186/s40359-015-0064-5
- Thomsen, A. B., Eriksen, J., & Smidt-Nielsen, K. (2000). Chronic pain in torture survivors. Forensic Science International, 108(3), 155-163. https://doi.org/10.1016/s0379-0738(99)00209-1
- Treede, R.-D., Rief, W., Barke, A., Aziz, Q., Bennett, M. I., Benoliel, R., . . . Wangw, S.-J. (2015). A classification of chronic pain for ICD-11. *Pain*, 156(6), 1003-1007. https://doi.org/10.1097/j. pain.0000000000000160
- UN General Assembly, Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, 10 December 1984, United Nations, Treaty Series, vol. 1465, p. 85. https://www. refworld.org/docid/3ae6b3a94.html
- Vlaeyen, J. W., & Linton, S. J. (2000). Fear-avoidance and its consequences in chronic musculoskeletal pain: A state of the art. *Pain*, 85, 317-332. https:// doi.org/10.1016/s0304-3959(99)00242-0
- Wald, J. (2008). Interoceptive Exposure as a Prelude to Trauma-Related Exposure Therapy in a Case of Posttraumatic Stress Disorder With Substantial Comorbidity. *Journal of Cognitive Psychotherapy*, 22(4), 331-345. https://doi.org/10.1891/0889-8391.22.4.331
- Wang, S-J., Bytyçi, A., Izeti, S., Kallaba, M., Rushiti, F., Montgomery, E., Modvig, J. (2017). A novel bio-psycho-social approach for rehabilitation of traumaticed victims of torture and war in the post-conflict context: A pilot randomized controlled trial in Kosovo. BMC Conflict and Health, 10: 34. https://doi.org/10.1186/s13031-016-0100-y
- Weiss, W., Ugueto, A., Mahmooth, Z., Murray, L., Hall, B., Nadison, M., . . . Bolton, P. (2016). Mental health interventions and priorities for research for adult survivors of torture and systematic violence: A review of the literature. *Torture Journal*, 26(1), 17-44. https://doi. org/10.7146/torture.v26i1.108061

# The effects of a combined psychotherapy and physiotherapy group treatment program for survivors of torture incarcerated in an adult prison in Kurdistan, Iraq: A pilot study

April Gamble PT, DPT, CLT<sup>1</sup>, Ahmed M. Amin Ahmed MBChB, MA, PhD<sup>2</sup>, Salah Hassan Rahim BSc<sup>3</sup>, Jeff Hartman PT, DPT, MPH<sup>4</sup>

# Key points of interest

- Novel interdisciplinary treatment approach for incarcerated survivors of torture using a culturally and contextually appropriate physiotherapy and psychotherapy group treatment service
- Initial treatment effects on symptoms of mental health, physical health, and functioning are positive despite ongoing exposure to the stress and trauma of prison
- Reveals feasibility of implementing research that follows international research standards and practices within under-researched settings like prisons and post-conflict areas

### **Abstract**

Introduction: Survivors of torture have high rates of mental health problems and can experience a sequela of physical effects with the most common being persistent pain. Similar to survivors of torture, persons that are incarcerated have high rates of mental health problems, persistent pain and pain-related disability. The purpose of this study is to assess the effect of an interdisciplinary group treatment approach, involving psychotherapy and physiotherapy, with survivors of torture whom are incarcerated in a prison in Kurdistan, Iraq.

Methods: A parallel group study design was used to compare a treatment group (n=11) and a wait-list control group (n=16). The treatment group participated in an interdisciplinary treatment service for a total of 10 weekly group sessions for each discipline. The primary outcome measures were symptoms of nociplastic pain, anxiety, depression, and PTSD. Secondary outcome measures evaluated physical functioning, sleep quality, and general self-efficacy.

Results: A statistically significant reduction in outcome measure scores was seen in all symptoms measured immediately post-treatment. Discussion and Conclusion: These findings suggest that a culturally and contextually appropriate interdisciplinary group treatment intervention for survivors of torture in a prison

Physiotherapy Technical Coordinator, Wchan Organization for Victims of Human Rights Violations; Founder of ACR – The American Center for Rehabilitation Correspondence to: april.dpt@gmail.com

Executive Director, Wchan Organization for Victims of Human Rights; Lecturer, Sulaimani Polytechnic University – Technical College of Health

<sup>3)</sup> Mental Health Director, Wchan Organization for Victims of Human Rights

Assistant professor, University of Wisconsin School of Medicine and Public Health, Doctor of Physical Therapy program, Madison, WI.

could be effective for short-term reductions in symptoms of anxiety, depression, PTSD, persistent pain, and function. The study has limitations including a small sample size, lack of long-term outcome measures, and an inability to isolate effect of each component of care. The study does demonstrate the feasibility of implementing research that follows international research standards and practices within underresearched settings and post-conflict areas.

Arabic and Kurdish versions of the abstract can be found at:

https://tidsskrift.dk/torture-journal/article/view/119199

Keywords: Prisons, Pain, Mental Health, Physical Therapy, Psychotherapy

## Introduction

Torture has been well documented to result in physical, psychological, and social consequences (Kabengele, Chastonay, & Frey, 2014; Steel, et al., 2009; Weiss, et al., 2018; Williams, Peña, & Rice, 2010). Survivors have high rates of mental health problems including symptoms consistent with post-traumatic stress disorder (PTSD), anxiety and depression (Steel et al., 2009) and can also experience a sequela of physical effects. The most common being persistent pain, specifically nociplastic pain which is described as pain that arises from changes in the nervous system with no clear evidence of actual tissue damage (Olsen et al., 2007; Tsur et al., 2017; IASP Terminology, 2017). It is theorized that a multitude of factors contribute to the development and maintenance of a sensitized nervous system that underlies nociplastic pain including fear avoidance behavior, deconditioning, unhelpful thoughts and beliefs about pain, and emotional distress (Asmundson et al., 2002; Asmundson & Katz, 2009; Williams et al., 2010).

It is also well documented that incarceration results in physical, psychological, and social consequences. As Massoglia (2008) stated, incarceration exposes a person to traumatic stress which increases the risk of mental and physical health problems. Persons that are or have been incarcerated have higher rates of emotional distress and mental health problems including symptoms consistent with PTSD, anxiety, and depression (Dirkzwager, 2019; Fazel et al., 2016; Fazel & Danesh, 2002; Fazel & Seewald, 2012). Similar to survivors of torture, persons that are incarcerated also have higher rates of persistent pain and pain-related disability (Williams, et al., 2014; Darnall & Sazie, 2012).

It has been established that physiological and psychological responses to pain, torture, and incarceration interact and contribute to comorbid conditions of mental health problems, stress reactions, persistent pain, and pain-related disability (Tsur, Shahar, Defrin, Lahav, & Ginzburg, 2017; Tsur, Defrin, & Ginzburg, 2017; Leder, 2018). Symptoms of PTSD, anxiety, and depression are associated with greater rates of physical health problems and pain-related disability (Tsang, et al., 2008; Bair at al., 2003). Similarly, 10-50% of persons receiving treatment for persistent pain reportedly have symptoms that satisfy the criteria for PTSD, compared to 8% in the general population (Asmundson et al., 2002). A mutual maintenance theory proposes that there are components of each condition that maintains or exacerbates symptoms of the other (Asmundson et al., 2002; Asmundson & Katz, 2009).

The physical and psychological effects of torture and incarceration have a substantial burden on the individual, workforce, health-care system, and society (Breivik et al., 2013; Sareen, 2014; Gifford, 2019; Wildeman et al., 2019; Kinner & Young, 2018). This is related

to decreased work productivity and high rates of healthcare utilization and disability (Breivik et al., 2013; Sareen, 2014). Considering the increased prevalence of health conditions in survivors of torture and persons that are incarcerated, and the burden of these conditions, finding effective and accessible treatment options should come with a sense of urgency (Penal Reform International, 2015).

Previous research established the effect of psychotherapy treatment on mental health symptoms in survivors of torture and persons that are incarcerated (Loughran & King, 2004; Bunn et al., 2016; Yoon et al., 2017; Heckman et al., 2007). Physiotherapy, which integrates pain neuroscience education and other aspects of the biopsychosocial treatment of pain, has been used to treat persistent pain and functional impairments in the general population, those with mental health problems, and with survivors of torture (Amris & Williams, 2015). Additionally, the effectiveness of an interdisciplinary approach, combining psychotherapy and physiotherapy, for the treatment of pain and mental health problems has been explored (Dibaj et al., 2017; Kurklinsky et al., 2016; Mcgeary, Moore et al., 2011). However, globally, there are no studies examining an interdisciplinary treatment program for survivors of torture who are incarcerated.

The purpose of this study is to assess the effect on symptoms of PTSD, anxiety, depression, persistent pain, and function of an established interdisciplinary group treatment approach, involving psychotherapy and physiotherapy, administered by Wchan Organization for Victims of Human Rights Violations (Wchan – pronounced wu-chan) with survivors of torture that are incarcerated in a prison in Kurdistan. It is hypothesized that the delivery of this culturally and contextually-designed treatment program will improve aspects of mental and physical health. A pilot study allows the

researchers to explore the feasibility of conducting future research within the context of a prison in Kurdistan, including the implementation of internationally-recognized research practices and capacity building activities to equip locally trained healthcare professionals with the skills to conduct research activities.

### Methods

# Research location and approval

The study was conducted in a prison in the city of Sulaymaniyah in the semi-autonomous Kurdistan Region of Iraq (Kurdistan). This prison involved in this study houses in excess of 1200 men over 18 years of age incarcerated with sentences ranging from one month to life. The men in this prison are serving sentences for a variety of crimes including but not limited to murder, physical and sexual assault, terrorism, illegal drug use, marital infidelity, forgery, theft, and car accidents resulting in the physical harm of others. Wchan is recognized by the United Nations Refugee Agency (UNHCR) as a qualified mental health and psychosocial support services provider and has been providing services in the prison for over five years. To enhance the treatment, conditions, and available services, the prison has collaborated with national and international human rights organizations including Wchan, the International Committee of the Red Cross, the Independent Human Rights Commission of Kurdistan and Democracy and Human Rights Development Center.

Kurdistan has had reports that as high as 60% of males experience torture or ill treatment while in the criminal justice system (Heartland Alliance International, 2015).

Approval to perform research was granted by the prison director and by the Ethical Committee of the University of Sulaimani, College of Medicine. There is an institutional review

ortite

TORTURE Volume 30, Number 2, 2020

board (IRB) and federal wide assurance available in Al-Najaf, Iraq. However, due to the political context, with Kurdistan acting as a semi-autonomous region of Iraq, it would not have been appropriate to engage this IRB and Kurdistan authorities would not recognize it as reflecting or representing their community. Finally, this study was internationally approved by the IRB through Northwestern University (Chicago, USA), (ID# STU00206726; Clinical trials registry: NCT03470779).

### Research team

A research team was formed with international and domestic scholars and domestic clinical healthcare professionals, including psychotherapists and physiotherapists trained in Kurdistan (see Annex 1). The treating clinicians met the local requirements for clinical practice which includes graduation from a 2-year or 4-year entry level degree program specific to the field. The clinical members of the team were providing treatment in the prison prior to the study. Additionally, prior to the study, the clinicians participated in a year-long capacity building project to uptrain them in the delivery of the specific interdisciplinary treatment being studied.

The clinical team were instrumental in the development and design of the study to ensure that the procedures were culturally and contextually appropriate. They conducted all the study's recruitment procedures, data collection, and treatment interventions. The clinicians previous education and training did not include content related to conducting research. Therefore, to simultaneously build capacity of the research team and conduct a high caliber study, training and on-site supervision specific to research was provided by the primary author during and throughout the study.

# Study design

A parallel group, randomized, wait-list controlled pilot study was used to compare a treatment group to a wait-list control group using an allocation ratio of 2:3. This allocation ratio was selected to account for potential dropouts within the wait-list control group.

# Recruitment, screening, and consent

Recruitment for the study began in April 2018 and utilized a standard recruitment protocol for treatment at the prison which includes the use of trauma-informed practices. All activities related to the study were conducted in Kurdish Sorani. In summary, psychotherapists visited each living section within the prison and invited all to attend a seminar about the physical, psychological, and social symptoms of trauma and torture and the services offered by the organization that could potentially help address these symptoms. This seminar resulted in a potential cohort for treatment and a potential convenience sample for study.

Following participation in a seminar and expressing interest in receiving services, an individual was screened individually by a psychotherapist to determine if standard treatment services were appropriate (see Figure 1). If the individual demonstrated need, then the assessment continued and a standard psychotherapy intake was conducted which included two of the study's primary outcome measures; the Kurdish validated versions of the Harvard Trauma Questionnaire Part 4 (HTQ), the Hopkins Symptom Checklist-25 (HSCL-25) (see Table 1). The individual was referred for a physiotherapy assessment if they had symptoms consistent with post-traumatic stress disorder, anxiety, and/or depression evident by a total score of greater than or equal to 1.75 on HSCL-25 and/or by a total score greater than or equal to 2.5 on the HTQ.

Prior to the standard physiotherapy assessment, the physiotherapist completed a chart review of the clinical documentation completed by the psychotherapist. This facilitated a trauma-informed assessment as the physiotherapist was aware of potential triggers, could avoid asking for the same information already attained by the psychotherapist, and was prepared to explore possible physical symptoms relevant to the case. A standard physiotherapist assessment includes the Central Sensitization Inventory Part A which served as a primary outcome measure for the study (See Table 1).

After completing these components, those that met inclusion criteria (see Table 2) were invited to participate. The process of informed consent was adapted to the context and culture by only requiring verbal consent and not written consent. The participants that provided informed consent for the study participated in a second individual session with a physiotherapist to complete data collection specific to the research study. This included the following secondary outcome measures: (1) Patient Specific Functional Scale; (2) Pittsburgh Sleep Quality Index; and (3) General Self-Efficacy Scale. For individuals not interested in participating in the study, the physiotherapist completed the remaining components of the standard physiotherapy assessment and enrolled the individual in the appropriate standard treatment services.

**Table 1.** Clinical data that was collected as a part of the standard treatment protocol

#### Psychotherapy Intake Physiotherapy intake **During treatment**

- Name
- Age
- · Date of birth
- · Place of birth
- · Ethnicity
- · Religion
- · Education
- Ex-occupation
- Occupation
- · Marital status
- · Number of children
- · Date arrested
- · Duration in detention
- · Period of charge
- · History of psychiatric treat-
- · Details of torture history
- · Consent for treatment
- · Information required for risk assessment
- · HTQ
- HSCL-25

- Open ended interview of Subjective feedback and symptoms and functional problems
- · Body chart
- · Medical Screening checklist · Clinical assessment of
- · Symptom checklist
- · Objective evaluation as deemed necessary by physiotherapist
- · Central Sensitization Inventory Part A

- comments
- · Attendance of treatment sessions
- participants in the treatment group for the completion of the regular treatment notes by the psychotherapists and physiotherapists.

Table 2. Inclusion and Exclusion criteria	
Inclusion	Exclusion
Age equal to or greater than 18 years.	Would not remain in the current prison for at least 6 months from the onset of the study by self-report.
Incarcerated in the prison where research is conducted.	Was unable to make the time commitment required to participate.
Native speaker of Sorani, a Kurdish language.	Per treating psychotherapist, presented with symptoms consistent with a psychiatric condition and/or high risk to self or others which made participation in the study unsafe.
History of torture is self-reported and documented per the UNCAT definition.	Per treating physiotherapist, presented with symptoms consistent with or previously diagnosed with a severe medical condi- tion which made participation in the study unsafe.
Presented with symptoms consistent with post-traumatic stress disorder, anxiety, and/ or depression evident by a total score of greater than or equal to 1.75 on Hopkins Symptoms Checklist-25 and/or by a total score greater than or equal to 2.5 on the Harvard Trauma Questionnaire Part 4.	Reported previously receiving treatment by Wchan.
Presented with symptoms consistent with persistent nociplastic pain evident by a score of greater than or equal to 40 on the Central Sensitization Inventory Part A.	Current substance abuse reported by participant or identified by treating psychotherapist.
	Reported currently receiving mental health services and/or physiotherapy services from other organization.
	Reported unresolvable conflict with individual/s enrolled in the study.

# **Population**

Participants were all incarcerated in the prison and male survivors of torture based on the UNCAT definition of torture (Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment - Addendum to Initial reports of States parties due in 1995, 1995). As part of standard treatment protocol, self-reported history of torture was identified through a verbal one-on-one open question interview conducted by a psychotherapist and documented on an original form.

## Intervention Procedures

Originally Wchan provided only psychotherapy services within the prison, but the interdisciplinary approach being studied was adopted in 2017 as clients that received psychotherapy treatment reported persistent difficulties with pain, sleep, somatic symptoms, and physical functioning, as well as, a desire for body-based coping strategies. The structure of the interdisciplinary treatment as described here allows for close collaboration between the treating physiotherapists and psychotherapists so as to collaboratively support the clients' emotional, physical, and social functioning, while also maintaining distinct professional role and responsibilities.

Treatment manuals for the standard interdisciplinary treatment program were originally developed by the Center for Victims of Torture and then adapted and implemented to be more effective for the specific context and culture. The clinicians follow this treatment manual which includes specific treatments but are also able to modify them based on their clinical judgement and the needs of the clients. See Table 3 for details of the treatment sessions.

Given the small sample size of the study and that the severity of depression and anxiety has the potential to confound treatment response, proportionate stratified random sampling was used. To do this, the enrolled participants were first stratified into two strata based on their total baseline score on the HSCL-25 which reflects symptoms of anxiety and depression (Strata 1: low total score; Strata 2: high total score). The cut-off value for the two strata was established based on a review of data from 154 persons that previously received treatment services and nearly all had depression/anxiety. The participants randomly assigned to one of

two groups: (1) treatment or (2) wait-list. To perform random selection, the code numbers of each strata were inserted into a list randomizer application (https://www.random. org/lists/). This generated two lists. The code numbers of the participants identified via this randomly-generated list were the participants assigned to the treatment group from each stratum. Participants were randomly selected for the treatment group from strata one and from strata two so that equal proportions of people with high and low HSCL-25 total scores were assigned in each group at baseline.

Twelve participants were assigned to the treatment group. To account for potential dropouts, 18 were assigned to the wait-list group. Participants of the treatment group received 10 weekly group psychotherapy treatment sessions and 10 weekly group physiotherapy treatment sessions, and one individual check-in session for physiotherapy and psychotherapy over a span of 11 weeks. Participants in the wait-list group did not receive any treatment until after the completion of the study but did participate in an individual check-in session with a psychotherapist during weeks 6 and 7 of the intervention to assess for risk. Per standard treatment protocol and to ensure coordinated care, the clinical research team had an interdisciplinary meeting before the start of the treatment sessions, between sessions 5 and 6, and after the completion of the treatment sessions. During the treatment period, participants did not have access to any additional direct mental health services.

As per the previously established manual, treatments provided in the physiotherapy group treatment include the following: (1) relaxation exercises; (2) mindfulness exercises; (3) breathing exercises; (4) stretching and strengthening exercises; (5) low to moderate intensity exercise; (6) therapeutic neuroscience education; (7) circuit training; (8) body

	-	ł
	C	)
	ュ	)
	_	à
	_	
	៑	5
	П	1
	_	,
	2	
		_
	$\subseteq$	
	⊐	
	Φ	
	u	)
	C	)
١	•	
	$\geq$	,
	ξ	
	ō	
	P	
	Ė	
	_	٥
	•	
	_	)
	C	>
	1	)

Table 3.	Details of the Interdisciplinary Group Treatm	nent Service
Session	Physiotherapy	Psychotherapy
1	<ul> <li>Introductions</li> <li>Establishing group agreement</li> <li>Relaxed diaphragmatic breathing</li> <li>Intervals of low to moderate intensity exercise and diaphragmatic breathing</li> <li>Selecting individual physical, psychological, and social goals</li> </ul>	<ul> <li>Introductions</li> <li>Discussing expectations</li> <li>Establishing group agreement</li> <li>Psychoeducation: One finger vs. many fingers</li> <li>Closing the circle</li> </ul>
2	<ul> <li>Home practice check-in</li> <li>Intervals of low to moderate intensity exercise and diaphragmatic breathing</li> <li>Body awareness activity</li> <li>Stretches for the chest musculature</li> <li>Progressive muscle relaxation</li> </ul>	<ul> <li>Home practice check-in</li> <li>Exploring strengths and challenges</li> <li>Cognitive triangle</li> <li>Psychoeducation: negative vs positive thinking</li> <li>Closing practice</li> </ul>
3	Home practice check-in     Therapeutic neuroscience education:     Posture and emotions     Active exercise for postural awareness     Therapeutic neuroscience education:     Posture and movement variability     Intervals of moderate to high intensity exercise and diaphragmatic breathing     Progressive muscle relaxation	<ul> <li>Home practice check-in</li> <li>Movement breathing</li> <li>Exploring emotions and linking them with physical sensations</li> <li>Closing practice</li> </ul>
4	<ul> <li>Home practice check-in</li> <li>Intervals of moderate to high intensity exercise and diaphragmatic breathing</li> <li>Therapeutic neuroscience education: Stepping on a nail, Temperature warning light</li> <li>Therapeutic exercise for back</li> <li>Progressive muscle relaxation</li> </ul>	<ul> <li>Home practice check-in</li> <li>Narrative Exposure Therapy 1: The River of Life Exercise</li> <li>Closing practice</li> </ul>
Individual check-in	<ul> <li>Conduct body chart and the Central Sensitization Inventory Part A</li> <li>Provide individualized education and exercise prescription based on the physiotherapists' clinical judgement</li> <li>Address any questions or concerns</li> </ul>	<ul> <li>Discuss and concerns about sharing traumatic experiences</li> <li>Risk assessment</li> <li>Provide individualized psychoeducation based on the psychotherapist's clinical judgement</li> <li>Address any questions or concerns</li> </ul>

Session	Physiotherapy	Psychotherapy
5	<ul> <li>Home practice check-in</li> <li>Therapeutic exercise for lower extremities</li> <li>Therapeutic neuroscience education: Cups of water, Factors contributing to sensitivity</li> <li>Intervals of moderate to high intensity exercise and diaphragmatic breathing</li> <li>Body scan mindfulness technique</li> </ul>	<ul> <li>Home practice check-in</li> <li>Review confidentiality agreement</li> <li>Discuss respectful responses to others, listening to others empathically</li> <li>Narrative Exposure Therapy 2: Discussion of Traumatic Experiences</li> <li>Containment and integration</li> <li>Closing practice</li> </ul>
6	<ul> <li>Home practice check-in</li> <li>Therapeutic exercise for upper extremities</li> <li>Intervals of moderate to high intensity exercise and diaphragmatic breathing</li> <li>Therapeutic neuroscience education: Finding comfort during sleep, lifting, and carrying</li> <li>Body scan mindfulness technique</li> </ul>	<ul> <li>Home practice check-in</li> <li>Review confidentiality agreement</li> <li>Narrative Exposure Therapy 2: Discussion of Traumatic Experiences</li> <li>Large group reflection and contain ment of trauma reactions</li> <li>Closing practice</li> </ul>
7	<ul> <li>Home practice check-in</li> <li>Functional goal check-in</li> <li>Intervals of moderate to high intensity exercise and diaphragmatic breathing</li> <li>Therapeutic neuroscience education: Wrinkles</li> <li>Body scan mindfulness technique</li> </ul>	<ul> <li>Home practice check-in</li> <li>Surviving multiple losses</li> <li>Psychoeducation: Self-blame, guiltand shame</li> <li>Coping strategies for self-blam related to grief</li> <li>Closing practice</li> </ul>
8	<ul> <li>Home practice check-in</li> <li>Circuit training</li> <li>Therapeutic neuroscience education: Develop a coping plan – Part one</li> <li>Progressive muscle relaxation or body scan mindfulness technique (per participants' request)</li> </ul>	<ul> <li>Home practice check-in</li> <li>Ambiguous loss</li> <li>Expressing multiple losses throug storytelling</li> <li>Rebuilding life after loss</li> <li>Closing practice</li> </ul>
9	<ul> <li>Home practice check-in</li> <li>Circuit training</li> <li>Therapeutic neuroscience education: Develop a coping plan – Part two</li> <li>Therapeutic exercise for the neck and upper back</li> <li>Progressive muscle relaxation or body scan mindfulness technique (per participants' request)</li> </ul>	<ul> <li>Home practice check-in</li> <li>Adapted Tree of Life</li> <li>Future goals</li> <li>Closing practice</li> </ul>
10	Home practice check-in     Therapeutic neuroscience education: Sleep hygiene     Therapeutic exercise – Demonstration and sharing     Celebration ceremony	<ul> <li>Home practice check-in</li> <li>Review coping skills: Keep, start, sto plan</li> <li>Letter to the future group</li> <li>Closing practice</li> <li>Celebration ceremony</li> </ul>

$\dashv$	
0	
Ā	
$\rightarrow$	
$\subseteq$	
$\overline{\mathcal{R}}$	
m	
<	
0	
ume	
30,	
Number	
2,	
2020	

subacute, and chronic

conditions.e

Table 4. Primary	y Outcome Measures	
Name	Description	Psychometric properties
Harvard Trauma Ques- tionnaire Part 4 (HTQ)*	Part 4 is a self-reported checklist that includes 30 trauma symptoms with the first 16 items being derived from the DSM-IIIR/DSM-IV criteria for PTSD and the other 14 items describe symptoms related to specifically refugee trauma. The scale for each question includes four categories of response: "Not at all," "A little," "Quite a bit," "Extremely," rated 1 to 4, respectively. A scientifically validated cut-off score of greater than or equal to 2.5 has been established.	Cronbach's alpha: .8689ª
Hopkins Symptom Checklist-25 (HSCL-25)*	A 25 item self-reported symptom inventory which measures symptoms of anxiety and depression. The scale for each question includes four categories of response: "Not at all," "A little," "Quite a bit," "Extremely," rated 1 to 4, respectively.  A scientifically validated cut-off point has been established at less than or equal to 1.75 for asymptomatic people.	Cronbach's alpha <sup>b</sup> : .7393 Pearson correlation coef- ficient <sup>b</sup> : .7386
Central Sensitization Inventory Part A**	A 25 item self-report outcome measure designed to identify persons who have symptoms that may be related to central sensitization and nociplastic pain. The scale for each question ranges from 0 (never) to 4 (always).	Cronbach's alpha: 0.91 <sup>d</sup> Test-retest reliability = 0.817 <sup>c</sup>
Patient Specific Functional Scale**	A self-report outcome measure of function for a large number of clinical presentations. Persons identify important activities they are unable or having difficulty performing as a result of their problem. They then rate (on an 11-point scale) the current level of	Valid, reliable, and responsive in populations multiple pain presentations including chronic low back pain and for individuals with a limited number of acute,

difficulty associated with each activity with

"0" representing "unable to perform" and

"10" representing "able to perform at prior

level."

Name	Description	Psychometric properties
Pittsburgh Sleep Quality Index**	A 19 item self-rated questionnaire grouped into seven component scores (subjective sleep quality, sleep latency, sleep duration, sleep efficiency, sleep disturbance, hypnotic medication use, and daytime dysfunction). The seven component scores combine to provide a global PSQI score with an established cutoff score with scores greater than or equal to 5 indicating subjective insomnia.	Cronbach's alpha: 0.70- 0.83 <sup>f</sup> Intraclass correlation coef- ficient: .7983 <sup>f</sup>
General Self-Efficacy Scale**	A 10 item self-report measure of self-efficacy that is designed to assess optimistic self-beliefs to cope with a variety of difficult demands in life. Possible responses are not at all true (1), hardly true (2), moderately true (3), and exactly true (4), yielding a total score between 10 and 40.	Cronbach's alpha: .7690 <sup>g</sup> The total score is correlated to emotion, optimism, and work satisfaction. <sup>g</sup> Negative coefficients were found for depression, stress, health complaints, burnout, and anxiety. <sup>g</sup>

<sup>\*</sup>Measure was translated, culturally adapted, validated and used in previous research by an external group (Bolton, P., Bass, J, Zangana, G., et al. (2014),

awareness exercises; and (9) interactive education regarding coping skills, sleep, mind-body connection, and other topics. As per the previously established manual, the psychotherapy group treatment includes the following: (1) stabilization techniques and coping skills; (2) breathing and mindfulness exercises; (3) psychoeducation; (4) techniques based on dance movement therapy and somatic psychology; (5) techniques based on cognitive behavioral therapy; (6) techniques from narrative exposure therapy; (6) strategies for reflecting on loss and grief including ambiguous loss; and (7) goal setting and planning for the future.

Data collection and analysis

Data collected for research purposes were mostly a component of standard clinical treatment protocol. Clinical documentation using individual patient files is a standard part of clinical care and the participating psychotherapists and physiotherapists are well-trained in requesting and using information in a trauma-informed manner. All data collection activities were conducted in Kurdish Sorani and with measures translated and culturally adapted for Kurdish Sorani speakers, with two of the measures having been scientifically validated (see Table 4). Additionally, they were conducted privately, with the exception of documenting the subjective feedback that is shared during the therapeutic process within

<sup>\*\*</sup>Measure was translated internally with the translation not having been validated. Reported psychometric properties relate to the original English version.

<sup>&</sup>lt;sup>a</sup> Rasmussen et al. (2015), <sup>b</sup>Bolton et al. (2014), <sup>c</sup> McKernan et al. (2019), <sup>d</sup> Mayer et al. (2012), <sup>e</sup> Horn et al. (2012), <sup>f</sup> Mollayeva et al. (2015), <sup>g</sup> Schwarzer & Jerusalem (1995)

the group treatment sessions. Participants had several individual sessions with clinical staff in order to allow them to discuss any private matters that they felt uncomfortable discussing in a group setting. Data collection was not blinded as this was not feasible due to the logistical procedures required in the prison and a small amount of staff being granted access in the prison.

The primary outcome measures evaluated symptoms of anxiety, depression, PTSD, nociplastic pain. The secondary outcome measures evaluated physical functioning, sleep quality, and general self-efficacy (see Table 4). As these are commonly used clinically and in research for similar populations they were selected so as to inform the selection of feasible measures for a future large-scale study. Additionally, the primary outcome measures were already included as part of standard treatment protocol. All measures were patient-reported and were administered with versions that were translated to Kurdish Sorani, with two measures, HTQ Part 4 and HSCL-25, having been culturally adapted and validated in this language and for this specific population (Bolton, Bass, Zangana, Kamal, Murray, Kaysen, ... Rosenblum. 2014). The other measures have not been previously validated in Kurdish Sorani as this was not feasible with the group's limited resources. However, before the study and as a component of program development, all measures underwent an internal multi-step translation process to strive for a valid, reliable, and culturally appropriate translation.

Additional clinical data collected during the psychotherapy intake session and physiotherapy assessment as a part of standard treatment protocol was not included in the study's data analysis due to the small sample size limiting its usefulness (See Table 1).

For data analysis purposes, information from the written documentation was transferred to an electronic spreadsheet by the research team and stored on a removable media device with encryption. Following the study's final data collection, data analysis was conducted using PASW 18.0 (SPSS Inc., Chicago, IL). Given the small sample size, non-parametric statistical tests were used. For dependent variables, within-groups effects were analyzed using the Wilcoxon signed-rank test, and between-groups effects were analyzed using the Mann-Whitney U test. Data were analyzed from Baseline (T0) to Post-Treatment (T1) to assess effects. The level of statistical significance was set a priori at p < 0.01.

### Results

# Participant selection

After the recruitment seminar was conducted, 115 individuals expressed interest in participating. Of those, 68 persons did not meet inclusion and exclusion criteria based on information gathered during the screening sessions. The remaining 47 were assessed further for eligibility. 30 met the study criteria and were invited and selected for study. Recruitment and pre-testing (T0) occurred between April 5th and June 28th, 2018. The intervention began July 3rd and continued for a total of 11 consecutive weeks of service. The posttesting (T1) was completed by September 27th, 2018. See Figure 1 for more details.

## Participant demographics

The mean age of the participants was 33.2 years. The duration of the prison sentences ranged from three years to life with two persons in each group having life sentences. All participants were survivors of torture. The most common forms of torture reported by the participants included verbal abuse, electrical shock, solitary confinement, suspension, hitting with instruments like pipes, sticks, and

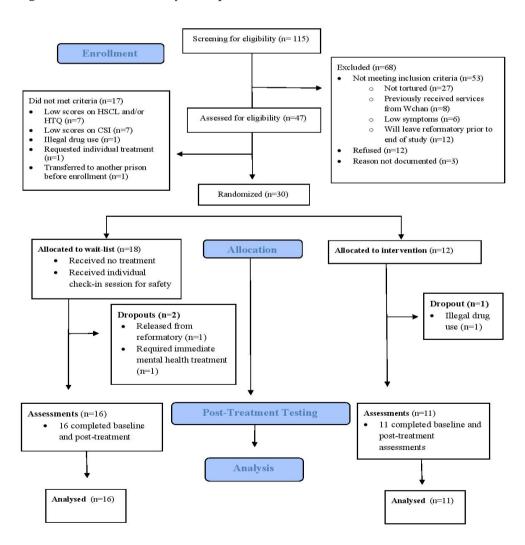
cables, and kicking, slapping, and punching. The two groups, with the dropouts excluded, were examined prior to comparing changes in the means. They were equivalent based on demographics and baseline measures used except for the PSQI global, with the wait-list group having a higher mean score but both

groups demonstrating clinically significant sleeping problems per the measure's established cut-off score.

### Outcomes

The primary outcome measures in this study were symptoms of persistent nociplastic pain,

Figure 1. Flow Chart of Study Participants



anxiety, depression, post-traumatic stress disorder. These were based on, respectively, Central Sensitization Inventory Part A (CSI), Hopkins Symptom Checklist-25 (HSCL-25), and Harvard Trauma Questionnaire Part 4 (HTQ).

Statistically significant improvement was seen in the treatment group in all measures. The change in treatment group (n=11) scores were statistically significantly greater than the wait list group (n=16) across all measures (see Table 5).

Statistically significant within-group improvement was seen in the treatment group in all measures. The change in treatment group scores were statistically significantly greater than the wait list group across all measures (see Table 5). All participants in both groups initially met criteria to be considered symptomatic with anxiety and/or depression. At post, 15 out of 16 participants in the wait-list group met this criterion and 0 out of 11 in the treatment group. At baseline, 13 participants in the wait-list group and 8 in the treatment group met criteria for post-traumatic stress disorder. At post, 14 met criteria in the waitlist group and 0 in the treatment group. At baseline, per the inclusion criteria, all participants met criteria for nociplastic pain based on the Central Sensitization Inventory Part A total score. At post, 15 out of 16 participants from the wait-list group met criteria and 1 out of 11 from the treatment group met criteria.

## Discussion:

It was hypothesized that the interdisciplinary treatment program would be a promising treatment approach for this population that often presents with persistent nociplastic pain, PTSD, anxiety, and/or depression. The results of this study indicate a significant reduction in all of the symptoms measured immediately post-treatment. This suggests that

the interdisciplinary treatment program was effective for short-term reductions in symptoms of anxiety, depression, PTSD, nociplastic pain and functional problems.

The authors conjecture that the significant effect illustrated by this interdisciplinary treatment program for survivors of torture may be attributed to the coordinated and simultaneous provision of evidence-based physiotherapy and psychotherapy group interventions that aims to progress a client through stages of trauma recovery. Additionally, this treatment approach allows the client's physical and mental health to be addressed through a combination of interventions that aim to address biological, psychological, and social functioning which research has illustrated as essential to treating the complex conditions of PTSD, anxiety, depression, and pain (Asmundson et al., 2002).

The effectiveness of the treatment demonstrated in this study may also be attributed to the fact that aspects of the treatment are adapted to be relevant to the culture and context of the population. For example, a key component of the physiotherapy treatment is therapeutic neuroscience education which is a form of education that aims to change a person's thoughts and beliefs about their pain by teaching them about the biology that contributes to pain (Zimney et al., 2013). Previous research has recommended this treatment for persistent pain (Louw et al., 2016). However, many of the previously developed educational resources are designed in English and for a western-centric culture and context. Therefore, the physiotherapists delivering group physiotherapy treatment developed educational analogies, metaphors, stories, and pictures to be relevant to the culture, language, and context of treatment. These culturally and contextually adapted therapeutic neuro-

				anges from pre		· · · -			
	Treatment Group At Baseline (T0)			Wait-list Group At Baseline (T0)		Treatment Group Change (T0 to T1)		Wait-list Group Change (T0 to T1)	
		IQR		IQR		IQR		IQR	
	M	(1 <sup>st</sup> , 3 <sup>rd</sup> )	M	(1 <sup>st</sup> , 3 <sup>rd</sup> )	M	(1st, 3rd)	M	$(1^{st}, 3^{rd})$	
		Н	opkins	Symptoms C	Checklist	-25			
Anxiety Score	3.0	2.1, 3.1	2.5	2.2, 3.0	1.3†‡	1.1, 2.0	0.1	-0.1. 0.7	
DSM IV De- pression	2.8	2.3, 3.2	2.7	2.5, 3.1	1.8†‡	1.3, 2.0	-0.0	-0.2, 0.5	
Score Total Score	2.8	2.3, 3.1	2.6	2.3, 2.9	1.8†‡	1.3, 2.0	0.0	-0.1, 0.4	
Harvard Trauma Questionnaire - Part 4									
DSM – IV Score	2.8	2.5, 3.2	2.7	2.4, 3.0	1.8†‡	1.4, 2.0	-0.2	-0.5, 0.2	
Total Score	2.7	2.5, 3.0	2.7	2.5, 2.8	1.5†‡	1.4, 1.7	-0.1	-0.4, 0.1	
Central Sensitization Inventory Part A									
Total Score	57	48.0, 62.0	53.0	44.0, 65.0	41.0†‡	37.0, 45.0	1.5	-4.0, 13.8	
		I	Pittsbur	gh Sleep Qu	ality Inde	ex			
Global Score	12	10.0, 13.0	13.5	12.3, 15.8	9.0†‡	5.0, 11	3.0	-0.5, 7.0	
			Gener	al Self Effica	acy Scale				
Total score	29	20.0, 37.0	29.0	20.0, 36.0	-8.0†‡	-14.0, -1.0	2.0	-5.0, 7.0	
		Patier	it-Spec	ific Function	al Scale	(PSFS)			
Goal 1	1.0	0.0, 4.0	2.0	0.0, 3.8	-6.0†‡	-8.0, -4.0	0.0	-2.0, 0.0	
Goal 2	3.0	0.0, 5.0	2.5	2.0, 3.0	-4.0†‡	-6.0, -3.0	0.0	-1.8, 0.0	
Goal 3	3.0	2.0, 3.0	2.0	0.0, 4.0	-6.0†‡	-6.0, -2.0	-0.5	-2.0, 0.0	

Note. M = Median. IQR = Interquartile range.  $1^{st}$  = The first quartile.  $3^{rd}$  = The third quartile.

<sup>†</sup> p<.01 within-group difference T0 to T1

<sup>‡</sup> p<.01 between-group difference compared to Wait-List Group

science education resources are integrated into the studied treatment service.

It is important to recognize that the participants in the study continued to live within the prison without changes to their sentences or living conditions and with ongoing exposure to the stress and trauma of these conditions. Therefore, this study indicates that it may be possible to address symptoms of mental and physical health in contexts where the ongoing stress cannot be abolished. Previous research has established that various factors contribute to a person's ability to remain resilient and have limited deleterious effects on health in the face of ongoing stress and trauma (Sareen, 2014). The authors surmise that the treatment service used in the present study equips persons with adaptive beliefs and coping strategies that allows them to better self-manage stress and other factors contributing to poor functioning.

This pilot study allows the researchers to explore the feasibility of conducting internationally recognized treatment approaches and research within the context of a prison in Kurdistan, a post-conflict area, with local healthcare professionals. The successful implementation of this study is a positive indicator of what is possible in this setting. This pilot study proved feasible most likely as a result of the authors' and Wchan's trusted relationships, social capital, and its commitment to and engagement with local stakeholders, including prison leadership, government, and the participant population. The authors also recognize that capacity building activities designed to equip Wchan's clinical team with the skills to deliver internationally recognized research practices was required to conduct this study effectively. The members of the clinical team participated in an estimated 20 hours of training to build their skills in research ethics and principles and procedures of data collection and data management. Additionally, they participated in an estimated 15 hours of interdisciplinary team discussion during the study and an estimated 30 hours of direct clinical supervision of the data collection and treatment interventions. International research partners provided external review and consultation, resources for research, and statistical analyses.

The feasibility of future research was also strengthened by participant compliance. Compliance was excellent as demonstrated by an 88.43% attendance rate for the group treatment service, after removing the one dropout within this group. Participants never reported not attending the group due to disinterest, but rather the most common reasons for absence were being required to work within the prison, acute illness, and legal procedures. Only three dropouts occurred over the span of the study with the reasons for drop-out not being related to the individual's dislike or disinterest in the treatment service (see Figure 1). Based on the experience of this pilot study, it would be feasible to implement a future large-scale controlled study. Recommended amendments for a future definitive trial include validating Kurdish versions of all measures, implementing blinding procedures and long-term follow up measures, and including several arms within the trial so that a comparison can be made between the impact of discipline specific treatment and the interdisciplinary treatment program.

### Limitations

The study has some important limitations: the small sample size limits generalizability of results. In addition, this study lacked long-term follow-up limiting the extent to which long-term effects of the treatment can be evaluated. The authors also recognize additional limitations in the study design. Bias in the data collection and reporting is possible

given this study was not blinded and relied on self-reported outcomes. Also, despite being validated in other settings, several of the Kurdish Sorani versions of the outcome measures were not validated for use in the current study setting. Finally, based on the small sample size and study design, it is not possible to identify which aspect of the treatment services have a more significant effect and whether the interdisciplinary nature of the program is more beneficial than one discipline. Lastly, feasibility of a few components that would be required for a large-scale study were not explored including blinding procedures and long-term follow up measures.

### Conclusion

This pilot study provides preliminary evidence for the effectiveness of culturally- and contextually-appropriate interdisciplinary physiotherapy and psychotherapy group treatment approach for survivors of torture in a male prison in Kurdistan. It also demonstrates the feasibility of implementing research that follows international research standards and practices within under-researched settings like prisons and post-conflict areas. A large scale randomized controlled study is warranted and feasible to further examine the treatment effects of this approach, as well as, to examine the long-term impact of the treatment.

### **Acknowledgements:**

Michael Shoemaker PT, DPT, PhD. Supported study design, data analysis, and writing.

Research Team (in alphabetical order):
Dara Faiq Abdalrahman
Chro Qadr Muhamad Ameen
April Gamble
Hiwa Omer Ismail
Salah Hassan Rahim
Yadgar Ismaiel Mohamed

Ahmed Amin Mohammed Mohammed Azeez Raheem Goran Mohamad Rasool Sarwar Kareem Saeed Fariq Karim Saeed Kawa Peshraw Salih Mina Harith Zaki

### **Funding:**

Service provision for survivors of torture that participated in this study is supported by United Nations Human Rights - United Nations Voluntary Fund for Victims of Torture

### References

- Amnesty international ltd. (2014). Torture in 2014 30 Years of Broken Promises. Torture in 2014 30 Years of Broken Promises (pp. 1-50). London.
- Amris, K., & Williams, A. C. D. C. (2015). Managing chronic pain in survivors of torture. *Pain Management*, 5(1), 5–12. doi: 10.2217/pmt.14.50
- Asmundson, G. J., & Katz, J. (2009). Understanding the co-occurrence of anxiety disorders and chronic pain: state-of-the-art. *Depression and Anxiety*, 26(10), 888–901. doi: 10.1002/da.20600
- Asmundson, G. J., Coons, M. J., Taylor, S., & Katz, J. (2002). PTSD and the Experience of Pain: Research and Clinical Implications of Shared Vulnerability and Mutual Maintenance Models. *The Canadian Journal of Psychiatry*, 47(10), 930–937. doi: 10.1177/070674370204701004
- Bair, M. J., Robinson, R. L., Katon, W., & Kroenke, K. (2003). Depression and Pain Comorbidity. Archives of Internal Medicine, 163(20), 2433. doi: 10.1001/ archinte.163.20.2433
- Breivik, H., Eisenberg, E., & O'Brien, T. (2013). The individual and societal burden of chronic pain in Europe: the case for strategic prioritisation and action to improve knowledge and availability of appropriate care. BMC Public Health, 13(1). doi: 10.1186/1471-2458-13-1229
- Bunn, M., Goesel, C., Kinet, M., & Ray, F. (2016). Group treatment for survivors of torture and severe violence: A literature review. *Torture Journal*, 26(1), 23. doi: 10.7146/torture. v26i1.108062
- Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment - Addendum to Initial reports of States parties

- due in 1995 (PDF). U.S. Department of State. U.S. Department of State.
- Darnall, B. D., & Sazie, E. (2012). Pain Characteristics and Pain Catastrophizing in Incarcerated Women with Chronic Pain. Journal of Health Care for the Poor and Underserved, 23(2), 543–556. doi: 10.1353/hpu.2012.0042
- Dibaj, I., Halvorsen, J. Ø., Kennair, L. E. O., & Stenmark, H. I. (2017). An evaluation of combined narrative exposure therapy and physiotherapy for comorbid PTSD and chronic pain in torture survivors. *Torture Journal*, 27(1). doi: 10.7146/torture.v27i1.26534
- Dirkzwager, A. J. E. (2019). The longitudinal course of prisoners' mental health problems during and after imprisonment. *European Journal of Public Health*, 29(Supplement\_4). doi: 10.1093/eurpub/ ckz185.759
- Fazel, S., & Danesh, J. (2002). Serious mental disorder in 23 000 prisoners: a systematic review of 62 surveys. *The Lancet*, 359(9306), 545–550. doi: 10.1016/s0140-6736(02)07740-1
- Fazel, S., & Seewald, K. (2012). Severe mental illness in 33 588 prisoners worldwide: systematic review and meta-regression analysis. *British Journal of Psychiatry*, 200(5), 364–373. doi: 10.1192/bjp. bp.111.096370
- Fazel, S., Hayes, A. J., Bartellas, K., Clerici, M., & Trestman, R. (2016). Mental health of prisoners: prevalence, adverse outcomes, and interventions. *The Lancet Psychiatry*, 3(9), 871– 881. doi: 10.1016/s2215-0366(16)30142-0
- Gifford, E. J. (2019). How Incarceration Affects the Health of Communities and Families. *North Carolina Medical Journal*, 80(6), 372–375. doi: 10.18043/ncm.80.6.372
- Heartland Alliance International. (2015). Torture and ill-treatment in detainees in Iraq and the Iraqi Kurdistan Region A Report on Prevalence and Practice. Torture and ill-treatment in detainees in Iraq and the Iraqi Kurdistan Region A Report on Prevalence and Practice (pp. 1–80). Chicago, IL.
- Heckman, C. J., Cropsey, K. L., & Olds-Davis, T. (2007). Posttraumatic stress disorder treatment in correctional settings: A brief review of the empirical literature and suggestions for future research. Psychotherapy: Theory, Research, Practice, Training, 44(1), 46–53. doi: 10.1037/0033-3204.44.1.46
- Horn KK, Jennings S, Richardson G, Vliet DV, Hefford C, Abbott JH. The patient-specific functional scale: psychometrics, clinimetrics, and application as a clinical outcome measure. J Orthop Sports Phys Ther. 2012 Jan;42(1):30-42. doi: 10.2519/jospt.2012.3727. Epub 2011 Oct

- 25. PMID: 22031594.
- IASP Terminology. (2017, December 14). https://www.iasp-pain.org/Education/Content.aspx?ItemNumber=1698
- Kabengele, E. M., Chastonay, P., & Frey, C. (2014). Economic burden of torture for a refugee host country: development of a model and presentation of a country case study. ClinicoEconomics and Outcomes Research, 165. doi: 10.2147/ceor.s56431
- Kinner, S. A., & Young, J. T. (2018). Understanding and Improving the Health of People Who Experience Incarceration: An Overview and Synthesis. *Epidemiologic Reviews*, 40(1), 4–11. doi: 10.1093/epirev/mxx018
- Kurklinsky, S., Perez, R. B., Lacayo, E. R., & Sletten, C. D. (2016). The Efficacy of Interdisciplinary Rehabilitation for Improving Function in People with Chronic Pain. *Pain Research and Treatment*, 2016, 1–6. doi: 10.1155/2016/7217684
- Leder, D. (2018). Coping with chronic pain, illness and incarceration: what patients and prisoners have to teach each other (and all of us). *Medical Humanities*, 44(2), 113–119. doi: 10.1136/medhum-2017-011426
- Loughran, M., & King, T. (2004). Developing Prison Inreach Services for Female Prisoners. *Mental Health Review Journal*, 9(2), 34–37. doi: 10.1108/13619322200400020
- Louw, A., Zimney, K., Puentedura, E. J., & Diener, I. (2016). The efficacy of pain neuroscience education on musculoskeletal pain: A systematic review of the literature. *Physiotherapy Theory and Practice*, 32(5), 332–355. doi: 10.1080/09593985.2016.1194646
- Mayer, TG, Neblett, R, Cohen, H, Howard, KJ, Choi, YH, Williams, MJ, Perez, Y, Gatchel, RJ. The Development and Psychometric Validation of the Central Sensitization Inventory (CSI). *Pain Pract* 2012; 12(4): 276-85.
- Massoglia, M. (2008). Incarceration as Exposure: The Prison, Infectious Disease, and Other Stress-Related Illnesses. *Journal of Health* and Social Behavior, 49(1), 56–71. doi: 10.1177/002214650804900105
- Mcgeary, D., Moore, M., Vriend, C. A., Peterson, A. L., & Gatchel, R. J. (2011). The Evaluation and Treatment of Comorbid Pain and PTSD in a Military Setting: An Overview. *Journal of Clinical Psychology in Medical Settings*, 18(2), 155–163. doi: 10.1007/s10880-011-9236-5
- McKernan, Lindsey C. PhD; Johnson, Benjamin N. MS; Crofford, Leslie J. MD; Lumley, Mark A. PhD; Bruehl, Stephen PhD; Cheavens, Jennifer S. PhD\*Posttraumatic Stress Symptoms Mediate

- the Effects of Trauma Exposure on Clinical Indicators of Central Sensitization in Patients With Chronic Pain, *The Clinical Journal of Pain*: May 2019 - Volume 35 - Issue 5 - p 385-393 doi: 10.1097/AIP.00000000000000089
- Mollayeva T, Thurairajah P, Burton K, Mollayeva S, Shapiro CM, Colantonio A. The Pittsburgh sleep quality index as a screening tool for sleep dysfunction in clinical and non-clinical samples: A systematic review and meta-analysis. *Sleep Med Rev.* 2016 Feb;25:52-73. doi: 10.1016/j. smrv.2015.01.009. Epub 2015 Feb 17. PMID: 26163057
- Olsen, D. R., Montgomery, E., Bøjholm, S., & Foldspang, A. (2007). Prevalence of pain in the head, back and feet in refugees previously exposed to torture: A ten-year follow-up study. *Disability and Rehabilitation*, 29(2), 163– 171. doi: 10.1080/09638280600747645
- Penal Reform International. (2015). Global Prison Trends 2015. Global Prison Trends 2015(pp. 1–44). London
- Rasmussen A, Verkuilen J, Ho E, Fan Y. Posttraumatic stress disorder among refugees: Measurement invariance of Harvard Trauma Questionnaire scores across global regions and response patterns. *Psychol Assess*. 2015;27(4):1160-1170. doi:10.1037/pas0000115
- Sareen, J. (2014). Posttraumatic Stress Disorder in Adults: Impact, Comorbidity, Risk Factors, and Treatment. *The Canadian Journal of Psychiatry*, 59(9), 460–467. doi: 10.1177/070674371405900902
- Schwarzer, R., & Jerusalem, M. (1995). Generalized Self-Efficacy scale. In J. Weinman, S. Wright, & M. Johnston, Measures in health psychology: A user's portfolio. Causal and control beliefs (pp. 35-37). Windsor, UK: NFER-NELSON.
- Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & Ommeren, M. V. (2009). Association of Torture and Other Potentially Traumatic Events With Mental Health Outcomes Among Populations Exposed to Mass Conflict and Displacement. Jama, 302(5), 537. doi: 10.1001/ JAMA.2009.1132
- Tay, A., Jayasuriya, R., Jayasuriya, D. et al. Measurement invariance of the Hopkins Symptoms Checklist: a novel multigroup alignment analytic approach to a large epidemiological sample across eight conflictaffected districts from a nation-wide survey in Sri Lanka. Confl Health 11, 8 (2017). https://doi. org/10.1186/s13031-017-0109-x
- Tsang, A., Korff, M. V., Lee, S., Alonso, J., Karam, E., Angermeyer, M. C., ... Watanabe, M. (2008).

- Common Chronic Pain Conditions in Developed and Developing Countries: Gender and Age Differences and Comorbidity With Depression-Anxiety Disorders. *The Journal of Pain*, 9(10), 883–891. doi: 10.1016/j.jpain.2008.05.005
- Tsur, N., Defrin, R., & Ginzburg, K. (2017).

  Posttraumatic Stress Disorder, Orientation to Pain, and Pain Perception in Ex-Prisoners of War Who Underwent Torture. *Psychosomatic Medicine*, 79(6), 655–663. doi: 10.1097/psy.00000000000000461
- Tsur, N., Shahar, G., Defrin, R., Lahav, Y., & Ginzburg, K. (2017). Torturing personification of chronic pain among torture survivors. *Journal* of *Psychosomatic Research*, 99, 155–161. doi: 10.1016/j.jpsychores.2017.06.016
- United Nations: Draft Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment. (1984). *International Legal Materials*, 23(5), 1027–1037. doi: 10.1017/ s0020782900030990
- Weiss, W. M., Uguento, A. M., Mahmooth, Z., Murray, L. K., Hall, B. J., Nadison, M., ... Bolton, P. (2018). Mental health interventions and priorities for research for adult survivors of torture and systematic violence: a review of the literature. *Torture Journal*, 26(1), 27. doi: 10.7146/torture.v26i1.108061
- Wildeman, C., Goldman, A. W., & Lee, H. (2019). Health Consequences of Family Member Incarceration for Adults in the Household. *Public Health Reports*, 134(1\_suppl). doi: 10.1177/0033354918807974
- Williams, A. C. D. C., Peña, C. R., & Rice, A. S. (2010). Persistent Pain in Survivors of Torture: A Cohort Study. Journal of Pain and Symptom Management, 40(5), 715–722. doi: 10.1016/j. jpainsymman.2010.02.018
- Williams, B. A., Ahalt, C., Stijacic-Cenzer, I., Smith,
  A. K., Goldenson, J., & Ritchie, C. S. (2014).
  Pain Behind Bars: The Epidemiology of Pain in Older Jail Inmates in a County Jail. *Journal of Palliative Medicine*, 17(12), 1336–1343. doi: 10.1089/jpm.2014.0160
- Yoon, I. A., Slade, K., & Fazel, S. (2017). Outcomes of psychological therapies for prisoners with mental health problems: A systematic review and meta-analysis. *Journal of Consulting and Clinical Psychology*, 85(8), 783–802. doi: 10.1037/ ccp0000214
- Zimney, K., Louw, A., & Puentedura, E. J. (2013). Use of Therapeutic Neuroscience Education to address psychosocial factors associated with acute low back pain: a case report. *Physiotherapy Theory and Practice*, 30(3), 202–209. doi: 10.3109/09593985.2013.856508

### The impact of Basic Body Awareness Therapy on balance and quality of life in survivors of hunger strike with Wernicke Korsakoff Syndrome

Hamiyet Yüce, Asst. Prof. Dr,1 Tanju Bahrilli, PT, MSc2

### Key points of interest

 Basic BAT improves dynamic balance and quality of life of survivors of hunger strike.

### Abstract

Introduction: The aim of this study is to examine the short and long-term results of Basic Body Awareness Therapy (Basic BAT) on balance confidence and health-related quality of life in the people with Wernicke Korsakoff Syndrome (WKS) who survived hunger strike.

Methods: A single case experimental design was used in the study. Basic BAT was applied to 4 people as a group therapy once a week for 12 weeks. Balance confidence was assessed with the Activities-specific Balance Confidence (ABC) Scale and health status was assessed with Health-related Quality of Life Questionnaire (SF-36 Short Form). Assessments were done before treatment, after treatment, at 3-month and 6-month follow-up.

Results: 4 patients achieved clinically significant improvements on balance. All patients achieved significant change in physical functioning and role physical subcategories of SF-36. Visual analysis showed that the improvement in the patients continued after the treatment during the follow-up period.

Conclusion: Basic BAT is effective as a physiotherapy method in the treatment of cerebellar problems, balance disorders and gait incoordination seen in WKS. The Basic BAT method may provide a new perspective for the rehabilitation of survivors of hunger strikes with WKS.

Keywords: Hunger strike, Basic Body Awareness Therapy, Wernicke Korsakoff Syndrome, balance confidence, quality of life.

### Introduction

In 1996 and 2000, political prisoners in Turkey joined together in a prolonged hunger strike to protest their torture and ill-treatment in prison, (Gökmen et al., 1997; Temuçin, 2001). Hunger strikes are very serious and may lead to severe neurological disorders and even death. The natural result of prolonged hunger is Wernicke's encephalopathy and Wernicke–Korsakoff syndrome (Başoğlu et al., 2006; Gökmen, 1998; Kirbas et al., 2008; Temuçin, 2001). Wernicke Encephalopathy (WE) and Korsakoff Syndrome (KS), which

Correspondence to: hyuce@bandirma.edu.tr

Bandirma Onyedi Eylul University, Faculty of Health Sciences, Department of Physiotherapy and Rehabilitation, Balıkesir, Turkey.

Hacettepe University, Faculty of Physiotherapy and Rehabilitation, Ankara, Turkey.
 Correspondence to: tanjubahrilli@gmail.com

are called Wernicke-Korsakoff Syndrome (WKS), are preventable, life-threatening neuropsychiatric syndromes caused by thiamine (Vitamin B1) deficiency (Isenberg-Grzeda et al., 2012; McCormick et al., 2011). WE is an acute syndrome, characterized by the clinical triad of nystagmus or ophthalmoplegia, mental state changes, and cerebellar dysfunctions (gait incoordination and trunk ataxia) (Sechi & Serra, 2007). KS is a residual syndrome in people with WE who cannot receive emergency and adequate treatment with thiamine replacement therapy. KS is characterized by cognitive and behavioural dysfunction in more serious cases (Arts et al., 2017; Isenberg-Grzeda et al., 2012). Although patients with KS continue implicit learning, they are unable to remember events that occurred half an hour prior (anterograde amnesia), but they are able to learn new motor skills or develop conditional reactions to stimuli (Arts et al., 2017; Sechi & Serra, 2007). Chronic alcoholism has been identified as the most common etiological cause. In addition, KS may develop in people on long-term hunger strikes, with anorexia nervosa, bariatric surgery, cancer deficiency with thiamine deficiency, vomiting, malnutrition, and who reject nutrition for various reasons (Isenberg-Grzeda et al., 2012; McCormick et al., 2011; Sechi & Serra, 2007).

A hunger strike situation negatively affects the health of the survivors of hunger strike and leaves irreversible damage. After a long-term hunger strike, the determining finding in the chronic period - the initial period - is WE and WKS (Başoğlu et al., 2006; Gürvit, 1997). Cerebellar dysfunction and ataxia, symptoms of WKS, have been reported to improve gradually in some cases while permanent in some others (Başoğlu et al., 2006; Gökmen, 1998; Kirbas et al., 2008; Temuçin, 2001). People with WKS who have with chronic ataxia typically stand with a broad support surface and

tend to fall forward or backward if they cannot support themselves physically. It has been observed that basic posture and walking take place with insecure, slow and small steps. Even in its mildest degree, performing the "tandem" gait was found to be difficult. Decreased associate arm movements and mild anteflexion posture are observed during gait (Gökmen, 1998; Temuçin, 2001). Ataxia and balance disorders affect the functional capacity of people with WKS, limit their independence in daily life activities and impair their quality of life (Sanchez-Lopez et al., 2017). Progressive long-term neurological conditions can affect both physical and emotional well-being with reduced health-related quality of life and require multidisciplinary health and social care interventions (Calvert et al., 2013). The imbalance is the most important factor in independent walking and daily activities. The main purpose in restorative physiotherapy is to improve balance and posture reactions to external stimuli and gravity changes, and to improve the quality of life by increasing people's independence whilst performing daily activities (Armutlu, 2010). Intensive rehabilitation programs are based on static and dynamic balance control, trunk stabilization training, multiple joint coordination exercises, and strategies to prevent falling (Freund & Stetts, 2010; W. Ilg et al., 2010).

Basic BAT is a method that focuses on postural stability and dynamic balance. Movements are made by maintaining the body's balance line and the ability to use stability limits (A. Gyllensten, L. et al., 2019). This method includes lying on the ground, sitting, standing exercises and walking, relational movements, as well as the use of sound and massage. Basic BAT exercises represent a sum of daily movements. Movements are made simple, small, soft, rhythmic and can be adapted to daily movements (Liv H. Skjaerven et al., 2018). When doing the movements, it is important for the individual to

pay attention to both "what they do" and "what they experience during the movements". Basic BAT also stimulates the awareness and movement performance of the individual. The therapist encourages the person to act with more appropriate postural control, balance, natural breathing and coordination (Gyllensten et al., 2003b). In Basic BAT, the aim is to establish relation with the ground (grounding), increasing stability in the centre line, breathing and flow; to improve sensory-motor awareness, dysfunctional movement patterns, perception of habits and motion control (Gyllensten et al., 1999). Positive effects of Basic BAT have been shown for improve quality of life, improve self-efficacy (Catalan-Matamoros et al., 2011), body awareness, balance and movement control (Gyllensten et al., 2003b; Hedlund & Gyllensten, 2010). In people who had suffered a stroke, Basic BAT, was important for balance function and daily activities (Ahn, 2018; Lindvall et al., 2016).

Gait incoordination, imbalance and fear of falling are the most difficult clinical tables in ataxic people with WKS. These syndromes cause serious deficits in the physical, psychological and social dimensions of life, leading to a significant decrease in daily activities and quality of life (Sánchez-López et al., 2017). The aim of this study is to evaluate the effects of BAT intervention on balance confidence and health-related quality of life in people with WKS.

### Method

Study design

The study was originally designed as a controlled cohort study for the effectiveness of the BBAT approach in people with WKS. Participation in the study was low due to reasons such as participants not staying in the same place for sufficient time, financial problems,

lack of permission from their jobs, not accepting new and different treatments, and the long duration of body awareness training. The study design was changed and arranged as a single-case experimental design (SCED). To examine the effect of Basic BAT for patients with WKS, an A-B-A design with a three- and six-month follow-up was applied. Data from self-report measures were collected at baseline (A: pre-treatment, the first day of treatment), after 12 weeks, at the end of intervention stage (B: Post-treatment the last day of treatment), at the second baseline, at 3 month follow up (A1) and at 6-month follow up (A2). All patients received Basic BAT one day per week for 12 weeks. Each session lasted for 90 minutes. Qualitative data of patient perspectives from interviews was also collected but is not included here. The evaluations and Basic BAT application were carried out by an experienced physiotherapist on Basic BAT. Statistical analysis of the study was done by another evaluator. In the first baseline phase (pre-treatment) patients did not receive any physiotherapy.

After baseline assessment, during the intervention phase, Basic BAT was applied to four patients as group therapy. Those with issues with standing independently did exercises by standing next to the grab bar. The Basic BAT group therapy was led by a physiotherapist who has therapeutic competence as a "B-BAT Therapist". The program included basic movements to experience relationship with the balance line, grounding, awareness of stability limits and movement coordination. Specifically, the purpose of each therapy session was to increase the person's physical, physiological, emotional and existential awareness (Gyllensten et al., 2003b). Slow and rhythmic movements were performed by combining with breath and sound. Patients were instructed to focus their attention on their body and breathe when doing exercises. Each session consisted of six parts (table 1). Group therapy is intended for patients to provide social support for each other, to share their experiences, and to gain awareness both individually and as a group. Group therapy began by focusing on the spine to regulate muscle tone and breath, and then continued with body alignment. The exercises were done whilst keeping the balance line within stability limits in sitting and standing positions. The sessions ended with special massage techniques performed by patients on each other. People were asked to implement and to integrate their new movement principles they experienced during each therapy session into daily life movements and actions.

### **Participants**

Four patients from the 1996-2000 hunger strike, who were followed by the Human Rights Foundation of Turkey (HRFT), were included in the group study between March 2016 and December 2016. Written informed consent forms and information in Turkish were provided, read and signed by the patients. The Human Rights Foundation Ethics Committee granted approval for the data collection based on the ethical principles of the Declaration of Helsinki (No: 2020/10). Inclusion criteria; those with cerebellar ataxia with WKS diagnosed by HRFT medical council, who were able to stand without support according to [Functional Ambulation Classification (FAS)>0] and who accepted to volunteer in the 12-week study. Age, vitaminfree hunger duration and disease duration on people diagnosed with WKS after the hunger strike is given in table 1. Vitamin supplements were used to prevent worsening of health conditions of hunger strikers and durations are recorded. All had gait and balance dis-

**Table 1**. Basic Body Awareness Therapy Programme

Duration: 90 minutes	
1) Meeting patients and physiotherapist	Talking about his/herself and the weekly movement experiences
2) Lying down exercises	Body scanning, breathing exercises, opening/ closing exercise, comfortable streching exercises
3) Sitting Exercises	Body alignment, breathing exercises, pushing the floor with feet one by one whilst keeping the balance line
4) Standing Exercises	Body alignment, awareness of stability, of limits, going up-down on balance line, weight transfer on wide step, turning coordination, symmetrical and asymmetrical arm swing with rhythmic knee flexion, wave and push- hands exercises
5) Related exercises and massage	Sitting massage to each other
6) Ending the session	Sharing reflections about experiences of the session with the group.

orders. Three people were independent in their ambulation, and one person required a walking aid.

### Instruments

The effect of Basic BAT was evaluated with the Activities-specific Balance Confidence Scale and Health-related Quality of Life Questionnaire (SF-36).

Activities-specific Balance Confidence (ABC) Scale: Self administered 16-item numerical assessment scale. It evaluates walking balance (such as walking around the house, walking on icy ground). A value of 0 indicates that there is no balance, and a value of 100 indicates that the activity shown is completely safe. It was translated into Turkish and a cultural adaptation, validation and reliability study was carried out (Ayhan et al., 2014). It shows excellent internal consistency ( $\alpha$  =0 .95) (Karapolat et al., 2010).

Health-related Quality of Life Questionnaire (SF-36 Short Form): The questionnaire was translated into Turkish including a validity and reliability study (Kocyigit et al., 1999). It consists of 36 items that measure eight subscales; Physical Functioning (PF), Role Physical (RP), Social Functioning (SF), Mental Health (MH), Role Emotional (RE), Vitality (VT), Bodily Pain (BP), General Health (GH). The subscales evaluate health between 0-100 and an increase in score represents an improved quality of life (Kocyigit et al., 1999). The standard version of SF-36 evaluating the last four weeks was used in this study (Demiral et al., 2006).

### Visual and statistical analysis

The ABC Scale, PF and RP scores of the patients are provided in the figures below, respectively. Reliable changes for other SF-36 subcategories were not given because they were not significant (Table 3). In the visual

analysis of the figures, only the changes in the levels were calculated due to the low assessment points in each phase. The trend overlap and stability assessment points are not given because they were insufficient.

The method of separation from dysfunction was used to determine whether reliable changes in the ABC Scale and SF-36 scores of people were clinically significant. In general, this method is assumed to show a clinically significant improvement when a person begins treatment in a dysfunctional state and ends in an improved functional state. Specifically, a clinically significant improvement was defined as a robust improvement of two or more standard deviations in each measure of the person's pre-treatment (and follow-up) scores (Kazdin, 2011).

A reliable change index (RCI) was calculated for each measurement to determine whether changes in scores were reliable, and not due to standard measurement error. This is calculated by dividing the difference between post-treatment (and follow-up) and pre-treatment scores by the standard difference error between the two scores. When RCI is greater than 1.96 or lower than -1.96, a reliable change has occurred (Jacobson & Truax, 1991). Descriptive statistics were given for demographic data. For the variables determined by the measurement, the study calculated the mean and standard deviation. Windows based SPSS 23.0 analysis program was used for statistical analysis.

### Results

4 individuals (3 female and 1 male) participated in the study. Their average age is 47.0±8.52 and their demographic information is given in Table 2.

Visual analysis of patients' ABC score and SF-36 subcategories scores in measurements revealed a clear trend towards improve-

ment before and after treatment (Figure 1, 2 and 33). In Figure 1, pre-and post-treatment level changes of people's ABC Scale scores are 39.7% (improving), 21.2% (improving), 111.5% (improving) and 34.5% (improving), respectively.

Reliable changes were observed in ABC Scale, PF and RP measurements, both before and after treatment (Table 3).

Clinically significant improvements were observed in subdomain PF and RP measurements of SF-36 and ABC Scale. Improvements in the remaining measures –MH, VT, RE, SF, BP and GH - have also been seen, but have not been so robust. The first hypothesis is that balance and physical processes of the study will improve significantly after treatment and will be continued in follow-up (Figure 1-2).

Table 2. Socio-demographic information of the participants

	Gender	Age	Hunger du	Hunger duration (day)	
	Gender	(year)	In 1996	In 2000	(year)
Person 1	F	39		93 / vitamin-free	15
Person 2	F	44	70 / vitamin-free		20
Person 3	F	59		244 / vitamin	15
Person 4	M	46	59 / vitamin-free	174 / vitamin	15

**Table 3.** Descriptive statistics and RCI&RC results (n=4)

	Mean (SD)	Mean (SD)	RCI (RC)
ABC Scale	39.94 (23.31)	55.06 (25.52)	14.45 (2.05)*
SF-36 Subscales			
Physical Functioning (PF)	41.25 (20.56)	51.25 (21.36)	8.06 (2.27)*
Role Physical (RP)	12.50 (25.00)	31.25 (31.46)	12.00 (3.06)*
Mental Health (MH)	41.58 (41.97)	58.38 (16.91)	69.78 (0.47)
Vitality (VT)	47.51 (13.23)	56.25 (10.31)	21.68 (0.79)
Role Emotional (RE)	69.00 (15.45)	72.00 (14.24)	11.33 (0.52)
Social Functioning (SF)	47.38 (12.30)	59.88 (25.6)	14.86 (1.65)
Bodily Pain (BP)	78.13 (9.40)	70.0 (5.34)	9.03 (-1.76)
General Health (GH)	41.25 (11.09)	42.5 (8.66)	12.30 (0.2)

RCI: Reliable change index, RC: Reliable change. \* Reliable change is clinical significance. (RC>+/-1.96)

٧٠

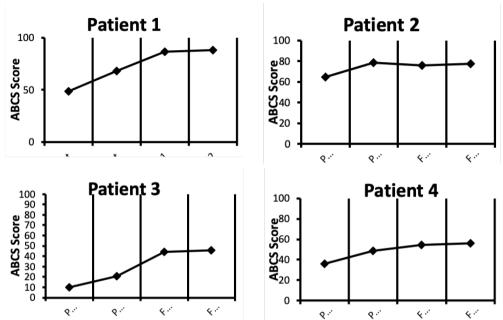
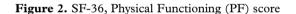
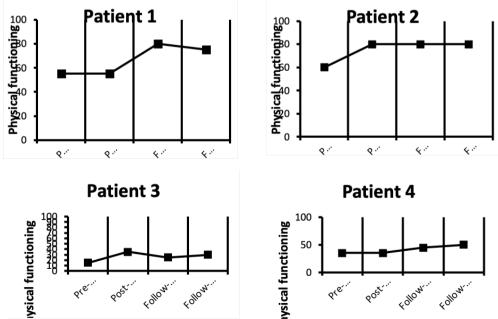
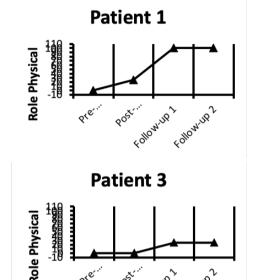


Figure 1. ABC Scale scores of the people according to their treatment periods

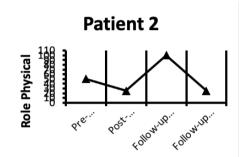


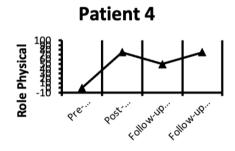




Egllowing J

Figure 3. SF-36, Role Physical (RP) score





### Discussion

In this study, Basic BAT was effective in patients who developed WKS after the hunger strike. While the ABC scores of patients with WKS increased in post-treatment and follow-up periods, there was an improvement in the physical functioning and role physical scores of the SF-36 subscales. The changes were reliable and over time in the ABC were found to be positive in terms of people's improved balance confidence. Individuals continued their physical development after the Basic BAT application (Figures 1, 2 and 3). The positive effect of follow-up periods supported permanent results in terms of balance, coordination and motor skills in these patients.

One of the most severe symptoms of WKS is cerebellar ataxia. Cerebellar ataxia can cause postural instability, walking difficulties

and falling due to the inability to protect the centre of gravity in the balance line during activity (Jacobi et al., 2015; Stolze et al., 2002). It shows that in people with degenerative cerebellar ataxia, falls occur very often, and these falls lead to injury or fear of falling. Fear of falling can further impair balance control. Most of the falls due to ataxia are classified as intrinsic and centre-of-mass falls, and the main reason for most of these falls is disturbance of balance (van de Warrenburg et al., 2005). Another reason for the underlying main causes of postural instability in ataxia seems to be the "locking" of the knees compensated by reducing the interaction between the body connections (Bakker et al., 2006). With Basic BAT, very little flexion of the knee joints, increasing pelvis and trunk movement (opening/ closing coordination) and providing alignment

of the body segments in the balance line are all important in the fall prevention strategy. The awareness of how to keep the body centre of the person in the balance line has increased, so balance and self-confidence may be improved. The patients with WKS stated that they walked by focusing on the balance line and that they were able to undertake more daily housework. Therefore, physiotherapy of the people with WKS should aim to correct gait abnormalities as well as to increase postural stability. One of the aims of physiotherapy in ataxia is to develop functional movements that improve the quality of life by increasing the independence of the patient while performing daily activities (Armutlu, 2010). It has been stated that intense continuous coordinative exercises improve coordination and dynamic balance in people with cerebellar ataxia, thus achieving personally meaningful goals in daily activities (Ilg et al., 2010; Ilg et al., 2009). In addition to body alignment and postural stability, we also focused on exercises that improve multi-joint coordination (opening / closing, turning and counter-rotation in the trunk) which are important for balance. Therapeutically, it is critical to be on the move, explore, experience, integrate and provide feedback on one's own movement coordination, and to gain more functional movement, strengthen their self and prepare for daily life (Liv Helvik Skjaerven et al., 2010). People with ataxia have been shown to have significant static and dynamic imbalance, which can directly affect their self-care, transfers and locomotion functions (Aizawa et al., 2013). It can lead to a significant decrease in daily life activities and social participation and can increase the dependency of people (Santos et al., 2018). Basic BAT strengthens the individual's "body ego" and increases confidence in one's body (A. L. Gyllensten et al., 2019). Although no qualitative assessment was made, one of the participants

mentioned an important development in our discussion following the group work. When she used a vacuum cleaner with oblique weight transfer movements that were learned from Basic BAT exercises, she moved "more comfortably without hurting her body and did not over-tighten her hands". This improvement in physical functioning and role physical subdomains may show that Basic BAT is effective as a physiotherapy method in the treatment of cerebellar findings like posture disorders and incoordination in people with WKS.

According to the results of this study, the patients with WKS showed positive developments nearly all subdomains of SF-36, if not significant. The people with WKS whose quality of life decreases due to fatigue, pain, impaired balance and fear of falling and whose are unable to carry out daily life activities, experience great deficits in their life in physical, psychological and social dimensions (Oudman & Wijnia, 2014). This may have a positive effect on increasing the mental concentration of the person, noticing and connecting with his body. With the continuation of the body alignment, there will be no excessive muscle tone; keeping the body in the balance line while walking will avoid excessive sway and therefore fatigue will not occur. In studies conducted, it is stated that fatigue decreases after Basic BAT and people feel more lively and comfortable (A. Gyllensten, L. et al., 2019). Overall, they were more active, and they lived a more stable life (Blaauwendraat et al., 2017).

The improvement after Basic BAT also affected the social lives of people with WKS. The fact that physical achievements resulted in independent movement increased social activity and enabled patients to better access society. Similarly, the restriction of daily activities seen in neurological patients affects social life negatively. On the other hand, Basic BAT interven-

tions in these patient groups enable people to take a more active role in daily life. The feedback we received during our group therapy is important to evaluate the healing process with Basic BAT. In addition, with the continued positive effects in the post-intervention period, the Basic BAT appears to positively affect the health of patients in the long-term.

### Limitations and strengths

The study had several limitations. In a study with a larger number of study participants, more meaningful results could be seen. Nevertheless, the design made it possible to study in-depth the effect of therapy in four chronic neurological cases. When the results of the study are examined, it is seen that it is close to the level of significance. In addition, according to participants' reflections on their experiences, all presented remarkable improvements in different daily activities. Another limitation is that the long-term nature of therapy causes many people not to participate. In addition, socio-economic conditions may make it difficult to continue therapy. If these patients with WKS can be reached with better opportunities, it can be clearly demonstrated that the Basic BAT is effective. We think that this study will be pioneering for future studies.

### Conclusion

As a result, the study shows that awareness of postural control with the Basic BAT in people with WKS will delay and limit physical deterioration, leading to loss of disability and independence in performing in walking and activities of daily living. This will lead to a wider accumulation of knowledge on sensorymotor rehabilitation and the improvements in the quality of life of patients. Basic BAT can provide a new perspective for the rehabilitation of people with WKS, however high-quality studies and evidence are needed to support

the intervention used.

### **Acknowledgements**

We would like to thank all the participants in the study and Foundation for Society and Legal Studies who contributed to the study by providing use of the exercise hall.

### References

- Ahn, S.-N. (2018). Differences in body awareness and its effects on balance function and independence in activities of daily living for stroke. *Journal of physical therapy science*, 30(11), 1386-1389. doi:10.1589/jpts.30.1386
- Aizawa, C. Y. P., Pedroso, J. L., Braga-Neto,
  P., Callegari, M. R., & Barsottini, O. G. P.
  (2013). Patients with autosomal dominant
  spinocerebellar ataxia have more risk of falls,
  important balance impairment, and decreased
  ability to function. Arquivos de Neuro-Psiquiatria, 71, 508-511.
- Armutlu, K. (2010). Ataxia: physical therapy and rehabilitation applications for ataxic patients. International Encyclopedia of Rehabilitation, 1-18.
- Arts, N. J., Walvoort, S. J., & Kessels, R. P. (2017). Korsakoff's syndrome: A critical review. Neuropsychiatric disease and treatment, 13, 2875-2890. doi:10.2147/NDT.S130078
- Ayhan, Ç., Büyükturan, Ö., Kirdi, N., Yakut, Y., & Güler, Ç. (2014). The Turkish version of the activities specific balance confidence (ABC) scale: its cultural adaptation, validation and reliability in older adults. *Turkish Journal of Geriatrics/Türk Geriatri Dergisi*, 17(2).
- Bakker, M., Allum, J. H., Visser, J. E., Grüneberg, C., van de Warrenburg, B. P., Kremer, B. H., & Bloem, B. R. (2006). Postural responses to multidirectional stance perturbations in cerebellar ataxia. *Experimental neurology*, 202(1), 21-35. doi:10.1016/j.expneurol.2006.05.008
- Başoğlu, M., Yetimalar, Y., Gürgör, N., Büyükçatalbaş, S., Kurt, T., & Seçil, Y. (2006). Neurological complications of prolonged hunger strike. European journal of neurology: the official journal of the European Federation of Neurological Societies, 13, 1089-1097. doi:10.1111/j.1468-1331.2006.01531.x
- Blaauwendraat, C. P. M., Levy Berg, A. P. P., & Gyllensten, A. L. P. P. (2017). One-year follow-up of basic body awareness therapy in patients with posttraumatic stress disorder. A

- small intervention study of effects on movement quality, PTSD symptoms, and movement experiences. *Physiother Theory Pract*, *33*(7), 515-526. doi:10.1080/09593985.2017.1325957
- Brazier, J. E., Harper, R., Jones, N. M., O'Cathain, A., Thomas, K. J., Usherwood, T., & Westlake, L. (1992). Validating the SF-36 health survey questionnaire: new outcome measure for primary care. *Bmj*, 305(6846), 160-164. doi:10.1136/bmj.305.6846.160
- Calvert, M., Pall, H., Hoppitt, T., Eaton, B., Savill, E., & Sackley, C. (2013). Health-related quality of life and supportive care in patients with rare long-term neurological conditions. Quality of Life Research, 22(6), 1231-1238. doi:10.1007/ s11136-012-0269-5
- Catalan-Matamoros, D., Helvik-Skjaerven, L., Labajos-Manzanares, M. T., Martínez-de-Salazar-Arboleas, A., & Sánchez-Guerrero, E. (2011). A pilot study on the effect of Basic Body Awareness Therapy in patients with eating disorders: a randomized controlled trial. *Clinical Rehabilitation*, 25(7), 617-626. doi:10.1177/0269215510394223
- Demiral, Y., Ergor, G., Unal, B., Semin, S., Akvardar, Y., Kıvırcık, B., & Alptekin, K. (2006). Normative data and discriminative properties of short form 36 (SF-36) in Turkish urban population. *BMC Public Health*, 6(1), 247. doi:10.1186/1471-2458-6-247
- Freund, J. E., & Stetts, D. M. (2010). Use of trunk stabilization and locomotor training in an adult with cerebellar ataxia: a single system design. *Physiotherapy theory and practice*, 26(7), 447-458.
- Gökmen, E. (1998). Wernicke-Korsakoff syndrome and neurologic, systematic complications of prolanged starvation. (Master thesis), Istanbul University, İstanbul.
- Gökmen, E., Gürvit H, Kınay D, Demirci N, Sahin H, Tuncay R, . . . Gürsoy, G. (1997). The clinical assessment of the participants in the hunger strike-death fast of may 1996 (Mayıs 1996 Açlık Grevi; Ölüm Orucu Katılımcılarının Klinik Değerlendirilmesi.). Türkiye İnsan Hakları Vakfı
- Gürvit, H. G., E; Kinay, D; Şahin, H; Demirci, N; Tuncay, R; Boyaciyan, A; Öge, E; Gürsoy, G. (1997). 1-27-07 Hunger strike-related Wernicke-Korsakoff's disease. Journal of the Neurological Sciences, 150, S39. doi:10.1016/S0022-510X(97)85019-8
- Gyllensten, A., L., Jacobsen, L. N., & Gard, G. (2019). Clinician perspectives of Basic Body Awareness Therapy (BBAT) in mental health physical therapy: An international qualitative study. J Bodyw Mov Ther, 23(4), 746-751.

- doi:10.1016/j.jbmt.2019.04.012
- Gyllensten, A. L., Ekdahl, C., & Hansson, L. (1999).
  Validity of the Body Awareness Scale-Health
  (BAS-H). Scandinavian journal of caring sciences,
  13(4), 217-226.
- Gyllensten, A. L., Hansson, L., & Ekdahl, C. (2003a).
   Outcome of basic body awareness therapy.
   A randomized controlled study of patients in psychiatric outpatient care. *Advances in Physiotherapy*, 5(4), 179-190.
- Gyllensten, A. L., Hansson, L., & Ekdahl, C. (2003b). Patient experiences of basic body awareness therapy and the relationship with the physiotherapist. *Journal of Bodywork and* movement therapies, 7(3), 173-183. doi: https://doi. org/10.1016/S1360-8592(02)00068-2
- Gyllensten, A. L., Jacobsen, L. N., & Gard, G. (2019). Clinician perspectives of Basic Body Awareness Therapy (BBAT) in mental health physical therapy: An international qualitative study. *Journal of Bodywork and movement therapies*, 23(4), 746-751. doi:https://doi.org/10.1016/j. jbmt.2019.04.012
- Hedlund, L., & Gyllensten, A. L. (2010). The experiences of basic body awareness therapy in patients with schizophrenia. *Journal of Bodywork and movement therapies*, 14(3), 245-254. doi:10.1016/j.jbmt.2009.03.002
- Ilg, W., Brotz, D., Burkard, S., Giese, M. A., Schols, L., & Synofzik, M. (2010). Long-term effects of coordinative training in degenerative cerebellar disease. Movement disorders: official journal of the Movement Disorder Society, 25(13), 2239-2246. doi:10.1002/mds.23222
- Ilg, W., Synofzik, M., Brötz, D., Burkard, S., Giese, M., & Schöls, L. (2009). Intensive coordinative training improves motor performance in degenerative cerebellar disease. *Neurology*, 73(22), 1823-1830. doi:10.1212/ WNL.0b013e3181c33adf
- Isenberg-Grzeda, E., Kutner, H. E., & Nicolson, S. E. (2012). Wernicke-Korsakoff-syndrome: under-recognized and under-treated. *Psychosomatics*, 53(6), 507-516. doi:10.1016/j.psym.2012.04.008
- Jacobi, H., Alfes, J., Minnerop, M., Konczak, J., Klockgether, T., & Timmann, D. (2015). Dual task effect on postural control in patients with degenerative cerebellar disorders. *Cerebellum Ataxias*, 2, 6. doi:10.1186/s40673-015-0025-z
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology*, 59(1), 12-19. doi:10.1037/0022-006X.59.1.12

Karapolat, H., Eyigor, S., Kirazli, Y., Celebisoy, N.,

- Bilgen, C., & Kirazli, T. (2010). Reliability, validity, and sensitivity to change of Turkish Activities-specific Balance Confidence Scale in patients with unilateral peripheral vestibular disease. *Int J Rehabil Res*, 33(1), 12-18. doi:10.1097/mrr.0b013e32832c0d72
- Kazdin, A. E. (2011). Single-case Research Designs: Methods for Clinical and Applied Settings: Oxford University Press.
- Kirbas, D., Sutlas, N., Kuscu, D.Y., Karagoz, N., Tecer, O., & Altun, U. (2008). The impact of prolonged hunger strike: clinical and laboratory aspects of twenty-five hunger strikers. *Ideggyogy* Sz, 61(9-10), 317-324.
- Kocyigit, H., Aydemir, O., Fisek, G., Olmez, N., & Memis, A. (1999). Validity and reliability of Turkish version of Short form 36: A study of a patients with romatoid disorder. *Drug Therapy*, 12, 102-106.
- Lindvall, M. A., Carlsson, A. A., & Forsberg, A. (2016). Basic Body Awareness Therapy for patients with stroke: Experiences among participating patients and physiotherapists. *Journal of Bodywork and movement therapies*, 20(1), 83-89. doi:10.1016/j.jbmt.2015.06.004
- McCormick, L. M., Buchanan, J. R., Onwuameze, O. E., Pierson, R. K., & Paradiso, S. (2011). Beyond alcoholism: Wernicke-Korsakoff syndrome in patients with psychiatric disorders. *Cogn Behav Neurol*, 24(4), 209-216. doi:10.1097/ WNN.0b013e31823f90c4
- Oudman, E., & Wijnia, J. W. (2014). Evolution of quality of life in patients with Korsakoff's syndrome in a long-term care facility. *Int Psychogeriatr*, 26(12), 2073-2079. doi:10.1017/s1041610214001719
- Sanchez-Lopez, C. R., Perestelo-Perez, L., Escobar, A., Lopez-Bastida, J., & Serrano-Aguilar, P. (2017). Health-related quality of life in patients with spinocerebellar ataxia. *Neurologia*, 32(3), 143-151. doi:10.1016/j.nrl.2015.09.002
- Santos, L. R., Teive, H. A. G., Lopes Neto, F. D. N., Macedo, A. C. B., Mello, N. M., & Zonta, M. B. (2018). Quality of life in individuals with spinocerebellar ataxia type 10: a preliminary study. Arq Neuropsiquiatr, 76(8), 527-533. doi:10.1590/0004-282x20180077
- Sechi, G., & Serra, A. (2007). Wernicke's encephalopathy: new clinical settings and recent advances in diagnosis and management. *Lancet Neurol*, 6(5), 442-455. doi:10.1016/S1474-4422(07)70104-7
- Skjaerven, L. H., Guitard Sein-Echaluce, L., & Catalan-Matamoros, D. (2018). Experiences from group basic body awareness therapy by

- patients suffering from fibromyalgia: A qualitative study AU Bravo, Cristina. *Physiotherapy theory and practice*, 1-13. doi:10.1080/09593985.2018. 1517286
- Skjaerven, L. H., Kristoffersen, K., & Gard, G. (2010). How can movement quality be promoted in clinical practice? A phenomenological study of physical therapist experts. *Physical therapy*, 90(10), 1479-1492. doi:10.2522/ptj.20090059
- Stolze, H., Klebe, S., Petersen, G., Raethjen, J., Wenzelburger, R., Witt, K., & Deuschl, G. (2002). Typical features of cerebellar ataxic gait. *J. Neurol Neurosurg Psychiatry*, 73(3), 310-312. doi:10.1136/jnnp.73.3.310
- Temuçin, Ç. (2001). Neurological tables after death fast / hunger strike (Ölüm orucu/açlık grevi sonrası nörolojik tablo).
- van de Warrenburg, B. P. C., Steijns, J. A. G., Munneke, M., Kremer, B. P. H., & Bloem, B. R. (2005). Falls in degenerative cerebellar ataxias. Movement disorders: official journal of the Movement Disorder Society, 20(4), 497-500. doi:10.1002/mds.20375

### The risk of sanctions following visits by monitoring bodies; a study conducted in Albania and Honduras

Marie Brasholt<sup>1</sup>, Brenda van den Bergh<sup>1</sup>, Erinda Bllaca <sup>2</sup>, Alba Mejía <sup>3</sup>, Marie My Warborg Larsen<sup>1</sup>, Anne Katrine Graudal Levinsen<sup>1</sup> and Jens Modvig<sup>1</sup>

### Key points of interest

- Monitoring places of detention is an important way of preventing torture.
- In this study from Albania and Honduras, prisoners reported actions prior to
  a monitoring visit like painting, cleaning and transfers, feeling pressured to
  act in specific ways during the visit,
  and experiencing threats, humiliations
  and physical violence following monitoring visits.
- The study concludes that there is a need to further improve monitoring methodology to avoid reprisals.

### Abstract

Introduction: Independent monitoring of places of detention is considered an effective way of preventing torture, but some reports have shown that detainees may face reprisals after engaging with monitors. This pilot study

- DIGNITY Danish Institute Against Torture, Denmark
  - Correspondence to: mbr@dignity.dk
- Albanian Rehabilitation Center for Trauma and Torture (ARCT), Albania Correspondence to: ebllaca@yahoo.com
- Centro de Prevención, Tratamiento y Rehabilitación de Víctimas de la Tortura (CPTRT), Honduras Correspondence to: cptrt@cablecolor.hn

aims to further investigate the nature and the extent of such reprisals.

Methods: A cross-sectional survey among male prisoners in 4 prisons in Albania and 4 in Honduras was carried out using an interviewer-administered, structured questionnaire and collecting additional narrative comments. Strict ethical guidelines were followed, and follow-up visits took place to detect any sanctions following participation in the study.

Results: 170 detainees were invited to participate of whom 164 accepted. Most were aware of monitoring visits and found them helpful. More than one-third reported that authorities had made special arrangements like cleaning and painting prior to the monitoring visits, and 34% of participants in Albania and 12% in Honduras had felt pressured to act in a specific way towards the monitors. One-fifth had experienced sanctions after the last monitoring visit, most often threats and humiliations. During the follow-up visits, the interviewees reported no incidents following their participation in the study.

Discussion: This pilot study has shown that it is possible to collect information about detainees' experience with monitoring visits through interviews while they are still detained. The fact that reprisals are reported prior to and following monitoring visits points to the need of improving monitoring methodology to further lower the risk. Further research is needed to

better understand the dynamics of the sanctions taking place with the aim of reaching a deeper understanding of potential preventive measures.

Keywords: Reprisals, sanctions, prison, monitoring, Albania, Honduras

### Introduction

Torture and ill-treatment most often take place in places where people are deprived of their liberty. Such places are largely inaccessible to public scrutiny. Independent monitoring of places of detention is considered one of the most effective ways of combating torture and ill-treatment. This was the rationale for the adoption of the Optional Protocol to the United Nations Convention Against Torture (OPCAT) in December 2002 that has as its objective to establish a system of regular visits by independent national and international bodies to places of detention. At the international level, the task of monitoring is assigned to the Subcommittee on Prevention of Torture (SPT), and at the time of writing, 65 countries worldwide have designated their National Preventive Mechanism (NPM) in accordance with the protocol (OHCHR, n.d.). The preventive monitoring visits carried out by the NPMs should lead to reports and concrete recommendations on how to improve the protection of persons deprived of liberty ("detainees"). A recent research based on 16 country-examples has shown that domestic monitoring practices were correlated with a positive impact on the incidence of torture (Carver & Handley, 2016).

During monitoring visits, external monitors typically interact with the detainees through interviews, meetings, and visits to wards, dormitories, workshops and other places where the detainees spend time. This enables the monitors to get a broad picture of

the situation in the place visited and to triangulate the information they obtain with what they learn from other sources such as interviews with prison staff and review of documentation. However, it comes at the price of potentially exposing informants and other detainees to subsequent risks.

Reports exist that indicate that monitoring visits in some contexts may be associated with a risk of reprisals or sanctions for the prisoners who are in contact with the monitoring team. One such report indicated that prisoners were threatened by the authorities prior to the visits and that prisoners who complained about ill-treatment were physically punished for it afterwards (Amnesty International, 2008). It has also been reported that reprisals in connection with monitoring visits occur in different kinds of establishments, such as in police detention, prisons and psychiatric establishments, and intimidation and reprisals have been reported in a number of different countries (Armenia, Azerbaijan, Bulgaria, Greece, Hungary, the Republic of Moldova, the Russian Federation, Spain, "the former Yugoslavic Republic of Macedonia" and Ukraine) (CPT, 2015).

The Association for the Prevention of Torture has published a document that includes a description of different reprisals that might occur and guidelines on how to prevent these from happening (APT, 2012), but to our knowledge, no scientific studies about reprisals following monitoring visits documenting their nature and extent have so far been undertaken and published.

DIGNITY (Danish Institute against Torture) works with partners in different countries to treat survivors of torture and to prevent torture from happening in the first place. The latter includes being a member of the Danish NPM. Some of DIGNITY's international partners have access to places of detention and have a long track record of working

inside these institutions which puts them in a unique position to study issues related to monitoring. Therefore, DIGNITY initiated a pilot study on reprisals in collaboration with two partner organizations, Albanian Rehabilitation Center for Trauma and Torture (ARCT, Albania) and Centro de Prevención, Tratamiento y Rehabilitación de Víctimas de la Tortura (CPTRT, Honduras). These partner organizations were selected based on their access to visit prisons, their capacity to interview prisoners and handle scientific data collection, and their motivation for collaboration and for mutual capacity building on research methods. Also, in the two selected countries, monitoring mechanisms exist and information is available about their activities.

Albania and Honduras ratified OPCAT in 2003 and 2006 respectively (OHCHR, n.d.), and both countries have designated their NPM. If visits from these NPMs have led to reprisals or sanctions for the prisoners, it has not been documented in either country. Some basic information about the countries and the prison setting is presented in table 1.

### Research aim and objectives

This study contributes to the knowledge and awareness about the conditions and treatments faced by detainees prior to and following visits from monitoring mechanisms. The immediate aim is to assess the extent to which detainees are coerced into giving certain information to the monitoring bodies, and whether they experience any kinds of retaliations from prison staff or fellow prisoners following monitoring visits.

### Methods

The study results included both quantitative and qualitative data. A cross-sectional survey among detainees was carried out using an interviewer-administered, structured questionnaire. In addition, narrative comments from the interviewees were taken for each question. The data collection took place in December 2015.

In Honduras, four prisons (in San Pedro Sula, Santa Bárbara, Danlí, and Comayagua) were selected by CPTRT based on three criteria: 1) access to visit the prison, 2) population quantity in each prison, and 3) ability to conduct 20 interviews in each prison center. In Albania, four prisons (in Fieri, Shën Kolli, Rrogozhina, and Peqini) were selected by ARCT based on four criteria: 1) capacity of accommodation, 2) sufficient level of security for interviewers, 3) highest number of life sentenced prisoners, and 4) mixed detained population (normal/high security, pre-trial/sentenced). Characteristics of the prisons are presented in table 2.

### Data collection

Data was collected through interviews structured by a questionnaire administrated by staff from ARCT and CPTRT. In Albania, the same group of four interviewers visited all four prisons consecutively, whereas in Honduras distinct teams of two interviewers visited the four prisons on the same day. All interviews were conducted in the participants' own language and they took place on the prison premises. The local prison authorities helped identify suitable locations for the interviews, so they could be conducted in privacy. The interviewers conducted a second visit to the prisons a few days after the interviews had been conducted to monitor the continued well-being of the detainees who had been interviewed.

Each interviewer answered 7 questions by the end of the data collection, assessing the selection process, the prisoners' understanding of the questions, the follow-up visits and if there had been any other contact between

0	5	
2		
ζ.	V	
C	D	
c	V	
٠	-	
c	V	
	-	
3	_	
0		
i	ש	
-	_	
- 5	_	
3		
	$\overline{}$	
Z	Z	
-	_	
C		
0	<u></u>	
n	n	
ñ	n	
Ô	ก	
0	ח	
0 000	מ	
0	מ	
Comilia		
C 0 001110/		
1/0 him	2000	
1/0	2000	
1/0		
1/0	2000	
1/0	2000	
1/0	2000	
TIIDE Wolling	O NE VOIDILLE	
TIIDE World	O NE VOIDILLE	
TILDE Wolfers	N 0 N 0 N 0 N 0 N 0 N 0 N 0 N 0 N 0 N 0	
OBTILDE Wolfings	OPION PROPER	
TIIDE World	OPION PROPER	

Country	Albania	Honduras
Human Development Index (UNDP, n.d.)	0.733	0.606
Torture and ill-treatment	Absence of comprehensive and disaggregated data on complaints, investigations, prosecutions and convictions of cases of torture and ill-treatment. Reports of high numbers of torture and ill-treatment during pretrial detention. Alleged victims not aware of complaint procedures, and some are afraid of counter-complaints and reprisals. Hardly any allegations of physical ill-treatment of prisoners by staff were received in any of the prisons visited by CPT in 2017 (OHCHR, 2012; UNHCR, 2018).	253 complaints of torture to the Office of the Special Prosecutor for Human Rights between 2009 and 2014, 912 complaints of torture and ill-treatmen to the Office of the National Commis sioner for Human Rights between 2010 and 2014. Several additional cases of torture and ill-treatment documented and reported by NGOs (OHCHR 2010; OHCHR, 2016).
Prison conditions	Physical conditions in some prisons largely satisfactory, whereas in others, conditions are poor with cells being severely overcrowded, damp and with lack of adequate ventilation and natural light.	153 violent deaths in the prison system from Jan. 2009 to June 2014, of these 81 in the San Pedro Sula prison. Prison substandard and characterized by over crowding, lack of proper hygiene, ventilation and sanitation. Lack of adequate staff. In-mate self-rule through so called <i>coordinadores</i> and loss of control by prison authorities resulting in corruption, violence, traffic in prohibited substances, and informal markets of many kinds.
Prison population ('Albania   World Prison Brief', 2019; 'Honduras   World Prison Brief', 2019)	Rate: 180 per 100.000 Prison population: 5,152 Pre-trial detainees: 41 % Average occupancy: 103.8 %	Rate: 229 per 100.000 Prison population: 20,506 Pre-trial detainees: 53.1 % Average occupancy: 193.5 %
Categories of prisons <sup>1</sup>	8 high security prisons 2 normal security prisons 4 specialized prisons (women, disabled and other special groups) 8 pre-trial detentions	2 high security prisons 25 normal security prisons 4 specialized prisons (women and minors)

Table 2. Prisons	characteristics		
Prison	Туре	Actual number of detainees/capacity (occupancy rate) <sup>1</sup>	Additional comments
Shën Kolli, Albania	Normal and high security, pre-trial detention, and youth	790-870/700 (113-124%)	
Rrogozhina, Albania	Normal security and pre-trial detention	418-485/343 (122-141%)	A fire in 2015 destroyed a section of the prison
Peqini, Albania	Normal and high security, life-sentence, and pre-trial detention	788-811/685 (118%)	
Fieri, Albania	Normal security and pre-trial detention	870/780 (112%)	New institution in function since 2014 housing detainees from Jordan Misja Prison
Danlí, Honduras	Normal security	704/204 (345%)	
Comayagua, Honduras	Previously known as penitentiary farm, maintains some farming activities	616/587 (105%)	A fire in 2012 led to the death of 362 detainees
Santa Barbara, Honduras	Normal Security	439/200 (220%)	
San Pedro Sula, Honduras	Normal Security	2983/800-900 (331-373%)	3 detainees killed and 32 hurt during prison riot in 2015

1 Information provided by ARCT and CPTRT

the interviewers and the prisoners after the interviews had taken place.

Both research partners provided a written report to DIGNITY with background information about the prisons and the data collection process.

### Questionnaire

The questionnaire consisted of 19 questions and was developed in English before it was translated into Albanian and Spanish by ARCT and CPTRT. The study participants

were encouraged to provide narrative comments to the problems raised in the structured interview, and short versions of these were written down by the interviewers. No part of the questionnaire contained personal information beyond name of prison and length of stay.

Study participants and sampling procedures 170 male prisoners were invited to participate in the study. Of these, six eventually did not participate resulting in a study population of 164 prisoners (participation rate: 96.5%), 79

in Albania and 85 in Honduras. 150 study participants (93.8%) were selected randomly for the interviews, while 10 (6.3%) were selected by their personal requests to take part in the study (missing data on selection process: 4). The randomization technique used differed from prison to prison. In Albania, prisoners were randomly selected by the interviewers, and a few of the prisoners also participated in another survey made by ARCT at the same time. In Danlí the interviewers chose specific areas in the prison and let those participate who wanted to. In Comayagua they chose two prisoners from 10 different households in the prison. In Santa Barbara they chose participants at random. In San Pedro Sula the participants were chosen at random by calling them out. If they did not want to participate, a substitute was chosen straight away. They did not use lists to choose participants, and all were chosen on the same day.

The interviewers identified language barriers in two of the interviews (1.2%) and other difficulties in nine interviews including the respondents being fearful that reprisals might take place and some respondents having difficulties understanding some of the questions due to low educational levels (5.5%). Where a language barrier or other issues hindered understanding of a question, the answer to the question was recorded as either "missing" or "don't know" depending on the response given.

### Data handling and analysis

After data collection, the data was uploaded to "SurveyXact", a data management program which allows for legality checks during input. Data was afterwards transferred to SPSS v.25 for analysis.

Only descriptive statistics were used since numbers were too small to allow for comparative analyses.

### Ethical considerations

### Ethical review

During the study it was ensured that the dignity, rights, and well-being of the research participants and the researchers involved were respected. The principles such as those detailed in the Helsinki Declaration concerning the Ethical Principles for Medical Research involving Human Subjects were adhered to (WMA, 2013). The following principles for data protection, anonymity, confidentiality and privacy were followed:

- Research partners were trained on the aim of the study and the data collection process.
- The interviewers were trained to be sensitive to individual, cultural and role differences.
- Participants were asked for informed consent at the start of the interview.
- The interviewers informed the participants:
  - About the aim and methodology of the study
  - About the intended use of the data
  - That they had the opportunity to ask questions about the research at any time
  - That their participation was voluntary
  - That they had the right to decline participation or withdraw from the study at any time
  - That, in the event of withdrawal, all their data would be deleted and removed from the study
  - That no person-attributable data would be collected and reported
- The participants did not receive any incentives for their participation
- Interviews took place in a private setting
- Referral was to be considered if a prisoner reported torture or other traumatization and was in urgent need of support or treatment

 All data was stored in SurveyXact anonymously<sup>1</sup> and remained confidential. The analysis of the data focused on general results and not on individual replies.

The research underwent internal ethical review according to requirements applying at DIGNITY. Since the collected data was non-attributable, the research was not subject to ethical review in Denmark by the Danish national ethical committee system, nor was permission from the Data Inspection Authority required. Ethical review was also not needed in Albania or Honduras for this type of study, and at the time of the study no ethical committee existed in the two countries.

### Prisoner safety

A key ethical challenge was to ensure the safety of the prisoners who participated in the interviews, since they could become victims of sanctions on the part of prison personnel or fellow prisoners for providing information to the interviewer. Different measures were taken to counter this risk.

ARCT and CPTRT informed national prison authorities about the study prior to initiating the interviews and stressed that it was their obligation to ensure that those participating in the study were protected against sanctions following their participation.

As the research partners access the prisons in their country on a regular basis, they are used to continually monitor and evaluate prisoner safety and risks. For this study, the researchers also conducted a short, announced follow-up visit to each prison a few days after the interviews had taken place, to ensure the

well-being of the participants. Participants were encouraged to contact the interviewing organizations by phone, either personally or via family, in case they experienced any negative consequences after their participation in the study.

Each participant was interviewed in a private environment, meaning that the conversation could not be overheard or overseen by members of the prison staff or by fellow prisoners. Information about the prisoners' length of stay in the prison was collected, but not any information about their identity or reason for imprisonment.

A risk existed that participants might not dare to inform about reprisals at the follow-up visit for fear of further sanctions. During follow-up visits, interviewers were therefore particularly observant to any signs that physical reprisals or other sanctions had taken place or that information was withheld. Had strong suspicions arisen, instructions had been given to the interviewers to report to the prison authorities in order for them to protect the prisoner, e.g. through transfer to another place of detention.

### Informed consent

Prior to giving consent, the study participants were informed as stated above. The interviewers also specifically made the participants aware that they could not completely exclude the risk of sanctions or negative consequences after participation. Informed consent was collected at the outset of the interview. To maintain anonymity, the consent was given only orally and documented in the questionnaire.

### Results

The interviews and follow-up visits were conducted without any major problems or incidents, and no negative consequences of the study were discovered during or after the data

In Albania, many prisoners insisted on signing the filled-out questionnaire after their interview.
 This signature was not coded during data entry.

collection period. There were also no suspicions that participants withheld information during the follow-up visits.

### Descriptive statistics

A total of 164 interviews were conducted: 79 in Albania and 85 in Honduras. There were between 19 and 23 study participants in each of the eight prisons (table 3). They had spent an average of 50-63 months in prison.

Of the 164 study participants, 160 were aware that monitoring visits had taken place to the prison during their detention (table 3). Details like who had undertaken specific visits (e.g. NGOs, judges, national preventive mech-

anisms etc.) were not collected. 110 participants (72 in Albania and 38 in Honduras) had interacted directly with monitors during the last monitoring visit that they were aware of, whereas the others had only heard about it or seen the monitors pass by (table 3).

Prisoners' perception of visits by independent monitors and the impact thereof 87.2% of the study participants found it important or very important that independent monitors visit prisons whereas only 9.1% found it not so important or not important at all (table 4).

Table 3. Prisoner characteristics, awareness of monitoring visits, and interaction with monitors

Country	Prison	Prisoers inter- viewed, n (%)	Time spent in prison, months <sup>1</sup> Median (min – max)	Numbers of prison- ers aware of monitoring visits, n (%)	Prisoners who had interacted di- rectly with mon- itors during the last monitoring visit, n (%)
Albania	Jordan Misja	20 (25.3)	42 (2 – 153)	79 (100.0)	72 (91.1)
	Shen Kolli	19 (24.1)			
	Rrogozhina	20 (25.3)			
	Peqini	20 (25.3)			
	Total	79 (100.0)			
Hondu- ras	San Pedro Sula	21 (24.7)	44 (1 – 216)	81 (95.3) Missing=4	38 (46.9) Missing=4
	Santa Barbara	21 (24.7)			
	Danlí	20 (23.5)			
	Comayagua	23 (27.1)			
	Total	85 (100.0)			

<sup>1</sup> As time spent in prison does not follow a normal distribution, the median is reported in table 2.

The main reasons indicated by the participants in both Albania and Honduras for the visits being important was that the monitors listen to them, are helpful, respect the rights of the detainees and give them advice. As was stated by one prisoner:

"Monitoring can help us raise the problems [...] nobody pays attention to our problems in this institution" (prisoner, Albania)

One interesting difference was that prisoners in Honduras also mentioned reasons such as showing humanity, change of staff behaviour, better treatment and less beatings, while such were not mentioned by the prisoners in Albania.

"The treatment in the prison has changed. Before there were no visits [...] and before the police beat quite a lot. It is not like that now when there are more visits from human rights<sup>3</sup>" (prisoner, Honduras).

Those who did not find the visits important indicated that the visits are too few and that the monitors have no actual power.

In Honduras, the majority stated that the conditions in the prison improved following a

**Table 4.** Prisoners' thoughts about independent monitoring visits, n (%)

	Albania	Honduras
Very important	23 (29.1)	52 (61.2)
Important	43 (54.4)	25 (29.4)
Not so important	1 (1.3)	4 (4.7)
Not important at all	8 (10.1)	2 (2.4)
Don't know	4 (5.1)	2 (2.4)

<sup>3</sup> Translations of Spanish quotes into English done by DIGNITY staff

monitoring visit, both when asked about the first few days after the visit and the long-term impact (55.5%). 40.7% stated that the conditions in the prison remained unchanged. In Albania, 29.1% of the participants stated that the conditions in the prison improved. 59.5% found that the conditions in the prison remained unchanged (table 5). Notably, of the six participants in Albania who said that conditions got worse, four came from the same prison.

Prisoners' reports of arrangements set in place by authorities to ensure that the monitoring team would get a positive impression of the prison conditions

36.5% of the participants had experienced that the authorities had made special arrangement prior to a monitoring visit, with most cases in Honduras (42.0% vs. 30.8% in Albania). Seven prisoners in Albania informed that the prison had been painted before the visits, and seven had experienced

**Table 5**. Prisoners' assessment of the last monitoring visit's impact. N=160, n (%)

8	r	- , ()
	Albania	Honduras
Prison conditions improved considerably	5 (6.3)	9 (11.1)
Prison conditions improved	18 (22.8)	36 (44.4)
Prison conditions were unchanged	47 (59.5)	33 (40.7)
Prison conditions got worse	6 (7.6)	1 (1.2)
Prison conditions got considerably worse	1 (1.3)	1 (1.2)
Don't know	2 (2.5)	1 (1.2)

that the prison was cleaned. Some also men-

<sup>2</sup> Translations of Albanian quotes into English done by ARCT staff

tioned that the showers were fixed, they got new mattresses, and recreational time was added, and three prisoners mentioned that the number of inmates per cell was changed to reduce overcrowding. It was also mentioned that prison staff had chosen certain inmates to interact with the monitors.

"The prison staff has selected five inmates to answer positively to monitors" (prisoner, Albania)

"They changed the number of inmates in a cell, we changed the floor to reduce the number of persons" (prisoner, Albania).

12 prisoners in Honduras informed that they were instructed to behave well, 7 were told to correct their clothes, and 6 mentioned that they had had to clean more than usual. 3 prisoners said they painted the place and 4 mentioned that they were forced to participate in a raffle about who should make improvements to the place. Some mentioned that they were forced to respond well when asked questions by the monitors and one told that the coordinators were hiding a detainee who had been beaten in an isolation cell.

"They do not let us get close to human rights, only the coordinators talk to them, sometimes there are people beaten in the bartolinas and the coordinators hide them" (prisoner, Honduras).

"Yes, the conditions of the prison were improved plus the side where the women are, paint, clean and fix the roof ... that is not done every day" (prisoner, Honduras).

Other arrangements set in place before a monitoring visit were improvements of inventory, change of number of prisoners per cell, change in the activities and instructions on how to look and behave.

"In this case, it was an activity in the classroom, and they were very well arranged, with the participation of doctors, coordinators and other technical personnel" (prisoner, Honduras). Prisoners' reports of pressure to act in a specific way in connection with monitoring visits

In Albania, 34.2% of the participants had felt pressured to act in a specific way during the last monitoring visit to ensure that the monitors in the last monitoring visit would get a positive impression whereas this was only the case for 12.3% of the participants in Honduras.

One prisoner from Albania explained that "the police officers come to make "controls" and letting us know that the monitoring is coming (like pressure)" (prisoner, Albania).

Another prisoner from Honduras explained that "sometimes (they) ask questions about how you feel in the penitentiary center in front of police, and one is forced to respond well" (prisoner, Honduras).

Other ways of being pressured mentioned in Honduras were threats of being transferred.

Sanctions from prison authorities, prison staff or other prisoners in relation to visits by independent monitors

25.3% of the participants in Albania knew other prisoners who stated to have experienced sanctions or negative consequences after the last monitoring visit. In Honduras this was the case for 19.8%. 20.3% of participants in Albania and 22.2% in Honduras had experienced sanctions or negative consequences themselves. In both countries the

**Table 6.** Percentage of prisoners who felt pressured to act in a specific way during a monitoring visit, N=160, n (%)

	Albania	Honduras
Threatened with	5 (6.3)	5 (6.2)
sanctions		
Promised extra	13	0 (0.0)
privileges	(16.5)	
Felt pressured in	7 (8.9)	4 (4.9)
another way		

TORTURE Volume 30, Number 2, 2020

Table 7. Prisoners' experience of sanctions or negative consequences after last monitoring visit, N=160, n (%)

		Participants who knew other prisoners who had experienced sanctions or negative consequences		Participants who had experienced sanctions or negative consequences themselves			
		Prison authorities	Prison staff	Fellow prisoners	Prison authorities	Prison staff	Fellow prisoners
Albania (N=79)	Physical punishment or violence	3 (3.8)	2 (2.5)	0 (0.0)	3 (3.8)	2 (2.5)	0 (0.0)
	Threats and/or humiliations	7 (8.9)	6 (7.6)	2 (2.5)	4 (5.1)	4 (5.1)	1 (1.3)
	Isolation	1 (1.3)	2 (2.5)	1 (1.3)	3 (3.8)	3 (3.8)	1 (1.3)
	To not be allowed visits	3 (3.8)	5 (6.3)	0 (0.0)	1 (1.3)	2 (2.5)	0 (0.0)
	To not be allowed commu- nication with the outside world	3 (3.8)	3 (3.8)	0 (0.0)	3 (3.8)	3 (3.8)	0 (0.0)
	Other	1 (1.3)	1 (1.3)	2 (2.5)	2 (2.5)	3 (3.8)	1 (1.3)
	Any of the above	2	20 (25.3)			16 (20.3)	
Honduras N=81)	Physical punishment or violence	2 (2.5)	1 (1.2)	3 (3.7)	0 (0.0)	0 (0.0)	0 (0.0)
	Threats and/or humiliations	4 (4.9)	4 (4.9)	7 (8.6)	8 (9.9)	4 (4.9)	2 (2.5)
	Isolation	1 (1.2)	2 (2.5)	3 (3.7)	1 (1.2)	1 (1.2)	2 (2.5)
	To not be allowed visits	1 (1.2)	1 (1.2)	1 (1.2)	2 (2.5)	1 (1.2)	0 (0.0)
	To not be allowed commu- nication with the outside world	1 (1.2)	0 (0.0)	0 (0.0)	1 (1.2)	0 (0.0)	0 (0.0)
	Other	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	1 (1.2)
	Any of the above	1	6 (19.8)			18 (22.2)	

Note: Some prisoners reported more than one type of sanction or negative consequence

most frequent sanction reported was threats and humiliations. Sanctions were reported from all eight prisons.

In Albania, the participants mentioned that other types of sanctions experienced by themselves or others included disciplinary measures and forced transfers. Seven mentioned that permissions were stopped, two mentioned isolation, and two mentioned pressure from authorities. In Honduras, other types of sanctions mentioned included intimidation, sanctions, and isolation. Six mentioned threats from *coordinadores*, two mentioned physical punishment, two mentioned electric shocks, and two mentioned physical abuse by the assistant nurse.

One participant even said: "the police wants to give arms to the coordinators so that they will kill the people that would be against the system that they have imposed by order of the authorities" (prisoner, Honduras).

The participants attributed several different reasons to the sanctions they had experienced after the last monitoring visit. In Albania, these included very concrete things like speaking about the telephones and communicating with family, but also talking about violations, talking with the ombudsman, complaints, criticizing the police staff and speaking negatively about prison conditions.

One participant said, "I spoke with the monitors about the telephones and the police staff dragged me and put me in isolation for three days" (prisoner, Albania).

In Honduras, the participants mentioned lack of respect for the rules, complaints, power conflicts, that the coordinators want to exercise control, and abuse of authority by the director.

### Reporting of sanctions

Of those who had experienced sanctions, 40.5% of participants in Albania had reported their experiences of sanctions as compared to

37% in Honduras. Prisoners in Albania most often reported to monitors but also to the court, the ombudsman, prison authorities and prison staff. In Honduras, prisoners most often reported to their families but also to the judge, lawyers, the national commissioner for human rights and the interviewer. No information was collected about the outcome of the reporting, but as a comment one participant noted that he would not pass on this type of information again because his name was afterwards put on a list that was passed on. Others stated that they did not know how to report sanctions.

### Discussion

This study is a pilot study intended to test whether it is at all possible to collect information about detainees' experience with monitoring visits through interviews while they are still in prison. The fact that the study was carried out without any incidents shows that this is indeed possible if the interviewers have contextual knowledge and apply strict precautionary measures to avoid any potential harm to the informants. One might argue that what the study shows is that the researchers did not discover incidents that had happened nevertheless, but this is unlikely given that they already have close relations with the prisoners and are used to exchanging confidential information with them, gave the participants different avenues to report any incidents, and carried out follow-up visits. Whether similar studies can be applied in other contexts in the same way of course remains to be seen, but it is promising that it has been possible to conduct the study in two very different countries and in eight prisons.

It should be mentioned that not only prison management, but also higher prison authorities were made aware of the study and consequently may have been particularly observant to preventing harm. The follow-up visits were announced which may also have made authorities particularly keen to avoid reprisals. Additionally, the researchers were able to strictly adhere to confidentiality. In a monitoring context, the role of higher prison authorities and the monitors' ability to maintain confidence may be less clear.

The majority of the interviewees believed that monitoring visits are important, and many of them have actually experienced improvements in the prison conditions following a monitoring visit. This is an important finding. Equally important, however, is that some participants – particularly in Albania - report that prison conditions got worse after a monitoring visit. No specific information about this was collected, but it would be an important aspect to investigate further in future studies.

More than one-third of the participants reported that special arrangements had been made prior to a monitoring visit such as improving the material conditions and reducing overcrowding. This of course points to the importance of unannounced visits that would not make such arrangements possible and therefore may give the monitors a truer picture of the reality on the ground. What is also important is how the monitoring visit itself may in fact imply worsened conditions for those who may be forced to do work which they would otherwise not have had to do, and for those who are forcibly transferred.

Another way of affecting the monitoring team's assessment of the place is to pressure participants to respond in certain ways. This was reported by more than one-third of the Albanian interviewees and more than one out of ten in Honduras. There was an interesting difference here with the Albanian prisoners mostly being promised extra privileges, whereas in Honduras they would rather be threatened with sanctions. It is important that monitors understand the potential underlying dynamics of

the answers they receive, including the different use of "sticks and carrots" in different contexts, and that they look for ways to get information about this during their interviews.

In both countries, about one-fifth of the participants reported having experienced sanctions after the last monitoring visit. This is a very high proportion and may be the most important finding of this study. In Albania, the sanctions included physical violence committed by prison staff and prison authorities, and in both countries prisoners experienced sanctions that may influence their psychological well-being, like isolation and a ban on visits and communication with the outside world. The fact that sanctions indeed do take place after monitoring visits and to such a high extent as reported in this study should be a wake-up call to all monitors to make sure that they always do their utmost to minimize the risk of sanctions.

In Honduras, a number of prisoners reported knowing others who had been subjected to sanctions by fellow prisoners, and five reported having experienced sanctions from others themselves. The numbers are very small, but the finding might be interpreted as a consequence of how the prison system is functioning in Honduras with very limited prison staff, gangs setting the agenda, and so-called *coordinadores* being appointed to ensure peace and order in the prison.

Finally, it is worth noticing that in both countries not only prison staff and fellow prisoners were involved in sanctions but also prison authorities. This points to the fact that reprisals may be a systemic problem and not only related to a few staff members who don't follow procedures or a few prisoners who dominate the prison environment.

### Limitations

The countries and the prisons were purposefully chosen which introduces an obvious risk

of selection bias. The fact that the prisons are in two different countries in two different continents and no obvious difference was found between prisons in each country in terms of participation rates may however be evidence that the chosen methodology is indeed feasible, even under very different circumstances.

The study aimed for random selection of participants, but this was obviously handled very differently, not only across countries but in the case of Honduras even across prisons within the same country. Also, the interviewers did not stick completely to the chosen selection procedure since they did not want to exclude prisoners who volunteered information to them. Needless to say, this issue should be handled more carefully in future studies.

Generally, the response rate in the study was high, but a few prisoners who were asked to participate in the study eventually did not. No information about these prisoners was collected, and it is therefore impossible to assess in which direction their responses might have drawn the results. In future studies, a more detailed non-responder analysis would be desirable.

There is always a risk of information bias in studies based on questionnaires, and this study is no exception to this. Prisons are institutions with high levels of social control, and the prisoners may not have wanted to divulge information for fear of subsequent negative consequences. This tendency to underreport may be even more pronounced if a participant had already experienced reprisals and sanctions following monitoring visits or even following participation in other scientific studies. On the other hand, participants with an interest in putting prison staff, prison administration or fellow prisoners in an unfavorable light, for example to be transferred to another insti-

tution or to get revenge in case of a conflict, might tend to overreport.

Finally, recall bias may have influenced the interviewees' answers, and information may have been lost or compromised when more detailed answers were being recorded by the interviewers.

### Perspectives

Despite its limitations, this study has resulted in some interesting findings that in the future may qualify the way in which findings during monitoring visits are interpreted and reprisals prior to and after monitoring visits are prevented.

As long as sanctions and reprisals are happening in relation to monitoring visits, which has been evidenced by this study, there is still work to be done for monitors to improve the way in which they perform their task. Monitors should continuously seek new ways of obtaining information that do not put prisoners in danger, all monitors should be trained on issues linked to reprisals, and local guidelines taking into account the exact risks known in the context should be developed and adhered to at all times.

Research has a role to play in improving the way monitors work. This study is a first step towards quantifying and better understanding reprisals in relation to monitoring. Similar research is needed in more contexts to assess the general validity of the results, and more research is needed to better understand the dynamics of the sanctions taking place with the aim of reaching a deeper understanding of potential preventive measures.

### **Acknowledgements**

164 male prisoners in Albania and Honduras generously shared with us their views and experiences. They did so even though interaction with researchers might make them vul-

nerable to sanctions following the interviews. We are immensely grateful that they decided to participate despite the potential risk. We are also grateful to prison authorities who facilitated the study by seeking ways to ensure the private interaction with the prisoners in overcrowded prison environments, and to the interviewers.

We are grateful to Denmark's Ministry of Foreign Affairs, Danish International Development Agency (DANIDA), for its financial support to this research.

### References

- Albania | World Prison Brief. (2019). https://www.prisonstudies.org/country/albania
- Amnesty International. (2008). Mauritania: Torture at the heart of the state. https://www.refworld.org/ docid/49365b2026.html
- APT. (2012). Mitigating the risks of Sanctions related to Detention Monitoring. Association for the Prevention of Torture. Geneva. https://www.apt.ch/content/files\_res/Briefing4\_en.pdf
- Carver, R., & Handley, L. (Eds.). (2016). Does torture prevention work? Liverpool: Liverpool University Press
- European Committee for the Prevention of Torture. (2015). 24th General Report of the CPT. Council of Europe.
- Honduras | World Prison Brief. (2019). https://www.prisonstudies.org/country/honduras
- OHCHR. (n.d.). National Preventive Mechanisms. https://www.ohchr.org/EN/HRBodies/OPCAT/ Pages/NationalPreventiveMechanisms.aspx
- OHCHR. (2010, February 10). Report on the visit of the Subcommittee on Prevention of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment to Honduras. https://tbinternet.ohchr.org/\_layouts/15/treatybodyexternal/Download.as px?symbolno=CAT%2fOP%2fHND%2f1&Lang=en
- OHCHR. (2012, June 7). Considerations of reports submitted by States parties under article 19 or the Convention—Concluding observations of the Committee against Torture, Albania. https://tbinternet.ohchr.org/\_layouts/15/treatybodyexternal/Download.aspx?symbolno=CAT%2fC%2fALB%2fCO%2f2&Lang=en
- OHCHR. (2016, August 26). Concluding observations on the second periodic report of Honduras\*. https://tbinternet.ohchr.org/\_layouts/15/

- treatybodyexternal/Download.aspx?symbolno=CA T%2fC%2fHND%2fCO%2f2&Lang=en
- UNDP. (n.d.). Human Development Reports:

  Table 1. Human Development Index and its components. http://hdr.undp.org/en/composite/HDI
- UNHCR. (2018, May 24). Refworld | Report to the Albanian Government on the visit to Albania carried out by the European Committee for the Prevention of Torture and Inhuman or Degrading Treatment or Punishment (CPT). https://www.refworld.org/docid/5b0681334.html
- WMA. (2013). World Medical Association
  Declaration of Helsinki: Ethical Principles for
  Medical Research Involving Human Subjects.

  \*jAMA\*, 310(20), 2191. https://doi.org/10.1001/jama.2013.281053

## Ethical criteria when a (potential) perpetrator asks a human rights organization to defend their case based on the forensic documentation of alleged torture. How shall we proceed?

Sara López Martín\*

### Objective

Discuss the ethical dilemma of perpetrators requesting clinical evaluations intended to prove persecution or torture. The discussion is organized around three real cases.

### Method

We present three cases of plausible perpetrators, partially amended to protect anonymity. The paper presents a review of the complex ethical challenges that the dilemma poses.

A multidisciplinary panel of doctors, psychologists and lawyers had a similar discussion and agreed on three criteria presented here for contrast with the broader community of researchers and practitioners. The paper is not in itself a legal or ethical academic review, instead, it establishes the main terms of debate, demonstrates the lack of literature that debates it and reflects an initial consensus between forensic workers in an independent human rights organization.

Keywords: Torture, Medical Ethics, Perpetrators, Istanbul Protocol

### Introduction

This paper aims to explore issues to be considered when defendants, who have allegedly committed torture, request independent forensic documentation to support their claim for asylum.

The discussion arises from a multidisciplinary team at an NGO, whose primary mission is to provide supporting documentation for asylum claims made by victims of torture, using the Istanbul Protocol. This discussion is part of our process for developing policies and guidelines for our daily work. The enormous increase of asylum applications in southern European countries, in addition to the changing national contexts where our patients come from, has led us to assess several persons who could be both a survivor of torture as well as a possible perpetrator of torture.

The current academic discussion on the subject appears to be focused on ethical duties during judicial forensic investigations (Adshead & Sarkar, 2020; Goethals, 2018; Mason, 2006; Niveau & Welle, 2018), an ac-

<sup>\*)</sup> Lawyer, SiRa, Madrid. Correspondence to: juridico@redsira.net

tivity regulated by labour legislation - which limits ethical decision making - and of which ultimately does not apply to a pro-bono human rights NGO. Furthermore, the focus seems to be on identifying decision-making standards rather than on the ethical sense of the options themselves.

Three semi-fictional cases are presented and discussed to expose ethical dilemmas. We look forward to reactions from other experts facing similar dilemmas.

### Case 1

Georgia – A middle-aged man serving in high-ranking military positions to face pro-Russian military actions. Following a change of government, he resigned. There are criminal proceedings against senior leaders of the government he served that do not directly involve him. However, human rights organizations have reported crimes against humanity in several areas where troops under his command were involved. He attributes an arrest warrant against him to political persecution by the new government, on account of his nationalist affiliations.

In fact, after his resignation, he was arrested by his government and interrogated for nine days. He reports being beaten, subjected to sleep deprivation and threatened with death. After release, he eluded surveillance and left the country.

Clinical and psychometric examination revealed intrusive post-traumatic symptoms, frequent episodes of anger, impaired concentration, hypervigilance, hyper-reactivity and anxiety to unexpected stimuli. He was diagnosed with complex PTSD. His reports of being tortured were found to be credible and moderately consistent.

### Case 2

Colombia - A young man from a country

with prolonged conflict between the state and "guerrillas". When he was 18 years old, he was captured by an armed group which he then joined. During the seven years that he was with that group, various human rights groups identified them as being responsible for perpetrating torture and massacring peasants. The massacre is currently the subject of a criminal trial.

During a peace process, he left the group, moved to another state and attempted to hide. Two years later, the group located him and kidnapped him again. He was taken to a flat where he was beaten and raped by five men whom he recognised as former colleagues. After four days, he was left in a field. Following this, he fled the country immediately.

One year after his arrival, he was referred to our centre by the NGO that was managing his asylum application. That NGO requested a psychiatric assessment after their initial assessment identified symptoms of post-traumatic stress disorder. His symptoms included suicidal ideation, shame and guilt, low self-esteem, angry outbursts, and difficulty with memory and dissociation when talking about his experiences. Our centre diagnosed partial remitted post-traumatic stress disorder and found his report of being abused to be moderately consistent.

### Case 3

Brazil - A young man worked for three years as an informant for a police unit specialised in criminal gangs. After one gang member recognised him, he subsequently received death threats at home and was shot by motorcyclists whilst driving. Thereafter, he experienced fear and intense anxiety, hypervigilance, pronounced startle reactions and difficulty sleeping. He moved several times to different parts of the country but was again identified, shot in the chest and legs, and dropped in a ditch.

After several weeks in the hospital, he left the country. He applied for asylum and was referred to our centre.

When studying the case, the legal team discovered that reports from human rights organizations labelled the police unit he previously worked for as a para-police squad. He stated that he only "provided information" to special police undercover units to capture "thieves" and "leftist terrorists." He continues to cooperate with the unit from a distance and showed our staff photographs he has recently sent via WhatsApp of potential targets. He has also

told our interviewers about a song in which, he says, an anonymous voice describes how he will be tortured when located.

The patient does not appear to have post-traumatic symptoms, apart from sporadic distressing dreams. Although the account of torture is considered consistent, he has no clinical diagnosis. He seems to be a resilient person, although he may have a well-founded fear of torture if returned to his country of origin.

### Table 1. Ethical dilemmas

### Main Ethical decision/ First Order Dilemma

 Dilemma 1. Should a pro-bono NGO do a forensic assessment, of a highly probable perpetrator that alleges to have been tortured him/herself, to claim for international protection?

### Second order ethical dilemmas - dealing with the past

- Dilemma 2a. Should we, as an institution, "judge" our client's behavior? Are we circumventing the presumption of innocence? Is the role of a forensic expert that of a "judge" to decide whether a potential client is a "perpetrator"?
- Dilemma 2b. In forensic assessments of clients, do we have the duty to triangulate information to assess consistence and credibility? What are the limits of the "triangulation of information" mandate? Morally, how far can we go in knowing the client's whereabouts?
- Dilemma 2c. By cross-checking information with human rights organizations in the client's country of origin, we may put the client in danger, thereby violating the "dono-harm" principle of any health intervention.
- Dilemma 2d. If the alleged perpetrator has post-traumatic symptoms, is there an ethical duty to care?

### Third order ethical dilemmas - facing the present

- Dilemma 3a. The client may still be involved in present-day heinous acts by protecting him, the organization may facilitate human right violations
- Dilemma 3b. The client may be under national or international prosecution by protecting him, the organization may prevent victims' access to justice or reparation

### Fourth order ethical dilemmas - Reason for claiming asylum

• Dilemma 4a. Not documenting the client's allegations might mean that the person is deported to the country of origin and eventually face further torture or death.

### **Dilemmas**

As Swanepoel (2010) points out, "Making ethical or moral decisions, like any other decision in health care, is not a precise art but a learned skill. What decision is ultimately made and how that decision is made has always been the topic of intense debate". **Table 1** is a proposed map of the dilemmas of these cases.

**First Order Dilemmas** (*Accepting* clients who are survivors and perpetrators of torture).

Should a centre providing services to torture survivors undertake a forensic assessment of suffering torture survivors, when it has reason to believe that the potential client has been complicit in torture? Here we have our main ethical decision. The Convention Against Torture Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1984) does not void the rights of a torture survivor in any case, including torturers. However, the staff of a rehabilitation centre, especially those who have survived torture, may be reluctant to work with torture survivors who have, themselves, tortured. However, our main problem is defining the institution's "political" approach to this issue. Here we have to consider the sub-dilemmas that underlie this debate.

**Second Order Dilemmas** (Studying the case).

**Secondly**, and as second-order ethical dilemmas (dilemmas 2a and 2b in Table 1), there is the question of whether our organization may judge the acts and motivations claimed by the client who admits to being complicit in torture. As a starting point, we do not want to dispute the veracity of torture allegations our job consists precisely in determining the credibility, among other issues, of the allegations - made by our hypothetical patients. We also know that criminal responsibility for

what a torturer has done is not excused simply because such a person was subsequently tortured.

However, trust is a necessary pre-condition to work on the forensic assessment of an alleged victim. Moreover, trust and confidence are complex matters assuming our impartiality, but also our commitment to the absolute prohibition of torture. Since we systematically triangulate the information provided in the interviews with clients, are we morally allowed to investigate our patients in those aspects not related to their torture experience as a victim? Such documentation policies strike at the heart of potential clients' need to trust the centre as they seek help for the injuries of torture. Do we become our patients' "investigators" or "prosecutors"? Furthermore, and in practical terms, what does it mean for us? Do we accept that we could endanger the safety of our patients if we request information from human-rights colleagues about them in their country of origin; especially, but not only, in cases of asylum seekers? (Dilemma 2c).

On the other hand, some of them have shown persistent post-traumatic symptoms. This leads us to wonder whether we can ignore the deontological duty to assist patients with severe impacts (CGCOM, 2011; CGCOP, 2010; International Rehabilitation Council for Torture Victims, 2012). (Dilemma 2d)

In some cases, the evidence might be relatively clear. Some clients, as in Case 1, might be under national or international prosecution for human rights crimes. How should global human rights reports be used to assess an individual's criminal responsibility? In Case 2, for example, is it enough to know that the client was associated with a group that was notorious for human rights crimes, or should a more detailed assessment be made to assess personal complicity?

**Third Order Dilemmas** (Addressing clients' ongoing complicity with torture, or future responsibility for torture in the past).

We could avoid dilemmas related to the past, but sometimes, as the examples illustrate, we are confronted with dilemmas related to the present and the future. Let us focus on them.

On the one hand, some clients, as in Case 3, might still be involved in present heinous acts. In such cases, the centre may be seen as complicit with ongoing human right violations. Does a centre have a duty to retain, report, or discharge such clients? If our intervention means, and it does, to enable these people to obtain asylum in our country, it would be easy to conclude that by doing so, we would potentially be facilitating human rights violations (dilemma 3a).

Furthermore, some of our clients might have a claim from a national or international court (Case 1, who pointed out the possible existence of an arrest warrant against him, and Case 2, who could be claimed by the victims of the reported massacre). If our intervention in this involves allowing them to hide in our country, we would potentially be preventing their alleged victims from accessing reparation: we would become a masking identity machine for potential perpetrators. Can we afford that? We would act against our principles in helping to provide reparation to torture victims (dilemma 3b). We must assess this potential situation, pondering that, perhaps the client's testimony is true.

Inevitably, we are also concerned about the legal risks we may have to assume in protecting an alleged perpetrator, accused of potential human rights violations.

**Fourth Order Dilemmas** (Addressing the consequences of providing services to torture survivors who are torturers.)

Finally, a centre that services torture survivors must reflect on the consequences of servicing clients who are also torturers. If asylum is denied because the centre uncovered complicity with torture, the client may be placed in grave danger upon returning to their country of origin. We cannot ensure that these people would be brought before a judge, entitled to fundamental rights and guarantees, nor can we guarantee that they will not be tortured or killed shortly thereafter returning. Therefore, if the Istanbul Protocol is not implemented, we may be cooperating in the death or torture of our potential client (dilemma 4a).

Authorities agree that there is no duty to refoul when there are "substantial grounds" for believing that the person would be in danger of being tortured. France (Le Monde, 2011; Radio France Internationale, 2014) and England (Government of Rwanda v. Nteziryayo, Brown, Munyaneza, Mutabaruka & Ugirashebuja, 2017) refused to extradite persons accused of torture after ruling that Rwanda did not meet the requirements of Rule 11 bis. However, Article 33(2) of the 1951 Convention Relating to the Status of Refugees (1951) allows deporting asylum applicants who pose a risk to national security. Needless to say, we have witnessed the deportation of applicants, despite awareness that we, and any sensible citizen, know they will be tortured upon return. Therefore, not implementing Istanbul Protocols may mean cooperating in the death or torture of our potential client (dilemma 4a).

Thus, our dilemma is not a legal one, but instead an ethical one. Is it possible to assume this, individually and collectively? Should we find out if they have any court claims, or if they have been convicted? Do we have an obligation as NGOs to investigate if there is a suspicion? Can we make proper ethical decisions about these matters?

We know that we must assess and rehabilitate survivors of torture and that we have no professional obligation to lie about a client's background. However, simultaneously, we can certainly decide what and how to ask, including what to avoid particularly when we foresee the course of the answer. It should not be forgotten that we sign a confidentiality agreement with the client before conducting the interviews, allowing a climate of trust and confidence. Should we denounce our patients if our suspicions turn out to be accurate or we hear something that we know can determine the rejection of asylum in that case? Being a perpetrator or prosecuted for criminal charges is a ground for exclusion from international protection according to Rule 33.2 of the 1951 Geneva Convention.

#### Discussion and proposed criteria for moving forward

There are no guidelines for accepting or managing the torture survivor who is also a torturer. Although scholars have extensively analysed the dilemmas faced by professionals in psychiatry and forensic psychology in legal proceedings, the issues discussed in this paper arise from professional ethics. Our centre's multidisciplinary team searched for policy guidelines to guide decisions when a torture survivor is possibly a torturer.

Some authors use ethics principles or rules (Kalmbach, 2006); others refer to legal duties (Goethals, 2018). However, this paper is about ethics, not law. Some (Adshead & Sarkar, 2020) analyse the ethics of particular treatment techniques without addressing the background issue of whether to accept a client in the first place. Some authors compile different professional forensic and medical criteria for decisions (Swanepoel, 2010; Yadav, 2017), but only propose a vague case-by-case decision-making process. A few authors propose

integrated models of legal and medical duties called "robust professionalism" (Candilis, 2009) that advocate for a compassionate inquiry into clients' backgrounds and reason for becoming torturers.

To the extent that many of them have focused on specific aspects of professional practice, there are no general guidelines for reflection to be found amongst these sources, just because our field of action is subjected to distinct rules. Firstly, we are not obliged to accept all the cases referred to us or coming to our centre. Secondly, we are not obliged to provide expert reports if pre-established criteria in the team's methodology are not fulfilled. We could initially decide to do a report and then during the course of the interview, reverse our decision based on information that emerges. Thirdly, accountability is primarily performed before the client, and, if appropriate, his or her legal counsel. Only when required must we appear in court, and then it is exclusively our professional judgment that guides our intervention, as the independent entity we are. None of these issues are contemplated in the existing literature on ethical codes and principles in forensic, psychological or medical work.

Concerning the **First Order Dilemmas**, we will not exclude all potential clients who were torturers and subsequent torture survivors. In this situation, our first obligation is to the client. Our stance must be therapeutic, not judgmental. Therefore, this involves ensuring these clients receive equal treatment, especially when suspicious information is not sufficient to make a decision otherwise. Moreover, if our client, who is suspected of having tortured others, presents to us in a severe distressing condition, our deontological duty is to guarantee his stabilisation before attending to our mistrust. This decision cannot be imposed

on staff who raise ethical objections; however we consider it to be a policy of the centre.

Given the above resolution of First Order Dilemmas, we proceed to the Second Order Dilemmas. Mason (2006) depicts how prejudices can be destroyed by proximity: "What comes across invariably is their raw humanity, their often blundering but impassioned existential endeavour to be in the world, more or less eclipsed by their maladaptive, injurious, and sometimes malevolent behaviour". Moreover, after so many years, we have realised that our usual positive prejudice towards victims of torture is not universal. It loses meaning if we are consistently committed to the fight against torture: unpleasant, dishonest, or worse, could also be tortured, which a priori would include the perpetrators of torture.

We concluded that we could not call into question the "presumption of innocence" we all deserve. Furthermore, it is not (nor should it be) our work to investigate clients' lives, except necessarily obtaining contextual verification and clarification on information provided by the client. We understand it is not a matter of logistical capacity, but instead an account of the consistency of our professional values. We have to choose whose side we work on, and working on the victim's side sometimes requires assumptions such as that the victim may be lying, or not telling the entire truth. They may be a perpetrator of torture, in which case we are unable to investigate beyond searching online for their name. At the same time, choosing this framework implies the understanding that the victim who takes priority, is that who is in front of us. Otherwise, we would be assuming "ticking-time-bomb" logic (placing hypothetical scenarios before the real ones), with which we do not agree.

We consider, moreover, that any ethical commitment of this nature also requires, as a starting point, ensuring the safety of our clients. Requesting information about them from officials in their country of origin, or human rights groups could endanger the client (either as a torture survivor or as a torturer) by revealing his or her location.

Concerning **Third Order Dilemmas**, where the client, as in Case 3 (dilemma 3a), has continued to collaborate with organizations who are torturing, we propose discharging such clients on certain bases. These bases are where there is conclusive evidence or a personal statement indicating current involvement with human rights violations. Only in these cases, *and not through active research on our part*, would we make this decision.

The term "active perpetrators" is an ill-defined term. However, the mere persistence of a client's connection to identifiable structures engaged in human rights violations poses us an additional dilemma. This dilemma regards an assurance that our work does not become a potential risk to others, such as other patients or people who coexist with the potential perpetrator. We understand that, in these cases, we are not considering potential or hypothetical damage to third parties. However, an actual and verifiable situation of the client's involvement whereby such clients pose a potential risk to others, including both clients and non-clients (regarding asylum seekers, the public reception system concentrates them in a few entities throughout the territory, thus facilitating the meeting of applicants from confronted groups of the same nationality, which would lead to possible harmful interactions), as well as centre staff. This policy is supported, as Yadav (2017) notes, in ethical codes such as that of the Canadian Psychological Association's "Psychologists need to avoid or refuse to participate in practices contrary to the legal, civil or moral rights of others as well as refuse to assist anyone who might use a psychologist's knowledge

TORTURE Volume 30, Number 2, 2020

to advise, train or supply information to anyone to violate human rights" (CPA, 2017).

The policy problem is more profound. Is there a duty to report such ongoing collaboration, and if so, to whom and how? Some ethical guidance arises from "duty to E" literature as reviewed by Ford & Rotter (2014) stipulating that disclosure is required if the threat is specific and the victim is not aware of the danger (Tarasoff v. Regents of University of California, 1976). However, most of this information is non-specific. The World Psychiatric Association mentions, albeit fails to provide sufficient detail on how reports of this nature should be made. It notes, "Breach of confidentiality may only be appropriate when serious physical or mental harm to the patient or a third person would ensure if confidentiality were maintained" (1996), as does the United Nations in the Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care (United Nations, 1991). However, there is an additional concern - are we placing our team members at risk if we report it? Can we accept that possibility? These matters are left open.

Similarly, we suggest the possibility of rejecting a case if, according to the person's testimony or in the light of conclusive evidence not sought by us, the patient is being pursued through court (dilemma 3b). This is due to being inconsistent with hindering ones redress process, when presumably trying to facilitate another.

Inevitably, we are also concerned about the legal risks we may have to assume in protecting an alleged perpetrator, accused of potential human rights violations.

Finally, concerning Fourth Order Dilemmas, we have a customary obligation to honestly advocate on behalf of the interest of these complex clients. It is not our role to obstruct the pressing of criminal or civil charges against clients for their complicity with torture. It is our role to prevent refoulment in the face of a well-founded fear of torture or illegal persecution as described in Rule 33.2 of the 1951 Geneva Conventions and other international laws. Thus, when the possibility of deportation to one of these countries is dependent to some extent on our report, the need to guarantee the persons integrity would come first.

Given the nature of our clients' countries of origin, we concur with Swanepoel (2010) to act on a case-by-case basis. This means recognising that "[a]bsolute rules do not offer useful solutions to conflicts in values. What is needed is wisdom and restraint, compromise and tolerance, and an as wholesome respect for the dignity of the individual as the respect accorded the dignity of science" (Brim, 1965, p.1184).

These are our initial thoughts and reflections on this complex ethical dilemma. We are sure we have failed to take other essential aspects into account. The discussion is open for elaboration and refinement.

#### **Table 2.** Proposed criteria by the panel

- 1. Rejecting potential clients where there is conclusive evidence that they might be active perpetrators
- 2. Rejecting potential clients that are claimed by a national or international Court for human rights violations
- 3. Not contributing to the refoulment of anyone perpetrator or not- to a country that will not guarantee their physical and psychological integrity.

#### References

- Adshead, G., & Sarkar, S. P. (2020). Ethical Issues in Clinical Forensic Psychiatry. In A. Igoumenou (Ed.). *Psychiatry*, 6. https://doi.org/10.1007/978-3-030-37301-6
- Brim, O. G. (1965). Privacy and Behavioural Research. Columbia Law Review, 7, 1184 – 1211.
- Canadian Psychological Association. (2017).

  Canadian Code of Ethics for Psychologists (4<sup>th</sup> ed.).

  Canadian Psychological Association. https://cpa.ca/docs/File/Ethics/CPA\_Code\_2017\_4thEd.pdf
- Candilis, P. J. (2009). The Revolution in Forensic Ethics: Narrative, Compassion, and A Robust Professionalism. *Psychiatric Clinics of North America*, 32(2), 423–435. https://doi. org/10.1016/j.psc.2009.02.005
- Consejo General de Colegios Oficiales de Psicólogos. (2010). Código Deontológico, Madrid. https://www.cop.es/pdf/Codigo-Deontologico-Consejo-Adaptacion-Ley-Omnibus.pdf
- Consejo General de Colegios Oficiales de Médicos. (2011). Código de Deontología Médica. Madrid. https://www.cgcom.es/sites/default/files/codigo\_deontologia\_medica.pdf
- Ford, E., & Rotter, M. (2014). Landmark Cases in Forensic Psychiatry. Oxford University Press. https://doi.org/10.1201/b13499-98
- Goethals, K. (2018). Forensic Psychiatry and Psychology in Europe: A Cross-border Study Guide. Springer International Publishing. https://doi. org/10.1093/med/9780199393435.003.0019
- Government of Rwanda v. Nteziryayo, Brown, Munyaneza, Mutabaruka & Ugirashebuja, [2017] EWHC 1912 (Admin). (2017). https://www. judiciary.uk/wp-content/uploads/2017/07/rwandav-nteziryayo-and-others-judgment-20170728.pdf
- International Rehabilitation Council for Torture
  Victims. (2012). Forensic Examination Missions
  by Medical Teams Investigating and Documenting
  Alleged Cases of Torture: Operational Manual.
  International Rehabilitation Council for
  Torture Victims. https://irct.org/assets/uploads/
  pdf\_20161120160850.pdf
- Kalmbach, K. C., & Lyons, P. M. (2006). Ethical Issues in Conducting Forensic Evaluations. Applied Psychology in Criminal Justice, 2(3), 261–290.
- Le Monde. (2011, 28 September). La Demande d'extradition d'Agathe Habyarimana Rejetee. Le Monde. https://www.lemonde.fr/afrique/article/2011/09/28/la-demande-d-extradition-dagathe-habyarimana-rejetee\_1579081\_3212.html
- Mason, T. (2006). Forensic Psychiatry: Influences of Evil. Humana Press.

- Niveau, G., & Welle, I. (2018). Forensic Psychiatry, One Subspecialty with Two Ethics? A Systematic Review. *BMC Medical Ethics*, 19(1), 1–10. https://doi.org/10.1186/s12910-018-0266-5
- OHCHR (1991) Principles for the Protection of Persons with Mental Illness and the Improvement of Mental Health Care, United Nations General Assembly Resolution 46/119. https://www.who.int/mental\_health/policy/en/ UN\_Resolution\_on\_protection\_of\_persons\_with\_ mental\_illness.pdf
- Radio France Internationale. (2014, 26 February).

  Top French Court Blocks Extradition
  of Rwandan Genocide Suspects. Radio
  France Internationale. https://www.rfi.fr/en/
  africa/20140226-top-french-court-rules-againstextradition-three-rwandan-genocide-suspects
- Swanepoel, M. (2010). Ethical Decision-Making in Forensic Psychology. *Koers*, 75(4), 851–872.
- Tarasoff v. Regents of University of California, 17 Cal.3D 425. (1976). https://scocal.stanford. edu/opinion/tarasoff-v-regents-universitycalifornia-30278
- UN General Assembly, Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment, 10 December 1984, United Nations, Treaty Series, vol. 1465, p. 85, available at: https://www.refworld.org/ docid/3ae6b3a94.html
- UN General Assembly, Convention Relating to the Status of Refugees, 28 July 1951, United Nations, Treaty Series, vol. 189, p. 137, available at: https://www.refworld.org/docid/3be01b964. html
- World Psychiatric Association. (1996). Madrid
  Declaration on Ethical Standards for Psychiatric
  Practice. https://www.ochrance.cz/fileadmin/
  user\_upload/ochrana\_osob/Umluvy/zdravotnictvi/
  Madrid\_declaration\_on\_ethical\_standards.pdf
- Yadav, P. K. (2017). Ethical Issues Across Different Fields of Forensic Science. Egyptian Journal of Forensic Sciences, 7(1), 1–6. https://doi. org/10.1186/s41935-017-0010-1

## Commentary by Dr. Juliet Cohen\*

*Keywords:* ethics; forensic documentation; medicolegal report; perpetrator

This paper poses the ethical question of whether or not an NGO should provide forensic documentation for suspected perpetrators of torture, if the person is seeking asylum and claims that they have themselves been tortured. The author illustrates the dilemma with three case examples- one who is a high-ranking officer held to be responsible for the actions of his troops now presenting with complex PTSD, the second was forced to join an armed group aged 18 and also has PTSD, while the third case is an informer, suffering nightmares but not PTSD.

The author asks themself a series of questions about how these cases could affect both an individual staff member and the NGO as a whole. These questions are important considerations. It is good practice for an NGO to consider such issues and develop an organisational policy to provide guidance, rather than be in the position of responding to an individual who presents with an unexpected and urgent request.

The first point we are asked to consider is whether or not it matters if the person is definitely a perpetrator? Following on from this, should the NGO make this judgement or indeed seek out more information to elucidate this from the country of origin, when to

\*) MA, MBBS, DipRACOG, MRCGP, FFFLM. Head of Doctors at Freedom from Torture. Correspondence to: jcohen@freedomfromtorture. org do so might endanger the person should they be returned?

In my opinion, this whole question is one for others to answer, not for the NGO providing reports for torture. If torture is wrong, then it is wrong absolutely, so it is wrong to torture anyone, and it is not for us as doctors to judge the victim's past deeds or decide their guilt. Many of us have treated patients who were rude, or unpleasant personalities, who told us they had cheated on their partner, or who lied to us, and still our duty is to provide them with the medical care they need. We do not have to like or admire them, but we do have an ethical obligation to provide healthcare. If a doctor thinks they should not examine a perpetrator, will they examine a person who has committed other crimes? How bad do the crimes have to be? If the issue is that the person has brought this on themselves, should a doctor treat a smoker with lung cancer? It is better not to set foot on this ethical "slippery slope" at all.

The authors ask if seeking information from the client's home country is part of our duty to correlate information for consistency, and if we should do this, if it might mean putting them in danger by alerting people in the home country to their whereabouts. Firstly, this seems to overstep the boundary from being a doctor documenting torture to an investigator, and this is not our role. To be generally informed about patterns of torture in a person's country of origin is important, in order to compare an account and clinical findings with such information, as advised in the Istanbul Protocol. But it is usually only necessary to consider information generally available to all and not particularised. Even if information is so scarce that a doctor felt it imperative to contact an NGO in the country of origin, it is surely possible to do so without giving any details that might identify the person involved. And we have an ethical obligation to maintain confidentiality for our patients which would mean we cannot reveal any specifically identifiable information.

The next area in question is about future risk assessment and harm to others - what if we help this person gain asylum and this enables them to commit further human rights violations? Again, this seems to put the doctor into the role of judge and invites them to stray far from their duty of care. One might just as well argue that by identifying and documenting their torture, they may be enabled to seek treatment for their PTSD which may well in turn reduce the risk of their committing future acts of violence. PTSD is associated not only with fearfulness but with anger and aggression. Therapy may assist the person to reflect on their past actions and choose to act differently in future. How do we know that treatment may not therefore reduce the risk of further crimes?

The authors ask if helping a perpetrator gain protection may hinder victims' access to justice. This appears to be a further legal area rather than one of medical ethics. The existence of an extradition treaty with the country of origin should not be an ethical consideration in whether or not we treat a patient. And as the authors themselves point out, in fact the person is unlikely to be granted asylum if they are a perpetrator since exclusion regulations will be applied. If the person has themselves been tortured to confess their past actions then this evidence is surely inadmissible - again, it is not the doctor's role to be the judge in this area.

A more difficult question is about the extent to which suspicions that the person may be a perpetrator should be included in the report. We have a duty to the Court to include in the report all relevant information. Being a past perpetrator seems likely to affect the assessment of potential causes for the current psychological condition, as all past traumatic, or

otherwise significant, experiences will be relevant here. If a person reveals they are a perpetrator then this should be included. They may, as in the second case, have been forced into a situation they could not escape, or suffered earlier traumatic experiences which impacted them. The doctor's duty is to record all of this and give their opinion on the relative contribution of all known factors on their current condition. The doctor also has an ethical duty to inform their patient with whom they will be sharing the information given to them.

A further question posed is about a person who reveals themselves to be actively involved in torture currently- is there still a duty to provide a report for them? I would answer yes, nothing is significantly different about this case: If there is evidence that they have been tortured in the past this should be reported, as well as the current factors affecting them. Further questioning might reveal for example that they are only currently active because their family is detained and under threat of harm- again, it is not the doctor's role to be the judge here. And further, if there is evidence of current serious harm being inflicted that can be prevented by breaking patient confidentiality, then the doctor has an ethical duty to do this.

The authors conclude by proposing specific criteria:

 Rejecting potential clients where there is conclusive evidence that they might be active perpetrators

Conclusive evidence would be rare to see in such a case and there is no solution proposed for the fuzzy grey area of suspicion that is more often found in real life. I think if we hold onto the principle that all torture is wrong, and must be reported upon, then the answer to this question is clear.

TORTURE Volume 30, Number 2, 2020

 Rejecting potential clients that are claimed by a national or international court for human rights violations

This criterion presupposes their guilt, which again is not the role of the doctor. Indeed, even if they were already found guilty, they may still be suffering the effects of torture and the doctor has a duty to document and report this.

3. Not contributing to the refoulement of anyone

This criterion is effectively countered by the proposals above, to deny documentation of some cases, which would then effectively be contributing to the likelihood of their refoulement.

The important dilemmas posed in this paper can in my opinion be effectively answered by keeping the general ethical principles of medical practice firmly in mind: *autonomy, beneficence, non-maleficence and justice.* 

In these case examples, and in the question of documenting torture for perpetrators more generally, these principles can be employed as follows:

Autonomy- respecting the autonomy of the individual includes respecting their confidentiality and not seeking to be an investigator, prosecutor or judge.

Beneficence- requires the doctor to act for the patient's benefit and therefore to document their torture and assess its impact upon them and their treatment needs, and to enable them to access rehabilitation as a torture victim.

Non-maleficence means that the doctor must not put the patient into harm's way, such as refoulement where there is a risk of their being tortured again.

*Justice-* means the patient must be treated fairly, the same as other patients and not dis-

criminated against, regardless of whether we hold a personal antipathy to them. It should also be kept in mind that, just as there is a duty to report torture where it occurs, there is also a duty to consider the possibility of someone fabricating torture to escape justice, and the expert doctor is best placed to consider this and report on it.

It must be acknowledged that situations are not always clear-cut and that other considerations must sometimes be included in ethical decision-making. An example would be if a patient who is a possible perpetrator needs to attend the NGO premises and this poses a potential risk to others who could be survivors of torture inflicted by that person and traumatised by seeing their persecutor. There is an ethical duty to prevent harm to others where possible, therefore, it is in the best interests of all if potential perpetrators are examined offsite where this risk is much less likely, or at a time when no other victims might be present.

A further consideration must be made for the staff involved. In the UK, doctors who have a moral or religious opposition to a woman's right to termination of pregnancy can excuse themselves from involvement in her care provided they refer her on to another doctor who does not hold such views. A doctor who feels that they will not be able to provide an objective and impartial medical report for someone who is or may be a perpetrator, should excuse themselves from this duty, but they are ethically obliged to refer the person on to someone who will be able to do so.

In summary, ethical practice dictates that we should treat all patients equally, according to their healthcare needs, and leave the determination of guilt or innocence to others.

#### Commentary by Professor Henry Shue\*

I would like to contemplate three constructive suggestions for this probing, thoughtful, and modest set of reflections by the author. I hope that I have correctly understood your paper so that my suggestions will be helpful.

- 1. Sharply distinguish between:
- a. Aiding a potential client suffering extreme distress by providing therapy (therapy provision or 'aid-1')
- Aiding a (now accepted) client by providing an expert report in support of asylum (asylum support or 'aid-2')

On occasion, when comments are made or questions are raised about "assisting" or "aiding" a person, it is not clear whether the reference is to aid-1 or aid-2. Evidently, I am assuming that giving therapy and composing a report for an asylum application are distinct from each other, hence the organization could hypothetically fulfil aid-1, whilst refusing to fulfil aid-2 for that same person. If this assumption is mistaken, this is not a helpful suggestion.

An advantage of being consistently aware towards such distinction is that it clarifies which dilemma a particular argument is relevant to. For example, perhaps the most powerful argument in the paper is that "We have to choose whose side we work on, and working on the victim's side sometimes requires assuming that the victim...can indeed be a perpetrator...Choosing

The following is my explanation.

First order dilemma (see Table 1) states "Should a pro-bono NGO do a forensic assessment of a highly probable perpetrator that alleges to have been tortured him/herself to claim for international protection?" As presented, this dilemma relates to aid-2 - preparation of an expert report to support an asylum claim. When proceeding to present the "resolution" of this first order dilemma, the argument is as follows: "In this situation, our first obligation is to the client. Our stance must be therapeutic, not judgmental. Therefore, this involves ensuring that these clients receive equal treatment..." This argument is in support of aid-1, providing therapy where there is severe distress. That the potential client "comes to us in a severe distress condition" is indeed a strong reason to carry out the "deontological duty" of care, that is, to provide aid-1. However, the first order dilemma is not about whether to provide therapy. Conversely, it regards whether to prepare a report in support of asylum, that is, conducting a forensic assessment in support of asylum. As indicated above, providing aid-1 is not a reason for providing aid-2. Therefore, unfortunately, the reasons provided to the "resolution" of the first order dilemma, seem largely irrelevant to that dilemma (and decisive regarding dilemma 2d).

As I have previously mentioned, I am assuming that one option would be to provide therapy, thereby assisting in reducing the clients' extreme stress and fulfilling the duty

this framework implies the understanding that the first victim to be aided is the one in front of us" (second order dilemma). This is a compelling consideration in favor of aid-1, however not a very strong – and certainly not a decisive - consideration in favor of aid-2. Despite this, it seems to be presented in the paper as justification for taking a position on aid-2.

<sup>\*)</sup> Professor of Philosophy at University of Oxford. Correspondence to: Henry.shue@politics.ox.ac.uk

TORTURE Volume 30, Number 2, 2020

of care. Simultaneously, this option allows non-acceptance of the client (if, for example there is clear evidence he is an active perpetrator) and refusal in conducting a forensic assessment supporting asylum. Provided that aid-1 and aid-2 are separate matters, and it is possible to say yes to one and no to the other; reasons for one are not reasons for the other. In other words, a duty of care is not a reason to advocate asylum, but it is a reason to provide therapy. Nevertheless, there are certainly individuals who ought to receive therapy (because they had been tortured) however were directed to authorities for trial after committing torture, or were still actively involved in torturing, as was the scenario in Case 3.

- 2. Sharply distinguish between:
- a. The issues that arise *before* the decision to accept the person as a client, and
- b. The issues that arise *after* the decision to accept the person as a client.

It appears to me as if the main discussion about whether the potential client is also a perpetrator falls under second order dilemmas. This category was where I perceived before and after as being collapsed together. The reasoning in the paper is "trust is a necessary pre-condition to work in the forensic assessment of an alleged victim. Moreover, trust and confidence are complex matters assuming our impartiality ....". These considerations apply, however, after the decision has been made to accept the person as a client and to work with him on a forensic assessment that may support the asylum application. Such considerations are not reasons for why you should trust him, or that he trusts you, before you have decided to accept him as a client. Consider, if you were impartial to all potential clients, you could only either accept all or reject all. If you are

to accept some and reject others, an inquiry is necessary, if not an investigative, preliminary stage.

I realize that a client could not reasonably trust you if you continued to investigate his prior behavior (is he a torturer) after you have started work on the forensic assessment (has he been tortured). However, he cannot expect you to immediately and automatically accept him before you have chosen to take him as a client, and you have no reason to be impartial until you have chosen to enter that relationship. I realize that you cannot launch an investigation in his country of origin as it could endanger him. Nonetheless, before your task turns to determining whether he has been tortured, there is no reason why you cannot discreetly and carefully attempt determination on whether he is a torturer using general information available. Your choice is to decide whether the available evidence is conclusive, highly probable, or not-so-highly probable that he is a torturer before you choose to launch any forensic investigation.

If you were to conduct an inquiry about whether he was a torturer, prior to making the decision to accept him as a client, affect his ability to trust you post-acceptance? You are the expert on that, is the separation of before and after psychologically unrealistic? I do not think so, however, post-acceptance you could open a dialogue with him along the lines of "until now we have not developed a trusting relationship because we first needed to determine whether you were an eligible client. We are now finished with that decision and are committed to helping you. We are trusting that you deserve our help, and that you too, can trust us - we are now on your side and will try to help you gain asylum." Could this be realistic?

I would also like to mention a couple of issues about the conclusions, or "proposed cri-

teria" in Table 2. From my position, I take proposed criteria one and two to be the main answers for the first order dilemma about aid-2, support for asylum. Regarding criterion one, it is useful to note that different cases emerge. The statement made in the beginning on first order dilemma asked about "a highly probable perpetrator", however criterion one in Table 2 references "conclusive evidence". Probable and conclusive are two different situations, whereby conclusiveness is much easier to deal with. The discussion mentions "clients who admit to being complicit in torture", and Case 3 of the informer for the para-police "showed our staff photographs he has recently sent via WhatsApp of potential targets". Presumably, this would be an example of a conclusive case by which the client has admitted involvement. Although am I correct in presuming that implicating oneself like this is relatively rare?

In any case, the original, more difficult question regarded cases of "highly probable" yet not conclusive. I consider one kind of highly probably case as presented in criterion two "potential clients that are claimed by a national or international Court". Perhaps a claim by an international court would usually count as conclusive, or sufficiently highly probable. What do you say about national courts in contrast with international? Consider circumstances where a national court is a part of a dubious regime that might, as alleged by the potential client in Case 1, have ulterior motives for framing political enemies? Aren't you forced to make an independent judgment of your own about whether to accept the courts charge based on whatever general knowledge you have about the government in question?

Criterion three in Table 2 is a widely understood and shared legal requirement that is not at issue (even though the Trump Administration in the US is currently blatantly and flagrantly violating it). One clarification that is needed concerning refoulement is to be explicit about the answer to the question: do you consider refusal of providing an expert report in support of asylum as a case of 'contributing' to *refoulement* in a manner prohibited by criterion three? I would not, as refraining from helping is different from harming, but I think your position needs to be clear.

3. Apply the conclusions reached to each of the three illustrative cases in order to explain how the criteria help to resolve each case. It is very helpful to have the three cases, but it is a lost opportunity if you do not return to them and illustrate how the discussion helps with each. This concrete application will make the meaning of the criteria adopted much clearer.

#### Commentary Professor Elizabeth Lira\*

The questions at the heart of the text of the article arise in the professional work of evaluating victims of torture in a centre (NGO). The victims come from various countries, where torture practices exist or have existed, and request international protection.

Dilemmas arise from the possibility of professionals finding themselves in front of clients who, during assessment, have doubts about the client's status as victim, and who develop suspicions that they may be a perpetrator. The centre may decide to exclude them from treatment at some point to prevent international protection from contributing to impunity for any crimes they may have committed. However, the decision to exclude them makes it necessary to examine and review the admissibility criteria in trying to control the risks of committing injustices. Resolving the dilemmas identified in the article involves a process of discernment that guarantees the clients' rights, the safety and certainty of professional procedures and their outcomes, and finally the effective protection of victims.

Torture is an attack on the human bond and severely affects trust in other human beings. The consequences accompany victims for life. When victims undergo a forensic assessment to obtain international protection, they expect to receive understanding, some form of emotional support, and in particular, they expect to be "believed". It is this expectation that allows them to reconstruct their dra-

Evaluations are emotionally charged moments for clients that range from anxiety in the face of an evaluation, to the anguish evoked by the painful memories that are reconstructed. Professionals carry out their work within a framework of confidentiality that reinforces the bond of trust that is established. However, the ethical dilemmas proposed in this article have arisen in professional work when the background information collected calls into question whether the client is indeed a victim. In other words, when doubts are generated about the veracity of the information. Where the victim is "not believed", the professional questions the ethics of his or her actions in the evaluation process and the evaluation's results. For professionals, the greatest difficulty occurs when the data collected allows them to suspect that the client is not a "legitimate victim", understood as "innocent", but rather a perpetrator who presents himself as tortured.

There seems to be no great problem in expressly declaring the exclusion of perpetrators who are not in doubt about such status because they have been reported or are under prosecution. This decision is consistent with the principles of professional work within NGOs serving victims. But it is those dubious, ambiguous cases that require a process of discernment based on a thorough review of the

Correspondence to: lisbethlk@yahoo.es

matic experiences. Memories of that past can reactivate emotions and suffering that are difficult to communicate. Professionals are trained to do their job well and to believe the victims. Pro bono work in an NGO seeks to guarantee a service based on values and ethical principles declared as a commitment to the absolute prohibition of torture. In many cases, the work requires the support of an interpreter who shares the narrative and who also observes the non-verbal language which completes the meaning of what is said.

<sup>\*)</sup> Professor of Psychology at Universidad Alberto Hurtado, Chile.

facts and data available to us: the biographical background, personal motivations, and the decision to apply for international protection. Data analysis can provide a better understanding of the facts of the past, enabling the gathering of evidence to establish whether and under what circumstances the person presenting himself as a victim may be a possible perpetrator at some point in his past. These cases should also lead us to define under which criteria their status as a victim might prevail over the forensic assessment.

I think it is relevant to point out that in contexts of prolonged conflict, especially armed conflict, it can be difficult to establish clear differences between victims, perpetrators, witnesses, and accomplices, not only from a legal perspective. The forced recruitment of children and adolescents can generate devastating cumulative traumatic experiences, precisely because they have participated in, and in many cases been subjected to cruel, inhuman, and degrading acts and torture. It is not easy to reconstitute these stories or emotionally differentiate these experiences for those who were trapped and adapted in circuits of violence, abuses, and coercion based on religious or ideological visions, which did not always make sense to their participants. These and other considerations need to be made to understand the possible trajectories of some clients - by thoroughly analysing the available background. Clarifying the principles and values that frame our work can allow us to deepen these dilemmas to decide on the qualification of a victim whose trajectory allows us to suspect that it is a complex case.

I agree with what is said in the article about the first dilemma. Professional ethics require a good report and an exhaustive characterization of the client's situation, noting - with the resources available - that it presents evidence of having suffered torture. It

is important to bear in mind that professionals conduct themselves within ethical principles and values and, as the article points out, from a "commitment to the absolute prohibition of torture". Evaluating people by doubting the information received can affect not only the relationship of trust with the client but eventually the results of the evaluation. This type of case can generate discomfort and insecurity in the professional, especially if they have limited knowledge about the social and political context of the origin of the consultant. Doubts, as stated in the article, seem to force professionals to become investigators of their clients, since the difficulty presented by the case suggests that if more information were available, it could be adequately resolved. However, if the case has not been reported, it is unlikely that reliable information will be obtained from the country of origin. On the contrary, the lack of information does not ensure their "innocence" nor eliminate the doubts, returning to the professional the responsibility of examining their perceptions, mistrust, critical elements, and evidence to decide on the status of the client as a victim.

The analysis proposed in this article provides elements to think that it is not enough to establish general criteria to support procedures and decisions for doubtful cases. Guaranteeing the client's rights involves making a case-by-case judgment. In cases where there is evidence that the client has been a perpetrator, and that his or her recognition could have negative consequences for other victims, the decision to exclude seems obvious. But this decision requires that sufficient, truthful, and valid information be available to ensure that a decision in favour of his or her application would not endanger other victims. However, in addition, as noted in the article, the risks of refusal, especially deportation to their country of origin, must be weighed. It is precisely this

risk that forces us to delve into the subject's history and to differentiate when the victim's condition prevails in a violent path that sows doubts about the clarity of that classification.

Reasonable doubts regarding a client require that the NGO recognize these difficulties as part of their professional practice in this context and formulate strategies to guarantee the rights of those who consult as well as those who carry out this work. The protection of the client and the professional could be achieved by generating a process of discernment within an extended professional team to evaluate complex cases in a second instance, seeking to guarantee confidentiality, the link with the patient, the values to which the professionals and the NGO adhere.

The power of the decision is a matter of reflection in these cases, weighing up its consequences. The evaluation will affect people's lives. The commitment against torture is not an abstract one. It is expressed in decisions to protect victims. It is expressed in the rigor of the reports, taking into consideration the serious consequences that these experiences have had on the people who suffered them, despite the passage of time. The rejection of torture is clear. The responsibility to protect victims is a priority. But it also requires differentiating in complex cases the status of victims. As it has been said, an exhaustive characterization of the consultant's situation can allow asking the fundamental ethical question regarding the case, after objectifying the individual and collective veracity of their history, identifying the aspects that generate the doubts and hierarchizing their importance in the context of the subject's history. What is the right thing to do in this case? What are the main values in this case? Recognition of victims; truthfulness; security; trust; confidentiality? What are the possible options?

As concluded in the article, the institution can define criteria for rejecting potential clients if the available evidence indicates that they are active perpetrators or if they are claimed by a national or international court for human rights violations as a way of resolving the general dilemma proposed in this article. But responsibility for the life and rights of clients must be assumed if, after a process of discernment, it is concluded that victim status prevails in that case.

#### Commentary by Dr. Önder Özkalıpcı\*

I congratulate the author for bringing this topic regarding the ethical dilemmas faced by NGOs when a perpetrator of torture requests a clinical evaluation to prove claims of persecution or being victim of torture. Such dilemmas may arise in the case of NGOs whose primary mission is to provide supportive documentation for asylum claims by victims of torture, in accordance with the Istanbul Protocol.

Questions related to these dilemmas may emerge in the daily practice of any rehabilitation centre for survivors of torture (RCTs). I will proceed to discuss the paper from the perspective of RCTs.

Firstly, I propose my support for the panel's position towards not contributing to the refoulement of anyone to a country that is unable to guarantee a person's physical or psychological integrity, regardless of whether that person is a perpetrator of torture. However, the first and second dilemmas present important challenges.

The duty of a RCT or a rehabilitation unit in an NGO is to provide healthcare. This point is reiterated in the conclusion of the paper, "the organizations stance must be therapeutic, not judgmental."

Confusion seems to arise however, in situations where the provider fulfils forensic or medico-legal reports (MLRs) alongside rehabilitation. Within the centres expertise and remit, the healthcare and psychosocial support should be provided to everyone, without discrimination. Additionally, if the centre provides healthcare, providing MLRs should be In the case of persons seeking emergency services, providers do not, and should not, be requesting the person's criminal records. Therefore, when a patient is requesting treatment and a MLR for the problems acquired as a result of experiencing torture, services should not be rejected based on the possibility of the patient also being a perpetrator of torture.

In response to the question "should a probono NGO do a forensic assessment of a highly probable perpetrator that alleges to have been tortured him/herself to claim for international protection?" the answer is very clear. The organization's obligation is to follow the ethical declarations of the World Medical Association (2018a; 2018b). These declarations outline that health support and care for those in need, should be provided without any discrimination and without regard to any discriminating factors based on identity, affiliation, or political opinion.

Being a pro bono organization does not change the ethical responsibilities of a RCT and the health professionals working there. All medical professionals working in hospital emergency clinics, prison medical units, army medical corps or a pro bono RCT, are all bound by WMA Hippocratic oath and international code of medical ethics (WMA, 2018). The RCT should be concerned only by the health of the patient.

In situations of pro bono organisations having limited resources for providing client services, staff may question where the resources are being directed. In particular, they may ask "with these limited resources and capacity, why do we support/serve an alleged perpetrator?" The answer is multifaceted.

Firstly, the health support is to be provided, without discrimination or regard to

considered as part of the inherent therapeutic process.

<sup>\*)</sup> MD, PhD. World Psychiatric Association and Journal of Forensic and Legal Medicine. Correspondence to ozkalipci@gmail.com

their identity, affiliation or political opinion, or crime record. Secondly, there should be scope within the RCT to conduct patient triage, whereby their capacity and limitations are considered. Vulnerable groups such as children or single mothers, should be prioritised. Additionally, the RCT could implement standards for medical screening or triage algorithm for psychiatric screening (TAPS). Ultimately, within the organisations scope and as a healthcare provide, they must provide healthcare to all – including, in the current context, the torture survivor who is also perpetrator.

To know whether the medical report produced by the healthcare provider will be used for an asylum application or for international protection by the patient, is outside the RCTs scope. Furthermore, the dilemma of what to do when a person is both torture survivor and perpetrator, is one of a legal nature.

It is pertinent to reiterate that the RCT would not be contributing to human rights violations, if they were to provide healthcare to a torture survivors and perpetrator. On the contrary, the RCT would be defending medical ethics and supporting colleagues such as Dr. Kuni who works for the treatment of torture survivors in conflict zones and in countries where torture is systematic (WMA, 2017a).

At this point, the response to the "second order dilemma" is clear. The center must provide support to patients with PTSD who have allegedly experienced torture.

I agree with the author's conclusions regarding the second group of dilemmas. It is unnecessary to conduct "investigations" in the home country of the client for the purpose of determining whether he or she is a perpetrator or criminal. One scenario that may require contact with the country of origin is in the case of an RCT conducting an MLR. The RCT may request from the patient, any additional supporting documentation to their claims of

torture. Further, where originality or authenticity of the medical documents needs confirming, the RCT may follow this up.

Granting asylum is a legal decision, and MLRs provided by RCTs help asylum authorities make that decision. A MLR supporting an allegation of being victim to torture reflects a parameter to vulnerability, thereby assisting the asylum authorities to make their decision (European Asylum Support Office, n.d.).

The role of the RCTs is to provide psychosocial support and healthcare and where necessary, provide a report on the existing medical and psychological situation of the patient. According to the Istanbul Protocol, the health professional should provide within their report, a conclusion on the consistency of torture allegations as well as physical and psychological findings.

In situations where a RCT has both legal and treatment programs, or in our case, a multidisciplinary team, the relation between the two should be clarified. The rehabilitation team of the client can liaise with the legal team, in addition to providing the medical report. However, the rehabilitation team should never share information that could harm their client. With regards to information-sharing between the rehabilitation and legal team, prior consent to do so should be gained from the client first.

Human rights defenders and legal branches of human rights organizations have mandate to locate and expose perpetrators, however, for RCTs it is not the main mandate. In some instances their MLR s or human rights violence data on some countries or regions can be shared with the legal team. Along similar argumentation, legal organisations and legal experts have the choice to defend a perpetrator or not, albeit, they too are bound by their professional ethical codes.

Providing healthcare and psychological support to a client does not protect them from

judicial process. Likewise, providing an MLR to a client of your centre does not protect them from judicial process. Each MLR of RCTs are not, and cannot be, accepted as a pass for immigration. It is the asylum authorities' responsibility to assess the content and scientific quality of the medical reports.

Furthermore, it is always advisable that when making appointments for patients, it be organised as such to ensure they do not encounter other persons from his or her country or region of origin. Subsidiary to this, such practice by the RCT will prevent instances or opportunities for alleged perpetrators of torture to misuse the rehabilitation premises and activities, as a way to gather information on patients. Our patients' business and activities outside of the RCT premise is not of our concern. Where a patient does misuse the premise in such manner, it gives due cause to terminate the rehabilitation support.

When a complainant of this conduct reports to the RCT, they can be reminded of the legal options available, such as intervention or support from a legal human rights organisations. Nevertheless, alleged perpetrator identity should be held strictly confidential, as well as all of the RCTs patients. In the dilemma of a perpetrator of torture, identified by a court decision, (not to mention the dubious court decisions made by national courts under dictatorships) who is also claiming to be a victim of torture, the RCT should proceed with providing medical support and on request, a MLR for asylum application.

The statement of WPA is clear "risk direct harm to third persons". It is very unlikely that the alleged perpetrator knows the code of a ticking bomb.

Health professionals are dealing with the health problems of human beings. Their interest should not be towards whether their client is criminal nor whether their client is an alleged perpetrator or alleged member of a terrorist organization. For example, how can you judge health professionals working in places of detention? These professionals are obliged to provide healthcare to prisoners regardless of whether they are paedophiles, serial killers, rapists or terrorists. Does that mean they are accomplices of these crimes? Can you blame the medical team of Scheveningen Prison in the Hague which hosts war criminals of ICTY or ICC convictions? Such professionals are fulfilling their medical duty of providing medical support to these prisoners. Consider medical experts in war, they too should provide healthcare, even to an enemy soldier. It is health professionals' duty to provide healthcare and health professionals are protected by Geneva Conventions (WMA, 2016). "Whether civilian or combatant, the sick and wounded must receive promptly the care they need. No distinction shall be made between patients except those based upon clinical needs" (WMA, 2017b)

In response to your comment "Inevitably, we are also concerned about the legal risks we may have to assume in protecting an alleged perpetrator, accused of potential human rights violations" the answer to this is also clear. To reiterate, RCTs provide healthcare and we must concentrate on this mandate - providing healthcare can never be a crime.

Rejecting clients can only be acceptable in cases where the expert feels uncomfortable to treat the client of concern. Although, in such cases, the healthcare provider must provide another feasible option for treatment – "Give emergency care as a humanitarian duty unless he/she is assured that others are willing and able to give such care" (2018b) - provided that institution or clinic is qualified for the rehabilitation of torture survivors.

The RCTs and their health professionals should concentrate more on improving the

professional skills to differentiate false torture claims rather than the crime record of their clients.

#### References

- World Medical Association (WMA) (2018a). WMA

  Declaration of Geneva. https://www.wma.net/
  policies-post/wma-declaration-of-geneva/
- World Medical Association (WMA) (2018b). WMA International Code of Medical Ethics. https://www. wma.net/policies-post/wma-international-codeof-medical-ethics/
- World Medical Association (WMA) (2017a). WMA Council Resolution in Support of Dr Serdar Küni. https://www.wma.net/policies-post/cr-kuni/
- World Medical Association (WMA) (2017b). WMA Regulations in Times of Armed Conflict and Other Situations of Violence. https://www.wma.net/ policies-post/wma-regulations-in-times-of-armedconflict-and-other-situations-of-violence/
- World Medical Association (WMA) (2016). Ethical Principles of Health Care in Times of Armed Conflict and Other Emergencies. https://www.wma.net/wp-content/uploads/2016/11/4245\_002\_Ethical\_principles\_web.pdf
- European Asylum Support Office (EASO) (n.d.)
  EASO Tool for Identification of Persons with
  Special Needs. https://ipsn.easo.europa.eu/easotool-identification-persons-special-needs

#### **Author response to commentaries**

Sara López Martín\*

I want begin by acknowledging the fascinating and useful contributions these four renowned experts have made to my discussion paper; their comments and inputs honour me.

At the same time, and assuming, as Professor Henry Shue points out, that my proposal needs some clarification, I would like to address some of the issues raised by the discussion.

On the one hand, as Henry Shue and Önder Özkalıpcı mentioned, I would like to clarify that the dilemma was not related to therapeutic interventions, but only to forensic reports. Although we advocate for a retaining, as far as possible, of a therapeutic perspective in forensic work, I do not think that the same ethical principles that are applied in medical care can be applied here. We are not talking about the duty of care, but about challenges in forensic assessment, where the doctor and the psychologist play a completely different role. It is crucial to keep in mind here that the resources of small centres are limited.

To provide further detail:

1. The first confusion has to do with the assumption that we should apply the same

approach to therapeutic and forensic work. This issue is not trivial because we think as Henry Shue has rightly pointed out that, from a clinical point of view, "giving therapy and composing a report for an asylum application are separable". Our centre, in fact, seldom provides "medical care", in the sense that Juliet Cohen and Önder Özkalıpcı describe it, and on these occasions, we have no doubts regarding the duty of care contained in the Hippocratic Oath<sup>1</sup>. The dilemma discussed relates to a different scenario.

2. As our rehabilitation professionals are from different professional backgrounds, and do not work from the same perspective, it is valuable to harmonize these approaches. We are a multidisciplinary team. Thus, from an ethical point of view, this deontologically-bounded activity is not restricted but instead extended (or doubly restricted), by different deontological provisions. Hence,

\*) Lawyer, SiRa, Madrid.

account the circuit apply the came

We provide therapeutic support, pharmacological treatment, sometimes separately, sometimes in combination; corporal therapy, medical forensic reports; medical-psychological-psychiatric forensic reports; legal advice, various methods of traditional healing when considered pertinent, among many other things.

TORTURE Volume 30, Number 2, 2020

there are other concerns to be addressed in addition to the "duty of care". Furthermore, this may mean, as Cohen fears, having to make inroads beyond the boundaries of our medical ethics, which do not necessarily resolve all dilemmas.

As already stated, it is clear that the primary victim to be protected is the one who in front of us (Elizabeth Lira). However, here in this case, I would apply the logic of a single code of conduct, medical deontology, to cases that generate dilemmas for us. In that case, the big question is: once this victim is protected, does my commitment against torture cease? Am I not obliged to think that if, by helping, I indirectly facilitate torture of other people, or that, if they were tortured in the past, they have no reparation? I believe that a view that only contemplates a master key (the use of medical ethics for any situation) does not allow us to analyse the mediumand long-term consequences of what we do. Such a narrow view would not allow us to be accountable, to give explanations, to the potential victims of the person we are assessing, in the past or the future, if any at all.

In addition to this, other complexities move us away from prescriptions proposed surrounding *the duty of care*:

- 1. As we are not judicial forensic experts, but experts on behalf of the parties, we are not obliged to accept every case. Thus, we cannot rely on a commitment to accept all cases, in order to solve the dilemma.
- This element also means that, when we accept a case, we make a "certain" commitment not to harm our client. What is more, we do not have "a duty to the Court to include in the report all relevant information",

- as Dr Cohen states, mainly when this may condition a refusal of asylum, with all the associated risks.
- 3. Indeed, <u>our reports</u> are not conclusive (Onder Özkalıpcı and Henry Shue), <u>but</u> often have a substantial weight in decision <u>making</u>, especially in less documented cases. I have to acknowledge that, on issues such as non-refoulement, I find it difficult to discern the boundaries between "not helping" and "harming" (Shue), precisely on account of the implications that the absence of help has in some cases.
- 4. In any case, our position on torture and the protection of victims is strong. We are simply in a particular situation, different from official forensic practice, but also different from a limited medical approach so that traditional anchors do not always allow us to face the challenges posed by such dilemmas.

I also have to disagree with statements about what it should be to "do our job well". I defend the importance of studying not only the general but also the specific contexts of the facts that affect our client's history. We are professionals who must rigorously analyse the facts (and I think this has little to do with judging the work of prison doctors or refusing to treat criminals or people we dislike). I find it hard to imagine our work without this "preliminary stage of inquiry", precisely because we analyse the consistency of symptoms and facts. This is not just related to medical sequelae, but also to psychological and psychiatric impacts, which are different, much more complex, and require specific procedures and methods that may go far beyond the analysis of external scars. We do not need much information for a medical report. However, we need it when we need to assess consistency with psychological symptoms or to justify the

TORTURE Volume 30, Number 2, 2020

absence of psychological symptoms, which is what most often happens.

I also believe that this analysis affects trust, and this is not a problem that disappears with the acceptance of the case. Furthermore, distrust can increase as we know more about the case. This dynamic process is part of the work of making a judgement of consistency, and it is part of the work of the forensic expert. In any case, Elizabeth Lira's proposal of a case-by-case analysis seems not only inevitable but probably the only clear way forward at this point.

#### Wrapping up and proposal

Thus, grateful for the contributions and the possibility of thinking in greater depth about commentators' suggestions, below is a fine-tuning of my initial proposal, although significant changes are not incorporated.

These are our *new* proposed criteria:

 Reject potential clients where there is conclusive evidence that they might be active perpetrators.

There is rarely conclusive evidence about the activities of the assessed person (except when that person flaunts victims in front of our horrified ears, and this has happened to us). We must offer an alternative. For example, to offer a clinical impact record instead of making a full Istanbul Protocol report.

In any case, the debate over whether or not to reveal suspicions to the victim is not resolved. It demands a risk-benefit analysis in a case-by-case study.

2. Reject potential clients that are sought by a national or international court for human rights violations.

Again, this will rarely happen. If there were to be injunctions, they would probably be from domestic national courts, of which we may not be aware, and, in any case, we

have no reason to question a priori their ability to make a legitimate and safe prosecution. Once again, only on a case-by-case analysis would we know if we are dealing with a potential perpetrator of crimes against humanity and this in itself would help us to decide what to do (or not do!).

3. Not contribute to the *refoulement* of anyone – perpetrator or not- to a country that will not guarantee their physical and psychological integrity.

I have no doubts about this criterion. The only concern is that, because of the type of cases we usually see in asylum applications, this premise is always fulfilled and makes this debate sterile. I understand, however, that the debate about what kind of support we can offer depends on whether the case is sufficiently documented or on the weight that our report may have, among other factors that will determine whether not helping is or is not harmful.

#### Table 1. New proposed criteria

- 1. Reject potential clients where there is a conclusive evidence that they might be active perpetrators (define "conclusive evidence" and where to find it).
- Reject potential clients that are sought by a national or international Court for human rights violations (how to discover whether this is relevant and actions to take in this case).
- 3. Not contribute to the *refoulement* of anyone perpetrator or not- to a country that will not guarantee their physical and psychological integrity (decide what we do to help, provided that failure to do so will result in the possibility of return to their country of origin).

The discussion remains open...

#### An Overview of Torture Prevention Systems in Russia, Lithuania, Sweden and Norway

Report published by Citizen's Watch and Human Rights Monitoring Institute<sup>1</sup>.

#### Tania Herbert\*

The very nature of detention means that those subjected to it are dependent on detaining authorities to provide protection and to refrain from human rights abuses, including torture and ill treatment. Recognising this, the Optional Protocol to the UN Convention against Torture (OPCAT) obliges signatories to establish detention monitoring bodies through National Preventative Mechanisms (NPMs). Whilst some regions have received considerable attention in terms of CAT and OPCAT compliance, this has not generally been so for the region incorporating Russia, Nordic and Baltic countries.

Noting the shared responsibility and need for a regional approach to the eradication of torture, An Overview of Torture Prevention Systems in Russia, Lithuania, Sweden and Norway is a joint effort between four non-government human rights organisations, and forms part of a broader project on regional

prevention of torture, funded by the Nordic Council of Ministers.

This concise paper outlines the situation and preventative measures by country. There are some minor variations in nation-based topics, but included for all are descriptions of legislation, observations of international bodies, the system of prevention of torture, the number of places of detention, and analysis of the National Preventative Mechanism (NPM) and the Russian equivalent system.

In considering the number of places of detention, the difference in scale becomes apparent, with over 9,000 detention locations in Russia, compared to 4002 in Lithuania, 318 in Sweden, 1,511 in Norway (where, unlike for the other countries, 1,000 nursing homes are also included in the count).

The four countries cover a spectrum of legislative considerations. On one end, Russia has not signed the OPCAT and torture is not criminalised as a specific crime in national legislation. On the other end, Norway has constitutional and penal code provisions, with Lithuania and Sweden both showing steps towards specific criminalisation of torture and ill treatment. Existing Ombudsman structures are utilised as the NPM in those countries that have signed the OPCAT, and the high qualifications of appointees are particularly noted for all.

Russia presents a very different system, with law prescribing the formation of a Public Oversight Commission (POC). Whilst the mandate has similarities to the NPM system, its considerable limitations are outlined, including the non-transparent selection and appointment process, with the lack of financing, issues around independence, and the power of detaining authorities to restrict access being among them.

Reports of observations by international bodies and by local media and civil society

Available at http://hrmi.lt/wp-content/ uploads/2019/09/2019-09-14-Overview-of-Torture-Prevention-Systems-brochure-A5.pdf

<sup>\*)</sup> Counselling Services Unit, Zimbabwe. Correspondence taniaherbert@gmail.com

are telling in the greatly differing situationsthe section on Russia refers to serious concerns and "waves of killing and torture" as compared to the generally favourable reporting from Sweden and Norway (this section is absent for Lithuania).

For Norway alone, it is noted that the number of monitoring visits appears sufficient – both Lithuania and Sweden reviews note the limitations on resources to regularly visit all places of detention. The number of visits in Russia is unclear, but the limitations on the POC suggest that it is unlikely to meet the need. Criteria for prioritising where to visit are described for Sweden and Norway, with the lack of publically available rules around visits expressed as a critique for Lithuania.

Overall in this report, critiques for the OPCAT signatory countries are few, though of interest, given that there is comparatively little critical material written for these countries: The low awareness of visits and very poor public trust in the monitoring institution is noted in Lithuania, the Swedish review notes there is no development of a prevention strategy related to threats and reprisals, and Norway's legislation, whilst the most advanced, is still lacking a needed reference to "discrimination of any kind". Such critical reviews are an important reminder that there are steps that all countries can make in the prevention of torture.

Particular strength areas are also noted, such as the vibrant public presence and dialogue process by the Norwegian NPR. Despite the many limitations of the POC, the adopted Code of Ethics by the POC in Russia does detail guidance on how POC members can work with people in detention and authorities.

The paper is a clear and well-presented review of the situation across the four countries, and the use of regional reporting is an interesting approach. By taking the focus off the single country, the idea of regional solutions can be raised, and there is the opportunity to apply regional pressure to take on best practices, and to review one's country critically against one's neighbours. In this case, Sweden, Norway and Lithuania's procedures are able to be analysed, despite not being usual targets for criticism, and there is a new opportunity to highlight the deficiencies of Russia's approach by placing it in a regional context.

Expectedly, the document is weighted towards a discussion of Russia (as indeed this review is). The limitations of the POC in Russia are highly evident, particularly in comparison to the other presented countries, so the paper does, purposefully or not, particularly highlight the shortcomings of Russia. This discussion of the POC is particularly compelling, demonstrating that a parallel process which is not in line with the stipulations of the UNCAT can endanger its independence and impartiality, as well as its ability to function when it is a voluntary action and can be effectively stymied by detaining authorities - the very group that the OPCAT is aiming to compel to refrain from torture and ill-treatment.

The report presents as a factual read—whilst the obvious conclusions are the need for Russia to ratify the OPCAT, and for other countries to ensure compliance with its provisions, this becomes evident to the reader through the country-by-country evaluation, rather than through conclusion or recommendations. Whilst a more explicit comparison and suggestions on regional actions would also make interesting reading, allowing the reader to draw their own conclusions from the presented facts also makes for engaging reading.

#### **Torture based on discrimination in Chile.**

# The hunger strike of Mapuche political prisoners and the case of machi Celestino Cordova.

Jesús Antona Bustos\*

Of the approximately 40 Mapuche political prisoners currently serving sentences in Chilean jails, more than half have either gone on, or are currently on, hunger strike. The first prisoners to adopt such a measure did so on May 4. They are taking in liquids, but no solids, and so the state of health of many has now reached a critical level. Following substantial international pressure, the Chilean government has offered some minor prison benefits, however, there is no sign of measures to address neither the reasons for the strike, nor the torture perpetrated for reasons of discrimination that the Mapuche prisoners continue to suffer.

The Mapuche prisoners initially demanded to be afforded equal access to the penitentiary measures taken to confront the coronavirus. These were applied to more than 13,000 non-Mapuche prisoners through different formulas: pardons, parole, change of precautionary measures, etc., from which all Mapuche prisoners were excluded. The hunger strike that began as a result of this exclusion, has increased in its demands, which go beyond the coronavirus itself. Those striking demand the freedom of all political prisoners under the argument that the legal processes in which they

The current problem is one of déjà vu, and must be framed in the context of the so-called "Mapuche conflict", which was initiated by the Chilean elites against the indigenous people when they decided to invade the "Mapuche Country" and incorporate the indigenous territories into the sovereignty of the new nation, occupy its lands and assimilate its inhabitants into the discipline of the new republic. The Mapuche consider that they are

have been accused are based on judicial procedures of dubious legality and are legitimised by a racist and tortious interpretation of the nation's Anti-Terrorist Law. Their demands also refer to the government's non-compliance with ILO Convention 169, the Indigenous and Tribal People's Convention, which recommends that states should give preference to methods of punishment other than confinement in prison, preferably allowing them to remain in their communities and according to their own cultural traditions. The repeated refusals of the Sebastián Piñera government to address these claims have highlighted the existence of a discriminatory prison policy. The various human rights organisations, citizens' groups and indigenous organisations that have joined the international protest have described the Chilean state's actions as cruelty. In addition to justice processes of dubious legality, the treatment of Mapuche prisoners in prison is also a matter of concern.

<sup>\*)</sup> Professor of American Anthropology at the Complutense University of Madrid. Correspondence to: antona.jesus@gmail.com https://doi.org/10.7146/torture.v30i2.122540

political prisoners for ethnic reasons, since their imprisonment is related to indigenous demands: cultural rights, autonomy, land restitution, control of their ancestral territories. The Chilean authorities, for their part, do not recognise the existence of political prisoners in their country, although, paradoxically, they apply discriminatory treatment specifically to prisoners of Mapuche origin.

Although denied a thousand times over, the coronavirus pandemic has brought the evidence of racism and monoculturalism in the state to light, despite the official narrative on interculturality. The sensitivity of the current government towards the Mapuche prisoners is very different from the indolent penitentiary policy observed towards those convicted of crimes against humanity or the carabineros and military involved in repressing acts of mourning, especially against the "Indians".

The most emblematic case that has captured the attention of the international media is that of machi Celestino Cordova, sentenced to 18 years in prison in the so-called Luchsinger-Mackay case. His status as a traditional religious and therapeutic authority has centred the response of the prisoners and the Mapuche society on his person. The case involving this machi takes its name from the murder of an elderly couple, Werner Luchsinger and Vivian Mackay. The couple perished in a fire, when on January 4, 2013, several hooded men attacked and set fire to their house located on the Lumahue estate (Vilcun Commune). The Luchsinger-Mackay family is a powerful family of landowners in the south of Chile who have regularly clashed with the Mapuche, as many of their properties are located on lands that historically belonged to them. The most notorious confrontation was the one that, five years earlier, led to the death of the young Mapuche, Matías Catrileo, who was shot down by the carabineros during his attempt to occupy one of the properties belonging to this family of landowners.

The commotion caused by this attack amongst policitians and the Chilean public alike and marked by the rise to power of Sebastián Piñera, a supporter of the "iron fist" against the Mapuche, led to the arrests being rushed, with 11 ethnic Mapuche people initially charged with arson of the farm. Five years later, the Temuco Trial Court acquitted all of the accused, except for machi Celestino Córdova, who had already been sentenced to 18 years in prison. The primary evidence against him was a gunshot wound he had sustained less than two kilometres from the area of the attack. However, it was not possible to clarify what happened in the interval, whether the wound was related to the event itself, and whether the bullet came from Luchsinger's weapon, with which he had allegedly tried to defend himself.

The acquittal of the rest of the accused was based on the following arguments: the existence of "an elaborate and coordinated plan" to provoke fear among the farmers in the area was not demonstrated; there was no direct evidence to place the accused at the scene of the crime; the investigation of the case and the collection of evidence "suffered from insurmountable defects". In fact, the only basis for the accusation came from the testimony of one of the defendants, José Peralino Huinca, who, as he later stated when he tried to retract his statement, was forced to testify under pressure and torture. The veracity of his coerced account was questioned, both because of its technical aspects (despite having the appropriate means, it was not recorded), and because of the way in which it was obtained (secrecy, the aforementioned allegations of torture and the offer of reduced sentences). Furthermore, the experts at the trial noted that this community member could not read and had a cognitive deficit.

However, despite the acquittal, several of the accused continued to be held in pre-trial detention while their appeal was processed by the Public Prosecutor's Office, as the crimes were classified as "terrorism". The most widespread case was that of machi Francisca Linconao, an elderly traditional authority who, in addition to being held in pre-trial detention, was subjected to aggressions, searches, threats, fabrication of false evidence, espionage, etc. Part of this process was the so-called *Huracán* case: a police operation conceived by the carabineros to spy on indigenous human rights defenders and fabricate false evidence against Mapuche activists. In the end, machi Francisca Linconao was acquitted, and the only other people convicted, besides machi Celestino Córdova, were brothers Luis and José Trancal (life imprisonment) and the aforementioned José Peralino, who received only five years for having collaborated as a co-criminal informant.

The hunger strike of the Mapuche prisoners has placed the figure of the *machi*, *Celestino Cordova* at the centre of current political and legal discourse. His request is to be allowed to serve his sentence in his community and near his *rewe* (ritual post that embodies the spirit, strength and health of the community) in order to be able to attend to his therapeutic and religious functions and responsibilities with the members of his territory or *lof*. It must be taken into account that according to the vernacular conception of the disease, the Mapuche communities are also at high risk due to the Covid-19 pandemic.

The *machi* (they can be men or women) are the people in charge of guarding and caring for the *rewe*, which is the cosmic axis that brings together the different floors and forces of the universe, and from there emanates their strength (*newen*) to fight evil and guarantee the physical and spiritual health of the *lof mapu* (territory) and the *lof che* (all those

who live together in that space). But the *rewe* must be renewed from time to time in order to restore its strength by performing a community ritual called *geikurewen*, without which it is not possible to maintain collective well-being because the *machi becomes* ill when he loses his protective spirit (*filew*). If that happens, the community itself is exposed to illness and is unable to cope with internal conflicts. It is obvious, therefore, that the Mapuche are spiritually uneasy as they find themselves defenceless against an unknown and devastating evil, imported from the non-Mapuche world, *wigka kuxan*, which, according to native taxonomy, is a disease of "whites" or "foreigners".

Machi Celestino has argued before the authorities that the removal of his rewe and his community causes him great suffering. In fact, he considers it a conscious form of torture to break his spirit, which has also caused him a serious illness: Kisu kuxan (a disease typical of the Mapuche that derives from a cultural transgression). That is why the machi continued with the strike until its last consequences. In any case, if the rewe is not renewed, he will die because of a disease that is typical of female machi (machi kuxan), which usually manifests itself by not fulfilling the obligations of one's role. Therefore, if the cause of the transgression produced by the machi's disease-in this case by performing the rewe renewal ritual-is not alleviated, his suffering will inevitably lead to his death, and that is a powerful reason for understanding the machi's wholeness.

Understanding what it means for a person of any religious tradition to violate their liturgical and spiritual obligations and the effects that this has on their mental health, allows us to understand the extent of the damage that this situation generates and why this spiritual guide is considered to be subjected to a type of culturally-based torture. The action taken against him, like that of torture in general,

aims to set an example for all Mapuche people. Therefore, what is at stake, besides the physical integrity of the prisoners on hunger strike, are their fundamental human rights, as well as the religious freedom and the right to health of all Mapuche people.

In a situation like the one caused by the COVID-19 pandemic, the deprivation of freedom of this religious authority is a collective punishment for all Mapuche people.

The repressive strategy directed against socio-political (logko) and religious (machi) authorities is part of the modus operandi of the "stick and carrot" policy that alternate Chilean governments have tried to stifle cycles of ethnic emergence. Cases such as that of logko Pascual Pichun and Aniceto Norín, machi Juana Calfunao and Francisca Linconao provide good background for understanding what is happening today in the case of machi Celestino Córdova. These cases have made their way around the world and have been the subject of multiple condemnations in the reports of the different UN Rapporteurs and the main organisations of human rights defenders. Ultimately, the intervention of the Inter-American Human Rights System has forced the Chilean justice system to revoke various convictions, by questioning the legality of the processes followed, drawing attention to the harshness with which the Mapuche are judged and the discriminatory practices against this ethnic group. Unfortunately, international justice is slow and costly and there has not been a single case in which those involved have not had to endure years of deprivation of liberty, torture, searches, harassment and humiliating treatment, while their families and neighbours have experienced a distressing ordeal until they were free from police and judicial persecution.

In short, it is urgent that the Chilean government does not prolong any further the suffering of these people, which we consider to be culturally based and discriminatory in nature, by addressing the problem with the Mapuche from a political rather than a law enforcement perspective. To this end, the first step is to solve the unjustifiable prison situation of the Mapuche prisoners.

#### **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.

# TORTURE Volume 30, Number 2, 2020

#### Call for papers

Torture Journal encourages authors to present papers on this topic with a psychological, medical, social or legal orientation and, in particular, with interdisciplinary approaches with other fields of knowledge. We welcome papers on the following:

- a. Interdisciplinary documentation on the harm caused to relatives of disappeared persons.
- b. Analysis of cases of forced disappearance as a systematic and repeated phenomenon aimed at producing a social state of terror and anguish that generates serious damage to communities and social structures.
- c. Strategic litigation of cases in which the harm to relatives of disappeared persons has been documented as a violation of the right to personal integrity

Rehabilitation programs for the damage generated by forced disappearance that develops specific approaches that address the characteristics of this particular damage.

#### **Deadline for submissions**

30th January 2021

#### For more information

Contact Pau Pérez-Sales, Editor in Chief (pauperez@runbox.com) or Chris Dominey, Editorial Assistant (cdo@irct.org). For more general enquiries, please write to publications@irct.org

#### Submission guidelines and links

- To make a submission, navigate here: https://tidsskrift.dk/torture-journal/about/submissions
- Author guidelines can be found here: https://irct.org/uploads/media/2eefc4b785f87c7c3028a1c-59ccd06ed.pdf
- Read more about the Torture Journal here: https://irct.org/global-resources/torture-journal

For general submission guidelines, please see the Torture Journal website (https://tidsskrift.dk/index.php/torture-journal/index). Papers will be selected on their relevance to the field, applicability, methodological rigor, and level of innovation.

#### About the Torture Journal

Please go to https://tidsskrift.dk/torture-journal - a site devoted to Torture Journal readers and contributors - to access the latest and archived issues.

# Call for applications to the Torture Journal. Editorial Advisory Board 2021-2023

The Torture Journal invites interested candidates to apply for a position on the Editorial Advisory Board 2021-2023.

#### Introduction

The Torture Journal Editorial Advisory Board is comprised of a team of motivated leading experts with a keen interest in academia, advancing the research agenda for torture, and strategic development of the Journal. As an Editorial Advisory Board member, you will be directly engaging with the Editor in Chief in advising on strategic development, key areas of research, publication policies, quality of submissions, supporting authors, and raising the visibility of the journal.

Members meet periodically through Skype meetings, regularly engage via email, and also meet on an 'ah hoc' basis. You will be credited as an Editorial Advisory Board member in all publications for the Torture Journal.

The current Editorial Advisory Board's two-year tenure draws to a close at the of the year. This position starts in January 2021 and continues through to December 2023. The deadline for applications is the 1st of December 2020.

To ensure global representation of all aspects covered by the Journal's mandate, applications from the Global South and from legal experts are particularly encouraged.

#### About the Torture Journal

Published by the International Rehabilitation Council for Torture Victims (IRCT), the Torture Journal is an international scientific journal that provides an interdisciplinary forum for the exchange of original research and systematic reviews by professionals concerned with the biomedical, psychological and social interface of torture and the rehabilitation of its survivors. First published in 1991, the Torture Journal publishes three issues a year.

The journal seeks to enhance the understanding and cooperation in the torture field through diverse approaches. Its focus is not only biomedicine, psychology and rehabilitation, but also epidemiology, social sciences and other disciplines related to torture. The editors also wish to encourage dialogue among experts whose diverse cultures and experiences provide innovative and challenging knowledge to existing practice and theories. Editorial Advisory Board members are an essential part of this.

Please go to the Publications Page for the latest version of the Journal or go to our new platform - a site devoted to Torture Journal readers and contributors. The Torture Journal is indexed in MEDLINE/PUBMED and other academic databases. An overview of the Torture Journal research priorities can be found here.

#### Purpose of the Editorial Advisory Board

The Torture Journal Editorial Advisory Board's purpose is to advise on the strategy and priorities of the Journal aligned with the IRCT Global Strategy research and knowledge sharing priorities. In furtherance of this purpose, the Board will participate and assist with editorial decision

making and delivery of the Journal on a timely basis, promote it, and support the Editor in Chief in delivering the Journal to the highest standard.

#### Role and responsibilities

The Editorial Advisory Board supports the Editor in Chief (EIC) to advance editorial policy and to set the strategy and priorities of the Journal in conjunction with the publisher (IRCT). More specifically, the Editorial Advisory Board:

- assists the Editor in Chief and the IRCT with developing a strategic approach to the development of the Journal and its focus;
   advises on the editorial policy, guidelines, standards, and stance of the Journal;
- identifies key areas of research where the Journal can publish major new findings;
- solicits contributions to the Journal from researchers and practitioners;
- promotes the Journal and identify peer reviewers for vetting by the Editor in Chief;
- · act as referees for the review process and review articles ensuring robust peer review;
- ensures research published is according to best practices of sound scholarship, research practices and evidence-informed reasoning by authors;
- ensures effective communication of research that is accessible to practitioners, policymakers and the interdisciplinary audience in the torture rehabilitation field;
- engages with the widest range of readers and contributors in the torture rehabilitation field;
- contribute to IRCT events such as scientific and thematic conferences, strategy setting processes and other major organisational initiatives as requested;
- · attends Editorial Advisory Board meetings.

#### Skills/experience

The Torture Journal is seeking motivated candidates, with diverse backgrounds, and with strong interests and experience in academia, and promoting knowledge. Relevant academic fields not only include medicine, psychology and rehabilitation, but also epidemiology, a range of social sciences and other disciplines related to holistic rehabilitation, torture and research methods. The Editorial Board, as a whole, should be conversant with issues such as:

- International/Global health issues
- Diagnostic and therapeutic methods and techniques in the field of rehabilitation of torture victims
- Mental health care approaches in relation to torture survivors
- Research methods (quantitative, qualitative, mixed, participative)
- · Documentation of evidence of torture according to international standards
- Biomedical research and publishing ethics and guidelines, such as WMA Declaration of Helsinki, the CONSORT statement etc.
- · Open Access publishing and journal publication management and financing
- Editorial independence, conflicts of interest and confidentiality in a research and/or publishing setting
- · Strategic planning.

#### **Application process**

In order to apply, please send your CV and motivational letter to Knowledge Development Associate, Chris Dominey (cdo@irct.org), including your own views on how the Torture Journal could be further improved and the way Editorial Advisory Board could contribute to that.

Please be aware that Editorial Advisory Board positions are unpaid.

#### Deadline for applications: 1st December 2020

For any questions, please contact Pau Pérez-Sales, Editor in Chief (pauperez@runbox.com) or Chris Dominey, Knowledge Development Associate (cdo@irct.org).

## How to support the Torture Journal

Help us to continue keeping the Torture Journal open access and freely sharing knowledge by donating to the IRCT and subscribing. You can donate online at <a href="https://irct.org/">https://irct.org/</a>
Alternative methods are also detailed below.

#### By credit card

Please visit www.irct.org to make a donation using a credit card. All transactions are guaranteed safe and secure using the latest encryption to protect your personal information.

#### By bank transfer

#### **Danske Bank**

Holmens Kanal Branch Holmens Kanal 2 1090 Copenhagen K Denmark

SWIFT code: DABADKKK

#### Danish Kroner (DKK) account

Registration No. 4183 Account No. 4310-821152 IBAN DK90 3000 4310 8211 52

#### Euros (EUR) account

Registration No. 4183 Account No. 3001-957171 IBAN DK69 3000 3001 9571 71

#### U.S. Dollars (USD) account

Registration No. 4183 Account No. 4310-005029 IBAN DK18 3000 4310 0050 29 Impact of the covid-19 pandemic on work with torture survivors: Clinical and community perspectives

REVIEW ARTICLE: The potential of epigenetic methods to provide evidence of torture

SPECIAL SECTION: PHYSIOTHERAPY FOR TORTURE SURVIVORS (PART 1)

Painful memories: Challenges in traumafocused therapy for torture survivors with PTSD and chronic pain – a narrative review

The effects of a combined psychotherapy and physiotherapy group treatment program for survivors of torture incarcerated in an adult prison in Kurdistan, Iraq: A pilot study

The impact of Basic Body Awareness Therapy on balance and quality of life in survivors

of hunger strike with Wernicke Korsakoff Syndrome

RESEARCH ARTICLE: The risk of sanctions following visits by monitoring bodies; a study conducted in Albania and Honduras

DEBATE: Ethical criteria when a (potential) perpetrator asks a human rights organization to defend their case based on the forensic documentation of alleged torture. How shall we proceed?

LETTER TO THE EDITOR: Torture based on discrimination in Chile.

CALL FOR PAPERS: Enforced Disappearances
CALL FOR APPLICATIONS

#### **Subscription:**

Write to publications@irct.org to receive an email when a new issue is published or for a printed version (stipulating your profession and address).

The Torture Journal is a scientific journal that provides an interdisciplinary forum for the exchange of original research and systematic reviews by professionals concerned with the biomedical, psychological and social interface of torture and the rehabilitation of its survivors. It is fully Open Access online, but donations are encouraged to ensure the journal can reach those who need it (www.irct.org). Expressions of interest in the submission of manuscripts or involvement as a peer reviewer are always welcome.

The Torture Journal is published by the International Rehabilitation Council for Torture

Victims which is an independent, international organisation that promotes and supports the rehabilitation of torture victims and the prevention of torture through its over 150 member centres around the world. The objective of the organisation is to support and promote the provision of specialised treatment and rehabilitation services for victims of torture.

With the generous support of



