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Preventing retraumatisation in torture survivors during surgical care: results of a guideline-development project and qualitative study exploring healthcare providers' experiences

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ABSTRACT

Objectives Insufficient training and the absence of guidelines increase the risk of retraumatisation in torture survivors during surgical procedures. This study aims to develop guidelines to mitigate this risk and gather healthcare professionals' experiences treating torture survivors and insights on the guideline's feasibility and acceptability.

Design The study was conducted in two phases. Phase 'a' involved developing guidelines based on reviews of torture survivors' encounters in somatic care and potential retraumatisation triggers, as well as a qualitative study on survivors' experiences during surgical interventions. The development process adhered to the Grading of Recommendations Assessment, Development and Evaluation (GRADE) principles and the Appraisal of Guidelines for Research and Evaluation (AGREE II) instrument for methodological rigour. Phase 'b' involved focus groups and individual interviews with healthcare professionals to explore challenges in caring for torture survivors and to evaluate the guidelines.

Setting The study, conducted from May to August 2023, involved participants from surgical departments in three hospitals in southern and southeastern Norway.

Participants Twenty-one healthcare professionals, including surgeons, anaesthesiologists, nurses and a dentist, participated in the study. Both focus group interviews and individual interviews were conducted.

Results Phase 'a': guidelines comprising six sections were developed: an introduction, general guidelines and four sections covering the preoperative, perioperative and postoperative surgical stages. Phase 'b': healthcare professionals struggled to understand torture's complexities and identify survivors' unique needs. They faced challenges using interpreters and assisting patients with strong reactions. While the guidelines were viewed as practical and useful for raising awareness, their length was questioned.

Conclusions We provide recommendations for preventing retraumatisation in torture survivors undergoing surgical treatment. The guidelines may serve as a starting point for offering safe and individualised care to torture survivors. Teaching institutions and hospitals may incorporate the guidelines into healthcare professionals' education.

STRENGTHS AND LIMITATIONS OF THIS STUDY

⇒ This study provides evidence-based guidelines for preventing the retraumatisation of torture survivors in the various steps involved in surgical care.

⇒ The guidelines have the potential to be applied to other somatic healthcare contexts due to the fact that the surgical care context incorporates elements from other healthcare areas.

⇒ Using a focus group methodology harnesses group dynamics to delve into and clarify individual viewpoints among healthcare professionals in delivering care to torture survivors, a task that could prove more complex through individual interviews alone.

⇒ A potential limitation of this study is the sample bias towards healthcare professionals willing to engage in research and likely possessing a strong interest in the topic, potentially leading to an overrepresentation of individuals more knowledgeable than most about torture survivors in clinical settings.

INTRODUCTION

As a result of ongoing conflicts,[1] the global population of refugees and asylum seekers is growing, a considerable portion of whom have experienced torture.[2 3] This increases the demand for specialised healthcare services for this vulnerable group.[4 5]

The United Nations Convention Against Torture defines torture as:

> Any act by which severe pain or suffering, whether physical or mental, is intentionally inflicted on a person for such purposes as obtaining from him or a third person information or a confession, punishing him for an act he or a third person

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has committed or is suspected of having committed, or intimidating or coercing him or a third person, or for any reason based on discrimination of any kind, when such pain or suffering is inflicted by or at the instigation of or with the consent or acquiescence of a public official or other person acting in an official capacity.[6]

Throughout history, physical torture methods have been employed for a wide range of purposes, including extracting information and asserting control.[7] These methods, such as beatings, amputations, rape and burns, cause immediate pain and leave lasting physical effects such as headaches, musculoskeletal pains and sensory impairments.[8 9] Psychological torture induces mental suffering through techniques such as threats, sleep deprivation, forced nakedness, sexual humiliation, starvation and exposure to white noise, often without direct physical violence or leaving visible marks.[7 10] Distinguishing between physical and psychological torture is challenging, as the bulk of the long-lasting effects of physical torture are predominantly psychological.[10] Survivors frequently experience post-traumatic stress symptoms and post-traumatic stress disorder (PTSD), anxiety, depression and anger outbursts.[5 11] Sexual torture affects both men and women, with notable disparities in psychological repercussions[12 13] as women exhibit higher rates of PTSD and depression, while men experience more anxiety and have a greater tendency towards alcohol and substance misuse.[14] Long-term physical effects significantly impair survivors' quality of life and reintegration into society.[15]

Torture survivors require comprehensive healthcare due to complex physical and psychological symptoms, often complicated by comorbidity.[16 17] The complexities of a patient's trauma history can challenge healthcare providers and lead to potential oversights in care.[18 19] Resource limits and a lack of specialised knowledge can further complicate care for these survivors,[18 20] while comorbid conditions like pain and PTSD present diagnostic and treatment challenges that affect surgical outcomes.[18 21] A holistic approach integrating both physical and psychological aspects of trauma is crucial for optimal care and surgical outcomes in this population.

Physical torture often results in substantial joint, tissue and bone damage that demands surgical expertise for proper care. However, several factors complicate the surgical treatment of torture survivors.[18] An approach that integrates trauma understanding throughout the surgical journey is vital.[18 22] Successful surgery for these patients relies on technical skill and awareness of the patient's psychological state,[23] and recognising the relationship between psychosomatic and somatic symptoms early can improve outcomes. Surgeons focus on identifying treatable symptoms and securing patient consent, although a comprehensive psychological assessment may not always be possible. Nonetheless, understanding the connection between torture trauma and physical symptoms is crucial.[18] It is also important to note that torture survivors often exhibit distrust towards healthcare providers due to past traumatic experiences and the potential involvement of healthcare personnel in torture.[24–26] This distrust can limit their willingness to disclose their history, complicating their care.[26–28] Healthcare professionals must be skilled in sensitively and effectively addressing these challenges.

The invasive nature of surgical procedures adds to the complexity of treating torture survivors, increasing the risk of complications like retraumatisation—intense reactions triggered by trauma reminders.[18 29] This risk can deter survivors from seeking care, leaving health issues unresolved.[4 30] To prevent retraumatisation, healthcare approaches must ensure safety and psychological security.[23] Practitioners should address the mental health needs of torture survivors and help manage their emotions throughout treatment.[29] Recognising the impact of torture trauma among refugees is essential, because the incorporation of trauma-informed care (TIC) is necessary to avoid further trauma and effectively assist survivors. Practical measures to prevent retraumatisation might include creating a calm environment, reducing noise and harsh lighting, avoiding uncomfortable spaces and maintaining respectful interactions.[31]

Understanding retraumatisation is critical for preventing and may help recognising the unique characteristics of traumatic memories, which consist of explicit recollections of torture that can be consciously recalled and implicit memories that function at a non-conscious level.[32] Retraumatisation can occur when trauma symptoms are reactivated by new traumatic experiences or trauma-related stimuli encountered during treatment. These stimuli might include interactions with healthcare professionals, treatment environments and medical equipment.[32] The clinical setting can contain potential triggers like negative interactions with healthcare providers, personnel in uniform and various sensory stimuli.[33]Retraumatisation can result in neurobiological, physiological and psychological symptoms, including a sense of losing control during medical procedures, potentially leading to emotional harm and dysregulation. However, being psychologically prepared for these procedures can serve as a protective factor against dysregulation.[4 18 34]

Survivors of trauma often equate retraumatisation to a deep vulnerability, similar to torture, triggering a 'flooding' sensation that overwhelms the senses. It disrupts the central nervous system, inducing fear, preventing the body from returning to equilibrium and leading to reactions like dissociation, hyperarousal and avoidance.[35–37] During treatment, survivors may display intense reactions such as screaming, freezing, severe anxiety or aggression[29 38] that reflect typical trauma responses like fight, flight, freeze, fawn, flag and faint. If survivors perceive a threat during treatment, they may enter a physiological state that encourages fight–flight–freeze behaviours, making interactions with healthcare providers difficult.[38–40] Immediate or prolonged reactions

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may include avoidance of medical interventions, fear, shame, or sustained distress.[30]

Close physical contact in surgical settings can trigger traumatic memories in torture survivors, potentially limiting their participation in care.[41] Adverse treatment experiences can further deter survivors from seeking help.[30] While patient safety is prioritised in surgical departments, psychological aspects are often neglected, risking trauma reactivation and poor outcomes.[22 30] Preventing retraumatisation is crucial due to its severe impact. Provider behaviour plays a key role in this context; empathetic and sensitive approaches promote patient compliance, while negative interactions can worsen challenges for those at risk of trauma reactivation.[30 41]

The literature highlights retraumatisation in surgical care and promotes TIC principles,[22 23] which involve adapting service provision to address the impact of trauma. Practices include staff education about trauma effects, trauma history assessment, providing sensitive services and involving patients in treatment decisions.[42] These practices reduce retraumatisation risk and empower survivors.[43] Preventing retraumatisation in torture survivors requires healthcare professionals to understand the impact of trauma on treatment efficacy. Despite healthcare providers often lacking knowledge of torture and its effects,[20 44] efforts for improvement have been scarce.[20] Using guidelines in the surgical care of torture survivors may enhance providers' competence. Such guidelines can help identify retraumatisation triggers and provide management strategies, supporting the adoption of TIC principles.[22]

Existing guidelines cover psychiatric care for torture survivors,[45] documentation of torture in children[46] and treatment of pain resulting from torture,[47] but specific recommendations to prevent retraumatisation during surgical treatment are still lacking. Addressing this gap requires systematising knowledge and developing evidence-based guidelines that could improve decision-making, streamline medical processes and enhance care by suggesting adjustments to reduce retraumatisation risk during treatment.[48 49]

Although research on torture survivors' experiences in surgical wards is limited,[41] studies including their perspectives have noted retraumatisation in clinical settings[4 29 30] and indicate that the neglect of psychological trauma by healthcare professionals may increase retraumatisation risk during treatment.[4 29 30]

This phenomenological qualitative study, the last stage of a four-stage research strategy, aims to develop clinical guidelines to prevent retraumatisation of torture survivors in surgical departments. This research project's stages are outlined in a protocol paper.[50] The first two stages comprised systematic reviews in 2021 and 2023, resulting in two publications[33 41] that summarised torture survivors' experiences in somatic departments and identified clinical context triggers contributing to retraumatisation. The third stage explored torture survivors' surgical treatment experiences through in-depth interviews with eight individuals.[30] Healthcare professionals' failure to acknowledge torture, the prevalence of negative attitudes among staff and dissatisfaction with care decision-making processes were all reported by participants.

These issues were worsened by re-experiencing trauma symptoms and intensifying torture memories during treatment, suggesting that surgery may trigger emotions and reactions akin to those experienced during torture.[30]

In this final research stage, divided into two substages (phases 4a and 4b), guidelines to prevent retraumatisation during surgical treatment were developed (phase 4a). These guidelines were based on empirical data from the literature, consensus and experience-based materials gathered in the first three stages. In phase 4b, informed opinions from healthcare professionals in surgical departments were collected to evaluate experiences in treating torture survivors and to assess the feasibility and acceptability of the guidelines.

METHODS

Phase 'a' of the development of the guidelines

As detailed in our protocol article,[50] we employed evidence-based methods and the Grading of Recommendations Assessment, Development and Evaluation (GRADE) Working Group approach to create guidelines to prevent retraumatisation of torture survivors during surgery. Our reviews[33 41] consolidated data from global studies, while our qualitative study[30] explored the experiences of torture survivors undergoing surgical treatment in Norway.

Thematic analysis was used to examine the data across all studies. Due to the substantial volume of individual interview data in the qualitative study, thematic analysis was employed instead of interpretative phenomenological analysis, deviating from the protocol.[50] Thematic analysis, used throughout the research stages, provided foundational insights for guideline development. This method involved a thorough examination of lived experiences, followed by thematic analysis to refine patterns with the aim of improving our understanding of survivors' surgical care experiences.[51] Based on the findings from the first three stages, the first version of the guidelines was developed in phase 4a.

Our evidence-based guidelines target surgical care for torture survivors in refugee and asylum-seeker communities and can be distinguished from other guidelines. We followed the global standard Appraisal of Guidelines for Research and Evaluation (AGREE; www.agreetrust.org), and selected guideline topics based on two reviews[33 41] and torture survivors' surgical treatment experiences.[30] The first guideline version was revised following interviews with healthcare providers in surgical departments, completing phase 'b' of stage 4. Our guidelines aim to enhance surgical care providers' knowledge, awareness and skills regarding torture and its consequences and the impact of torture trauma on survivors and their interaction with healthcare providers.

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In the first draft of the guidelines, we categorised our recommendations into 14 sections (boxes 1–14), each containing several points (see online supplemental figure 1).

We developed the guidelines using the methodology suggested by the GRADE Working Group.[52] We employed the internationally recognised Appraisal of Guidelines for Research and Evaluation (AGREE II) instrument (www.agreetrust.org), which provides criteria for evidence-based guideline development. In this phase, we followed the Institute of Medicine standards for reliable guidelines,[49 53] which hold that guidelines should be as follows:

- Based on evidence-based findings.
- Developed by an expert multidisciplinary team.
- Consider patient preferences.
- Use a transparent procedure to minimise biases and conflicts of interest.
- Clarify the relationship between care options and health outcomes.
- Revised when significant new evidence emerges.

The grade II domains ensuring that the guidelines' quality are presented in online supplemental table 1.

Phase 'b' of the development of the guidelines

Healthcare professionals from surgical departments were invited to participate in focus group interviews. They were asked to discuss challenges they face when treating torture survivors and to provide feedback on the guidelines' potential feasibility and applicability. This study involved four focus groups from different regions of Norway and individual interviews with healthcare professionals who were unable to attend the focus groups. Deviation from the protocol occurred through the inclusion of individual interviews anf four groups instead of three. This was a strategy to assure data saturation.

Recruitment

Potential participants were contacted via email by a third party with no prior affiliation with the project. The study recruited participants from operating theatres, postsurgical departments, surgical critical care units and surgical outpatient clinics at three major hospitals in southern and south-eastern Norway. These institutions are located in areas where almost 70% of immigrants to the country reside. We organised four focus groups of six participants each, as smaller groups discussing sensitive topics are easier to manage and encourage participation.[54] Professionals with at least 2 years of experience in a surgical department or department receiving postsurgical patients were eligible to participate. Participants received written project and focus group interview information beforehand and provided written consent. Individual interviews were offered to those who were not able to attend the group interviews. Participant sampling is depicted in online supplemental figure 2.

Data collection

We gathered data by conducting four interdisciplinary focus groups using a semistructured approach, with the assistance of an interview guide (online supplemental file 1). The focus groups included specialised nurses in surgery, anaesthesia and postsurgical units, as well as nurses from a department that receives soldiers from combat zones. Additionally, anaesthesiologists, surgeons and senior physicians from surgical departments were also participants. Individual semistructured interviews were conducted with professionals unable to attend the focus groups: two surgeons, a dentist from a surgical department and one anaesthesiologist. In the first 30 min of the interviews, participants discussed challenges in treating torture survivors to ensure guideline relevance and coverage. In the second part, participants were given 30 min to read the guidelines and write comments in the comment field provided. After a 10 min break, the final part of the focus group discussions centred on the guidelines.

Professionals in the focus groups evaluated the guidelines and gave feedback about their potential feasibility and applicability, which informed some changes to the first version of the clinical guidelines for preventing retraumatisation in torture survivors. Based on healthcare professional interview findings, we revised the guideline structure and content to improve their potential feasibility and applicability.

Data analysis

Interviews were audiorecorded and transcribed verbatim using the Whisper software package. Text condensation analysis was performed on the transcribed data.[55] This systematic four-step procedure included (1) multiple transcript readings for data familiarity, (2) identifying meaningful text units and assigning codes derived from the data, (3) interpreting, condensing and abstracting similar coded text units to extract shared meanings and (4) summarising content within coded groups to describe participant perspectives and experiences in providing care to torture survivors. Systematic text condensation is an analytical strategy based on common principles of most qualitative data analysis methods; it offers the researcher a process that is intersubjective, reflexive and feasible while maintaining a high rigour.[55] The initial data analysis was done by ACS and supervised by AKB. The research team regularly discussed the data analysis process, and consensus on the final theme categorisation wasreached as a team.

Patient and public involvement

This study was discussed with leaders of professional groups for surgical nurses, intensive care nurses and anaesthesia nurses belonging to the Norwegian Nurses Association, as well as leaders of the institutions where recruitment was conducted. By recruiting participants through healthcare organisations, we incorporated public statements into our analysis. Participant interviews

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provide a form of involvement statement in the guideline development process.

RESULTS

Healthcare professionals' feedback on challenges in caring for torture survivors and comments on the guidelines were synthesised and structured based on interview guide questions. The analysis resulted in several subcategories corresponding to the initial interview questions. These were further condensed into seven main categories: inadequate knowledge, difficulties in identifying torture survivors in clinical settings, lack of mutual understanding of torture survivors' specific needs, time constraints, interpreter-related challenges and difficulties in assisting patients with intense reactions. These categories reflected the sequential progression of participants' experiences treating torture survivors. They were distilled into the phrase 'hitting a snag with treatment', which referred to unexpected hurdles during healthcare procedures. This phrase symbolises barriers hindering adequate treatment provision to torture survivors; it encapsulates healthcare workers' frustration without suggesting defeat. It acknowledges temporary setbacks due to unforeseen disruptions, not permanent failure. The findings are summarised in online supplemental table 2, organised by themes that emerged in the focus group interviews.

Insufficient knowledge

Healthcare professionals recognised their insufficient knowledge of torture and its effects, which hinders comprehensive care for survivors. They noted this topic's absence in internal healthcare institution courses and its rare inclusion in professional healthcare education programmes. The topic's importance was heightened following the Ukrainian conflict and the influx of refugees into Norway. Regarding retraumatisation, participants noted varied reactions in refugee patients during surgical treatment, with providers lacking a full understanding of the causes and mechanisms involved.

One surgeon experienced in treating torture survivors attributed this expertise to prior collaboration with a psychologist in pain management. This partnership significantly improved their understanding of trauma patient management, leading to advocacy for increased awareness of torture-related trauma among surgical professionals. Additionally, one participant suggested that due to their proficiency in preventing retraumatisation in torture survivors, dentists' level of educational proficiency should be emulated by medical and nursing associations through collaborative efforts to develop comprehensive educational programmes enhancing knowledge of torture survivors' needs.

Another participant, working in a specialised unit treating soldiers from conflict zones, reported that even healthcare professionals dedicated to treating war and torture survivors struggle to understand patients' complex post-torture clinical picture. This participant noted the use of interpreters to educate healthcare providers on patients' cultural nuances, aiding in understanding the clinical context and establishing tailored routines for war and torture survivors. The participant recounted cases of postoperative patients displaying intense reactions, either immediately after surgery or in the next several days. Healthcare providers often learn about torture survivors and their reactions during treatment through experiential learning due to their lack of formal training in this area.

Identification of torture survivors in a clinical context

Focus group discussions largely centred on the challenge of identifying torture survivors in the clinical setting. Participants highlighted the infrequency of correct identification as a significant barrier to providing adequate care, with the realisation that patients were torture survivors often occurring late in the surgical process and typically triggered by reactions during treatment. This failure was attributed to healthcare professionals' lack of sufficient torture knowledge. Some participants refrained from inquiring about torture due to uncertainty about how to approach the topic or handle patients' disclosures.

While most participants were confident that they regularly encountered tortured patients, some admitted to having suspicions without certainty and often lacked the courage to directly inquire about patients' pasts. Participants occasionally noted perceived differences in patient reactions based on their countries of origin, but the lack of background information in patient medical records hindered their ability to substantiate these observations.

Participants agreed on the importance of identifying torture survivors, advocating for integration into the entire surgical process and ideally before entering the operating room. They acknowledged difficulties in addressing patients' disclosure of torture histories and recognised a need for improvement in this regard. Participants discussed strategies for inquiring about torture experiences, suggesting integrating the inquiry into presurgery health information forms, addressing torture trauma during the surgical procedure, and developing a trauma assessment checklist for polyclinics.

Participants deliberated on the appropriateness of directly questioning patients and concluded that they would benefit from education on how to approach the sensitive topic of torture. The participants believed that guidelines are essential to assist healthcare professionals in addressing torture when treating survivors, suggesting that the guidelines must be implemented in all surgical wards.

Absence of mutual understanding of torture survivors' special needs

Participants agreed that torture survivors may have unique healthcare needs and emphasised the crucial role of healthcare providers in ensuring quality care. They highlighted the need for standardised procedures to address these patients' needs. Participants noted significant levels

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of anxiety and fear in refugee patients, posing challenges for healthcare professionals. Torture survivors often exhibited intense emotional reactions presurgery and postsurgery, with medical records typically lacking detailed entries on trauma-related issues. Participants advocated for more comprehensive documentation of patients' psychological challenges and backgrounds.

Instances where acknowledging patients about their past torture led to positive outcomes were recounted, stressing the importance of transparency. However, healthcare professionals who were attentive to retraumatisation risk often faced criticism from colleagues, highlighting existing rigidities in adhering to new procedures.

Anaesthesiologists proposed heightened awareness among healthcare professionals, noting a prevailing naivety regarding admitting patients for surgery, especially without adjustments for traumatised refugees. Premedication for these patients was seen as essential, yet guidelines were lacking, leading to practice inconsistencies. Some participants expressed concerns about the suitability of ambulatory surgery for torture survivors, suggesting they may not cope well with the associated stress. Participants also discussed innovative practices like allowing traumatised patients to bring their dogs into the operating room for comfort. However, they highlighted challenges in supporting torture survivors when restrictions prohibited the presence of a friend or family member during surgery. While some departments considered patients' preferences for same-sex treatment professionals, others viewed such accommodations as unnecessarily complex. A dentist with extensive experience treating torture survivors emphasised the potential for psychological reactions to treatment despite optimal care and the importance of actively earning trust from torture survivors.

Time constraints

The lack of torture survivor identification in the clinical settings was often attributed to time constraints. Some participants were concerned that discussing torture histories could take valuable time due to patient volume and administrative duties, leading to a preference for efficiency over discussion-driven exploration. They also noted that time limitations in the operating room further restricted opportunities to discuss sensitive issues like torture trauma. However, others argued that inquiring about torture histories and listening to patients' accounts did not necessarily require significant time. They suggested that acknowledging patients' trauma experiences did not equate to extensive therapeutic intervention but merely required a brief acknowledgement, which could be done efficiently.

Challenges related to the use of interpreters

The majority of participants were confident in the effectiveness of interpreter services for communication with patients who were not comfortable conversing in Norwegian, but they acknowledged a gap in interpreter availability in the operating room, especially with refugee patients facing presurgical or postsurgical challenges.

Participants with extensive surgical department experiences were surprised at the absence of interpreters in the operating room, noting their consistent use in other phases of surgical treatment. This discrepancy often led to patient anxiety. Some participants considered the routine of not employing an interpreter in the operating room unacceptable, attributing it to insufficient awareness and financial constraints. They frequently relied on other healthcare professionals or technicians to assist in communication during surgery or postoperative care. However, others believed that healthcare providers' demeanour and actions were paramount, and that verbal communication was not always necessary if providers were careful to act in the patient's best interests.

Participants acknowledged the challenge for torture survivors to trust interpreters, particularly when an interpreter shares the patient'snationality. Some suggested using telephone interpreters as an alternative, while others opposed this as impersonal and detrimental to patient confidence. Participants noted a lack of consideration within the operating programme for the additional time needed when using interpreters. Discussions also addressed the challenge of accommodating survivors' preferences for interpreters based on gender and ethnicity. One participant advocated for prioritising interpreter capability over the patient's preferences. Concerns were raised about the potential disadvantages patients face when relying on interpreters, as this could expose them to labelling or stigmatisation by the interpreter.

Challenges helping patients manage strong reactions

Participants acknowledged that surgical staff often lack training in communication and grounding techniques, especially when addressing patients suffering from strong reactions during treatment. They emphasised the need for guidance in inquiring about torture histories.

According to participants, the efficient 'production line' approach in operating departments can pose challenges to accommodating patients with special needs like torture survivors. Participants advocated for abandoning treatment under local anaesthesia due to survivors' distress reactions, suggesting the use of general anaesthesia instead.

Nurses in postoperative care mentioned difficulties in assisting patients with severe postsurgical reactions, particularly due to time constraints, that often necessitated patient sedation. Despite these challenges, the importance of ensuring patient comfort was emphasised. Some participants suggested reallocating time from stable patients to attend to torture survivors struggling after surgery.

Anaesthesiology professionals noted severe reactions following anaesthesia, particularly among refugees, suggesting a correlation with past trauma. They expressed uncertainty in effectively understanding or documenting these reactions. Participants discussed support strategies

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for torture survivors, including designating a contact person and considering alternative pain management approaches.

Participants noted biases among healthcare professionals regarding refugee patients' perceptions of pain, underscoring the need for cultural sensitivity. They recognised the lack of established routines for assisting patients with severe reactions and advocated for a multidisciplinary team approach to support torture survivors, recommending the use of terms like 'stress management team' to reduce any stigma associated with psychiatric care.

Evaluation of the guidelines

Most participants viewed the guidelines as comprehensive and clear and felt that they addressed many of the challenges when treating torture victims. They believed that the guidelines would increase knowledge and awareness of torture and assist in decision-making when treating torture survivors. However, one participant believed the guidelines overcomplicated the situation.

While some participants considered the guidelines' content to be both significant and well written, they suggested condensing it into a shorter version in an appendix. Some proposed incorporating the guidelines into healthcare professionals' specialisation training. However, others noted that this topic would compete with many other themes included in the educational programme for healthcare professionals, making prioritisation difficult. Most participants considered the guidelines suitable for e-learning course development and advocated for their digitalisation.

The guidelines

Following feedback from the first two group interviews, we reorganised the original guidelines from 14 boxes with about 120 recommendations into 10 boxes, including an introduction with about 20 recommendations. These modifications were based on the comments and feedback from interviewed healthcare professionals. After the last two focus group and individual interviews, we revised the second version's content but maintained its structure. Given feedback about the guidelines' length, efforts were made to condense the content using more concise language. However, further condensation was halted when it risked compromising content integrity. This process is illustrated in online supplemental figure 3.

The guidelines are presented in six sections in this article, covering specific aspects of surgical care: introductory, general guidelines (table 1), preoperative care (table 2), perioperative care (box 1), anaesthesia care (table 3) and postoperative care (table 4).

Introduction to the guidelines

This section provides recommendations addressing torture vulnerabilities, emphasising trust and safety in healthcare settings. Torture disrupts emotional regulation and social interactions, leading to feelings of a loss of control, diminished self-worth and identity and shame.[27]

Torture survivors may exhibit a range of emotions in their interaction with healthcare professionals, underscoring their vulnerability and need for support.[27 41 56] It is vital for providers to assist patients in reclaiming their dignity, self-respect and safety, thereby reducing retraumatisation risk.[57] Staff in surgical departments should recognise traumatic stress symptoms even if they do not directly address psychological trauma.[18 23]

As introduction to the guidelines, we recommend the following:

1. When treating patients from war-torn countries or with unexplained psychological conditions, scars, neurological or orthopaedic disorders or pain, consider the possibility of torture.
2. When treating torture survivors who require multiple surgical procedures, avoid long waiting times between treatments.
3. Be mindful of and attentive to the possibility that torture survivors may exhibit symptoms of traumatic stress such as severe anxiety and flashbacks. It is crucial to identify these symptoms and engage in discussions with the patient about effective strategies for managing them.
4. Because of the nature of torture and the involvement of authority figures and healthcare providers in torture, torture survivors may have difficulty in trusting others, including healthcare providers, who have a strong influence on how survivors react during treatment.
5. Torture involves a complete loss of control similar to surgery and to a lesser extent certain medical procedures. The experience of being unclothed or partially unclothed, surrounded by unfamiliar individuals, and feeling physically constrained may trigger memories from torture.
6. Keep in mind that survivors of torture may have difficulty in establishing relationships with others.
7. Do not expect spontaneous disclosure. Torture survivors are often ashamed, uncomfortable, and reluctant to burden others.
8. Be aware that in addition to your attitudes, the environment (equipment, sounds and smells) can trigger memories of torture in survivors.
9. Be aware that patients may express preferences for healthcare professionals or interpreters to avoid contact with individuals who share the same gender, ethnicity, accent or other characteristics that may remind them of their perpetrators.
10. When you know that the patient is a torture survivor, inform them of your awareness. This can provide the patient with comfort and a sense of safety.
11. Allow patients to discuss trauma in their preferred manner. This will improve the patient's comfort.
12. Recognise torture's effects and survivors' needs. This fosters trust and makes survivors feel believed.

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Table 1 General guidelines

Recommendations for the identification of torture survivors	*Recommendations for the use of interpreters when treating torture survivors*
Suggested questions *Be mindful that inquiring about experiences of torture carries the risk of retraumatisation, particularly if the subject is approached without a compassionate and supportive attitude.* *Explain to the patient that knowing their history will help you to understand their pain and other symptoms:* 1. Can you tell me why you left your home country? 2. Was your life in danger in your home country? 3. Have you ever been held captive? Has that happened to members of your family? 4. Do you want to tell me how you got this scar? Once you have the impression that the patient is at ease, ask them about torture: 5. Have you experienced violence or torture in your home country? 6. Would you tell me if you have experienced violence or torture in your home country? **If the patient describes a history of torture, acknowledge that history, using phrases such as** 'I'm sorry that happened to you. I am here to help you, and I will do everything possible to ensure your safety. Please tell me whenever you feel unsafe'. In cases where the patient has endured torture, it is imperative to treat this information with the utmost sensitivity. Record it discreetly in the clinical notes, marking it as highly confidential. Additionally, integrate this crucial detail into the patient's medical history. This proactive approach serves to alleviate the burden on the patient, sparing them the need to recount their traumatic experiences repeatedly and mitigating the risk of retraumatisation.	1. Even if survivors seem fluent, interpreters should be offered. Survivors may be fluent in discussing education or work but not emotions or medical issues. 2. Always use a qualified interpreter, preferably one with training in interpreting for survivors of torture. 3. Phone interpreting can be an effective solution for sensitive topics due to its anonymity. 4. In addition to their preferred language, accommodate the patient's preferences regarding interpreter gender and ethnicity. These preferences may be intended to avoid interpreters with similar characteristics to the perpetrators. 5. Assure the patient that confidentiality extends to the interpreter. 6. Consider potential drawbacks when interpreters are present, as patients may withhold information due to feelings of shame and mistrust. 7. Ideally, the same interpreter should be used for all appointments. 8. If possible, an interpreter should be present before and after general anaesthesia. 9. If the patient consents, an interpreter should be present during local anaesthesia surgery. 10. The interpreter should sit at a neutral distance from you and the patient, such as at the tables' end if the parties are seated in a triangle formation. 11. The interpreter must be able to see and hear you and the patient clearly in order to comprehend what is being said and maintain control of turn taking. 12. Make eye contact and speak directly to the patient. 13. Use short, simple sentences with frequent pauses; avoid jargon. 14. Sit at the same height as the patient to balance the power dynamic. 15. When it is not possible to have an interpreter during the patient's entire stay, use an institution-approved translation app.

13. Healthcare providers can build trust by understanding the survivor's culture. Research the torture survivor's country before meeting them.
14. The discriminatory attitudes of healthcare workers may remind patients of torturers. Be careful regarding your actions and attitudes. Be receptive to the patient's remarks regarding race, culture, and ethnicity.
15. Being seen, respected and supported throughout treatment, in addition to making practical adjustments, can prevent retraumatisation among survivors.
16. Be aware that there is a possibility that any medical procedure could induce retraumatisation. After retraumatisation, torture survivors can have difficulty coping with their own reactions or performing daily activities.
17. Explain procedures; knowing what to expect may make torture survivors feel safer.
18. When discussing clinical issues, avoid disbelief. You may accidentally convey these feelings to the patient, harming the relationship and equating your behaviour with that of the torturers.
19. Consult with colleagues if you do not fully comprehend the clinical picture; torture survivors need multidisciplinary care.
20. Explain the principle of confidentiality to the patient prior to the assessment.
21. If possible, use the same team for several treatments to assure continuity. This may help torture survivors feel safer.
22. Offer a comfortable setting for the physical examination and clinical interview. A chilly and cramped room can resemble a prison cell.
23. Assess the patient's psychiatric medications; those used for nightmares can indicate risk of retraumatisation.
24. Before elective surgery, patients should be oriented and shown the operation and recovery rooms.

General guidelines

This section includes recommendations for identifying torture survivors and recommendations for the use of interpreters and is intended for application throughout the surgical process. These guidelines are presentedin table 1.

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Table 2 Guidelines for the preoperative stage

Recommendations on how to welcome the patient prior to surgery

Consider that torture survivors may have a higher anxiety level than other patients.

1. Permit patients undergoing scheduled surgery to visit the department prior to the procedure.
2. Avoid fast-paced treatments and long waiting times in the waiting room.
3. Always offer an interpreter.
4. From the moment of arrival and throughout the process of entering the operating room, offer the patients the option of having a trusted person with them.
5. Memory discrepancies are normal consequence of torture and do not necessarily indicate dishonesty. Ask about deviations therapeutically.
6. Listen to survivors, offer them support and observe their non-verbal communication. If the patient is stressed, anxious or frightened, use grounding techniques to calm them down.
7. Avoid interrogations.
8. Inquiring about a patient's immigration status can be stressful for the patient and is not recommended.
9. Be clear and explicit about what patients can anticipate during their hospital stay.

Recommendations on how to bring the patient into the operating theatre

Being escorted into the operating room alone by unfamiliar individuals and wearing institutional attire may evoke distressing memories for the patient, reminiscent of being taken into a torture room.

1. Give the survivor the option of bringing a trusted person into the operating room to alleviate negative emotions.
2. The patient should be able to bring an interpreter into the operating room.

During this process, avoid rushing the patient, maintain a friendly and professional demeanour, demonstrate an interest in the patient and attempt to fulfil the patient's requests.

Recommendations regarding the physical examination

Due to the inherent power imbalance in the patient–healthcare professional dynamic, patients may experience feelings of powerlessness during healthcare interactions, complicating physical assessment and treatment.

1. Learn the tortured person's story prior to a physical examination.
2. Try to discover the causes of each scar.
3. Torture damages tissue and changes the modulation of pain; keep this in mind when assessing pain.
4. Be aware that there is a correlation between pain and fear in torture survivors.
5. Evaluate the patient's medical history concurrently with the physical examination, paying close attention to consistency between the two.
6. Pay attention to the fact that sexual assault is common among torture survivors, and patients may be embarrassed to disclose health issues related to sexual assault.
7. Examine the patient while standing in front of them whenever possible. Avoid positioning yourself behind the patient.
8. Obtain consent before touching the patient.
9. Conduct the physical examination in a sensitive and gentle manner, with an explanation of each step; expend empathy, time and interest to give the patient a feeling of control.
10. Chose a comfortable room with a comfortable temperature.
11. Remove or cover up equipment and instruments whenever possible.
12. Always follow the physical examination with a plan of treatment.

It is also necessary to have knowledge of torture techniques and the mechanisms by which they cause pain and other medical conditions.

Recommendations on the identification of torture survivors

Torture, regardless of when it occurs, can affect the clinical picture,[47] and lack of knowledge about a patient's trauma history can lead to errors in assessment and treatment.[30] Healthcare professionals should also not assume that an initial denial of torture means that it did not occur.[58] If the patient belongs to a persecuted group, torture should be suspected.[59] Refugee patients should be treated as individuals with unique life stories[5] and possible torture histories. Most torture survivors do not spontaneously disclose their experiences,[5 30] making it difficult for healthcare professionals to meet their needs.[5] Therefore, healthcare providers must exert the effort necessary to identify torture survivors prior to treatment.[60 61]

Survivors expect healthcare professionals to inquire about torture sincerely, not just for the sake of conversation.[41] They want providers to show curiosity about the historical context of physical wounds and proactively inquire about traumatic war experiences.[30 41 56] As recounting past experiences can potentially trigger retraumatisation, it is crucial for healthcare professionals to have the skills to inquire about torture and understand the importance of documenting such information.[62] This documentation spares survivors from repeatedly recounting their stories during clinical encounters.

Recommendations for the use of interpreters

Healthcare professionals may face challenges throughout surgical treatment processes when encountering torture survivors who do not speak their language, highlighting the critical need for skilled interpreters.[63] Trained interpreters reduce medical errors and optimise patient care by navigating cultural nuances and ensuring an accurate understanding of medical procedures.[64]

Communication barriers often arise between healthcare professionals and torture survivors when discussing traumatic experiences, but proficient interpreters can mitigate these challenges. Despite concerns regarding confidentiality and bias, studies have demonstrated that interpreters positively influence care quality and clinical outcomes for refugee clients.[65 66] Skilled interpreters foster trust between patients and physicians, and additional training

Box 1 Guidelines for the perioperative stage

Recommendations for managing potential triggers in the operating theatre

Keep in mind that negative attitudes from healthcare providers can increase the risk of retraumatisation. It is crucial to adopt attitudes that prioritise the utmost respect for the autonomy and dignity of patients. By embracing these attitudes, healthcare providers can create a supportive and empowering environment that minimises the potential for retraumatisation.

1. Before putting on a mask, welcome the patient to the operating room.
2. Slowly ask questions while going through the safe surgery checklist. Healthcare professionals' repeated questioning can cause anxiety because it resembles interrogation.
3. Delay preparations, such as disinfection and covering of the operation area, until the patient is asleep.
4. Ask the patient if there is anything in the environment that is disturbing them and make the necessary adjustments.
5. Comfort and inform; explain the procedures steps in advance. Healthcare professionals' failure to explain procedures or diagnostic tests may cause extreme anxiety and associations with the unpredictability of torture.
6. When using liquids, avoid the sound of running water, as it can cause stress in torture survivors who have been subjected to waterboarding and other torture methods involving water.
7. Try to wait until the patient falls asleep before attaching electrodes, which can remind patients of torture involving electric shock.
8. Before the patient falls asleep, request that they recline on the operating table and avoid exposing them to any stimuli.
9. If the patient becomes anxious while lying down, allow the patient to sit up for a moment.
10. Do not turn on the operating room lights until the patient has fallen asleep. Strong light is also used in torture.
11. Avoid darkness in the operating room before the patient falls asleep.
12. Do not apply a tourniquet or cuff before the patient fall asleep.
13. Do not manipulate surgical instruments prior to the patient's loss of consciousness. They can remind the patient of instruments used in torture.
14. Do not apply any belts to the patient before they fall asleep. Belts are often used in torture.
15. Do not insert a urinary catheter before the patient falls asleep because this can resemble sexual torture.
16. Maintain a tranquil environment until the patient falls asleep.
17. Avoid performing procedures from behind the patient.
18. To position the patient in an unnatural or uncomfortable position or on leg holders, wait until the patient is unconscious.
19. Switch off the operating lights before the patient wakes up.
20. Remove all instruments and bloody compresses from the operating room before the patient regains consciousness.
21. Remove belts; stay with the patient until they wake up. Have staff ready in case the patient acts out while waking up.

enhances their communication and trust-building skills. Healthcare professionals can use interpreters' expertise to identify cultural factors, including mental health stigmas, that may influence treatment outcomes.[66]

Guidelines to the preoperative stage

This section, presented in table 2, includes recommendations on welcoming the patient, ways to bring the patient into the operating theatre and recommendations regarding physical examination prior to surgery.

Recommendations on how to welcome the patient prior to surgery

Healthcare professionals in surgical departments may lack a sufficient understanding of torture's profound effects and how best to support survivors,[22 23] highlighting the need for trauma-informed and culturally sensitive care.[22 23] Recognising torture survivors' vulnerability and retraumatisation risk, adjustments from the initial encounter should be made as necessary.

Reception on arrival significantly influences a survivor's willingness to disclose past experiences.[67] Concerns about confidentiality, stigma, discrimination and mistrust may deter survivors from seeking medical care,[68 69] potentially increasing stress on arrival.[30 41]

Hospitals can resemble aspects of past torture experience[70] due to healthcare providers' involvement in torture.[25] Therefore, patients may not automatically trust healthcare providers, necessitating additional efforts from the healthcare team to build trust from the first meeting.

Recommendations on how to bring the patient into the operating theatre

Entering the operating room alone and in unfamiliar attire can trigger distressing memories for the patient due to similarities to a torture room.[30] A trusted companion's presence from the start may provide comfort.[29] Both torture chambers and operating rooms are high-stakes, controlled environments where lives are at risk.[71 72] The similarities between these environments may lead to strong reactions from survivors when entering the operating room.[30]

Recommendations regarding the physical examination

The power dynamic between patients and healthcare professionals can cause patients to feel powerless, complicating physical assessments and treatments due to feelings of helplessness.[28 73] Particularly for survivors of torture, examinations like gynaecological, urological and anal examinations can be traumatic, especially if they experienced sexual torture, evoking fear, distress and suffering.[74 75] These situations can trigger intense stress, flashbacks and reactions ranging from submission and shame to rage.[74 75]Certain words and phrases used by healthcare professionalsmay also trigger survivors if they resemble those used by their torturers.[41]

Guidelines to the perioperative stage

This section, which is presented in box 1, presents recommendations for managing potential triggers in the operating theatre. Operating rooms and torture chambers both employ instruments[56] and methods[76] capable of inflicting or alleviating pain. Scalpels, forceps and sutures play vital roles in saving lives within the operating room. In both contexts, skilled practitioners execute tasks with precision and expertise. In a torture chamber, the torturer must understand the human body's vulnerabilities to maximise pain infliction.[71 77] Similarly, surgeons in the

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Table 3 Guidelines for the anaesthesiologic stage

Recommendations for preventing retraumatisation during surgical procedures under local anaesthesia

Due to the association between treatment pain and torture pain in the minds of some survivors, it is best to perform certain procedures using general anaesthesia.

1. Avoid starting the meeting in the treatment chair or on the operating table; create a calm environment.
2. Ensure the patient's comfort and establish trust before attaching electrodes, as they may evoke memories of electric shock torture. Be aware that every gesture you make and every move you take influences the patient.
3. Be aware that a torture survivor may choose surgery under local anaesthesia to maintain control, but they may not be aware of their own pain tolerance. If feasible, administer additional analgesics.
4. Ensure the nerve block is performed after administering medication to help the patient relax.
5. Offer emotional support, education about possible stress reactions and details about what to anticipate. Explain all procedures.
6. Be aware that several factors, including your attitude, can trigger anxiety.
7. Always obtain informed consent before administering treatment. Torture includes forced medication.
8. Do not touch the patient without permission.
9. Facilitate patient participation in procedures.
10. Provide a setting with minimal stimulation and apply the principle of consistency by assigning the same staff throughout treatment, if possible.
11. Take pain complaints seriously. As a result of altered pain perception and modulation following torture, the patient may require a different pain management approach than other patients.
12. Pay attention to the occurrence of flashbacks.
13. Inform the patient before making any sudden changes.
14. Provide information regarding sounds and vibrations produced by treatment equipment. Avoid noise whenever possible.
15. Be aware that the numbness caused by local anaesthesia can remind patients of the numbness caused by some torture methods and can provoke strong reactions.
16. Do not play music without the patient's permission. Music can be used in conjunction with forms of torture and may disturb the patient.
17. Try to keep the surgical instruments out of the patient's line of sight.
18. Attempt to reduce, neutralise or eliminate the following triggers:

Lying still or in a prone or angled position	Gastroscopy without anaesthesia or relaxation
Unnecessary tactile stimuli	Pelvic and rectal exams under local anaesthesia
Noise stimuli	Insertion of urinary catheter
Strong light from operating lamps	Electrical equipment
Darkness	Electrodes (ECG, electromyography)
Surgical instruments	MRI
Routine tests	
Needles	

Recommendations on the administration of general anaesthesia to torture survivors

Try to wait until the patient falls asleep before attaching electrodes, which can remind patients of torture with electric shock

1. Ensure the patient's agreement to the procedure and general anaesthesia.
2. Apply a topical analgesic to the skin prior to applying an IV catheter.
3. Inform the patient that they may experience a bloody taste in their mouth after intubation. The taste of blood can evoke memories of torture-related oral wounds.
4. Clarify every step and eliminate uncertainty.
5. Allow the patient to hold the mask themselves during the initial phase of falling asleep. This helps to provide a sense of control.
6. Avoid performing procedures while standing behind the patient.
7. Be aware that torture survivors often have PTSD.
8. Be aware that torture survivors may have flashbacks after anaesthesia and make adjustments to prevent this.
9. Pay attention to psychiatric medications, especially those prescribed for nightmares.
10. Gain the survivor's trust before administration of medication. Forced medication is used as torture.
11. Allow the patient to awaken without stimuli following general anaesthesia. Forcing the patient to wake up can remind them of torture with sleep deprivation.

Recommended medications to reduce the risk of flashbacks or strong reactions

Before surgery

Oxazepam (10–15 mg)
Nitrazepam (5–10 mg)
Quetiapine (50 mg)
Dexdor (0.5–1 mcg/kg over 10 min)
For elective surgery, establish a collaboration with the patient's therapist whenever possible. Consider what has worked well in the past, such as sedatives the patient is already taking, and increase the dosage.

During general anaesthesia

Ketamine (0.1–0.3 mg/kg IV)
Midazolam (1–2 mg IV)
Dexdor inf (2 mcg/kg/t)
Zyprexa (5–10 mg intramuscular)

When awaking from anaesthesia

Dexdor: low dosage (0.3–0.5 mg/kg bolus)
Propofol: low-dose infusion or 20–30 mg bolus
Zyprexa: as administered under general anaesthesia

PTSD, post-traumatic stress disorder.

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Table 4 Guidelines to the postoperative stage

Recommendations for postsurgical assessment and treatment	Recommendations on how to handle patients' reactions indicating retraumatisation
1. Be aware of flashbacks and be prepared for them to occur. 2. Observe the following responses: fight, flight, freeze, fawn, flag and faint. They may serve as an indicator of retraumatisation. 3. Additionally, chest pain, hyperventilation, elevated heart rate and respiratory rate may indicate retraumatisation. 4. Do not leave the patient alone; this may resemble being abandoned in their cell in severe pain following torture. 5. Maintain a tranquil environment with minimal stimulation. 6. Having a friend or relative in the recovery room can help patients feel secure and prevent flashbacks. 7. If the patient has a strong reaction, offer the patient the opportunity to speak with a spiritual guide if your institution has one. 8. Provide medication for pain control to avoid an uncontrolled pain response and reactivation of pain from torture. 9. Adhere to pain management best practices. Take complaints of pain seriously. Do not assume that pain indicates PTSD. The standard postsurgical pain treatment may not be sufficient for this patient due to torture-induced pain and its association with fear. 10. To prevent flashbacks and strong reactions, administer – Antipsychotics – Hypnotics – Sedatives in low doses	1. Grounding techniques to calm the patient should be used if the patient has flashbacks. This can help patients feel present and safe from trauma. *Examples*: 'You are no longer in that time; you are in this moment, here in Norway, in the hospital!' Repeat reassuringly: 'Yes, you are here, right now, at the hospital getting help, right now!' Then, more firmly: 'Now everything is fine! Can you look at me?' 2. The presence of a friend or relative in the recovery room may help reduce flashbacks. 3. Ensure that the patient understands the language used during the application of grounding techniques. 4. Be aware that flashbacks can happen alone or with other medical causes of delirium. 5. A torture survivor under general anaesthesia may awaken with trauma-like reactions, such as acting out or stiffening, and may be unable to make contact. Take these reactions seriously and provide assistance by (a) administering hypnotics and propofol, but be aware that the agitation may worsen because of the medication, and (b) employing techniques to calm the patient by assuring them that they are in a hospital and not at risk of being tortured. Perform these steps until the patient can dissociate from the flashback and regain orientation to time and place. 6. Document the occurrence of flashbacks and the progression of the situation in the patient's medical notes. 7. Notify the patient of the occurrence.

PTSD, post-traumatic stress disorder.

operating room perform intricate procedures with meticulous attention to detail. Survivors, who have been forced to learn to be adaptable to various environments under torture,[71] may associate surgery with traumatic experiences due to these similarities. Modifying the operating theatre to diverge from a torture chamber environment can mitigate such associations.[33] Healthcare providers should implement practical environmental adjustments and prioritise respecting patients' autonomy and dignity.[4 18 30] By fostering a sense of security and autonomy among survivors, this approach improves their overall experience and reduces the potential for distressing recollections linked to past instances of torture.

Guidelines for the anaesthesiologic stage

The guidelines in table 3 recommendations to prevent retraumatisation during local anaesthesia surgical procedures and suggestions for the administration of general anaesthesia to torture survivors.

Recommendation on how to prevent retraumatisation during surgical procedures under local anaesthesia

Torture involving local anaesthesia entails injecting numbing agents into areas like the gums, fingers or genitals. This method is chosen because it leaves no visible scars and blocks pain signals, making the victim insensitive to pain. However, victims still experience pressure and discomfort, leading to long-term physical and psychological trauma.[78] Employing local anaesthetics for torture violates the victim's fundamental human rights and raises significant ethical concerns.[79] Such practices erode survivors' trust in healthcare professionals. In settings like operating rooms where treatment is conducted under anaesthesia, survivors may associate medical procedures with torture, triggering strong emotional reactions.[30] The numbness induced by local anaesthesia during surgery may evoke memories of similar sensations experienced during torture, often caused by constrained positions and tight restraints accompanied by pain.[4 80 81]

Recommendations on the administration of general anaesthesia to torture survivors

General anaesthesia for torture survivors presents challenges due to their physical and psychological trauma. It can trigger feelings of loss of control by echoing past torture experiences and heighten their anxiety, depression and PTSD symptoms.[30] Torture survivors may show a wide range of responses to anaesthetic drugs and face respiratory issues and haemodynamic instability, along with a possible risk of airway obstruction due to scarring or muscle tension.[29 82] Therefore, it is crucial for healthcare

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professionals to evaluate the patient's medical history and condition thoroughly to properly plan and monitor anaesthesia.[82]Healthcare providers should recognise and avoid potential triggers, reducing stress during the induction phase of anaesthesia.[33] Although general anaesthesia can risk retraumatisation for survivors, TIC can support their recovery.[83]

Guidelines for the postsurgical stage

Table 4 provides recommendations for postsurgical assessment and treatment and guidance on managing patient reactions that indicate retraumatisation.

Postsurgical assessment and treatment

Torture survivors often face heightened pain during surgical procedures, with past injuries complicating surgery and recovery.[18 30] Emotional effects of torture like stress, terror, grief and despair can worsen pain and hinder postoperative recovery.[29 30 84]Torture survivors may also exhibit anxiety, panic, dissociation and flashbacks after surgery.[29 41] It is crucial for healthcare professionals to acknowledge and address these emotional challenges, offering support and interventions to manage distress.[29] Addressing physical and emotional pain can improve the surgical experience and aid recovery for torture survivors.[21 84 85]

How to handle patient reactions indicating retraumatisation

Postsurgical triggers reminiscent of torture can lead to flashbacks and strong reactions, potentially causing retraumatisation in medical settings.[33] These triggers, which can be contextual, relational or a combination of the two, can be particularly inducing if healthcare providers display authoritative behaviour.[27 33] It is vital to understand and address these triggers to lessen their impact. Transparent communication, patient control over treatment, ensuring safety and providing support can help prevent retraumatisation.

When retraumatisation occurs after surgery, swift identification and intervention are crucial for recovery.[29] TIC principles like observing distress, minimising stress, validating experiences and empowering patients are vital.[22 31] Implementing TIC principles can aid physical and mental recovery. Grounding techniques, guiding patients to focus on the present and reminding them of their safetycan restore control and serve as therapeutic strategies.[29 56]

DISCUSSION

Our study reveals obstacles in providing surgical healthcare for torture survivors, including insufficient knowledge among healthcare providers and resources in healthcare to address their unique needs. The complex interplay between torture's physical injuries, psychological distress and societal consequences requires levels of comprehension and expertise that are not always readily available. This lack of customised care can exacerbate survivors' distress and perpetuate trauma cycles. This mirrors findings from a study on healthcare providers' responses to torture survivors among the female refugee population in Ireland, emphasising the need for specific policies and programmes to ensure vulnerable groups have equal healthcare access.[86]

Another study on rehabilitation services for refugee torture victims in Norway[20] reinforces our findings about the inadequate understanding of torture survivors among healthcare professionals. That study highlights the lack of competence in providing care to torture survivors and the absence of targeted education and training, underlining the systemic challenges and knowledge gaps within healthcare systems. Failing to meet the needs of torture survivors reflects not only a gap of clinical skills but also a broader neglect of the ethical duty to provide compassionate and culturally sensitive care to vulnerable populations.[20]Participants in our study noted cultural and linguistic barriers and complexity in torture survivors'care, supporting other research showing that misunderstandings can impede treatment and exacerbate feelings of alienation.[41]

The present study's guidelines can support healthcare providers, but they are not intended to replace the need for specialised TIC, training, and education. Healthcare environments must be safe and welcoming, and stakeholders must also understand the implications of torture to improve care. Collaboration with survivor-led organisations is crucial for prioritising survivor needs and perspectives, minimising retraumatisation risks and fostering empowerment.[30]

Given the inherent challenges in providing healthcare for torture survivors, it is imperative for healthcare providers to acknowledge and address these obstacles to effectively aid in survivors' recovery. Implementing the recommendations from this research is crucial for healthcare professionals to navigate and overcome the multiple difficulties that may arise during the treatment of torture survivors.

Participants, in the present study and other research,[87] have identified the primary barrier to effectively treating torture survivors as the difficulty in their identification within healthcare systems, a challenge exacerbated by a lack of awareness of torture's consequences and insufficient time. One study revealed that physicians failed to identify torture survivors due to these issues, with general practitioners detecting only half of torture survivors among non-Western immigrant patients.[60]

Asking about torture experiences should be part of patient interviews, as survivors often want healthcare providers to have a conversation before treatment[56] and take the initiative.[30 41] This study includes recommendations for identifying torture survivors in surgical contexts. While surgical services primarily treat physical issues, recognising and addressing psychological issues is crucial to prevent retraumatisation.[4 18 23] The guidelines provide suggestions about how to inquire about and respond to disclosed torture experiences that most participants found clear and useful.

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Most participants attributed the difficulty in asking about torture to limited time for listening to survivors' histories, which aligns with findings from other studies.[87 88] However, this time constraint may reflect other factors, such as healthcare professionals' emotional responses to dealing with survivors.[88] Coping strategies vary, and some professionals might cite a lack of time as a means to avoid confronting torture histories. Proper support and coping strategy instructions are needed for those treating torture survivors, as research reveals a general lack of support for professionals at risk of burnout and secondary retraumatisation.[89]

The guidelines advocate a multidisciplinary team approach, leveraging diverse expertise and fostering regular briefings among healthcare professionals. A multidisciplinary team including physicians, nurses, interpreters, spiritual advisors and trauma specialists allows for a comprehensive assessment of survivors' needs and the development of tailored treatment plans.[5 84] This approach helps ensure that survivors receive integrated care and fosters a collaborative environment for regular briefings and case discussions. Despite challenges due to insufficient resources and organisational complexity, the team promotes continuous learning and mutual support. It is crucial for healthcare professionals to be aware of their own limits, share experiences and avoid becoming overwhelmed by their patients' problems.[88]

Our study participants reported challenges related to a lack of understanding among colleagues about the needs of torture survivors and the difficulties in meeting those needs. They sometimes had to advocate for patients to ensure safe care. Discrepancies in subject matter expertise can lead to disagreements over treatment. However, access to guidelines can foster equilibrium. Participants felt that adherence to the present study's guidelines by all surgical department professionals could improve service quality and respond to the special needs of torture survivors,[5] preventing retraumatisation.

Some participants did not see any need to consider the gender and the ethnicity of healthcare providers and interpreters for torture survivors. However, survivors of sexual torture may be more triggered by providers of the same sex as the perpetrator.[90] Although this concept should be understandable to healthcare professionals, the responses of some participants indicated otherwise. This could be attributed to the under-reporting of sexual torture[12] and the fact that healthcare professionals have not reflected on this issue. Certain participants generalised the need to consider the gender and the ethnicity of staff who treat survivors of torture as unnecessary. It may appear that health personnel associate the gender preferences of professionals solely with cultural factors despite the high prevalence of sexual torture and its close association with gender.[90] Women subjected to sexual torture exhibit high levels of vulnerability and are prone to isolation and negative coping strategies, resulting in poor health and well-being.[91] Understanding the interplay between gender and torture is vital for healthcare professionals. Suggestions aimed to improve awareness regarding this aspect are included in the guidelines' introduction, but it is important to note that this factor does not stand alone in the challenges faced by sexual torture survivors. Various factors are at play, such as patient preferences for care from a professional of a different ethnicity than the torturer and the attitudes of healthcare providers. Without confidence-fostering attitudes, there is a risk of retraumatisation. Practices vary significantly due to differing levels of awareness among health professionals, highlighting the need for standardised guidelines that can help deliver consistent, effective care.

Participants in the present study noted a lack of standardised procedures to prevent retraumatisation and a general lack of knowledge about torture among healthcare professionals. This is consistent with other studies, including one involving over 100 healthcare professionals. In that study, 55% of respondents reported treating patients affected by torture, but only 12% felt confident in questioning a tortured patient, while 88% believed they would benefit from further training on asylum seekers and refugee health issues.[92]

Participants in the present study noted resistance among colleagues to implementing changes that would lead to better healthcare for torture survivors. They highlighted insufficient knowledge and a lack of standardised procedures to prevent retraumatisation, advocating for increased knowledge, competence and awareness through education, consistent with findings from other research.[92] Another study showed improvement in medical students' attitudes, knowledge of torture effects and confidence in clinical evaluation after a workshop on the consequences of torture.[93] Most participants in our study suggested that in addition to daily work activities, our guidelines could provide a framework for practical support and training.

The primary challenge identified in our study regarding interpreters was their absence in the operating room, the most stressful part of a patient's surgical path. Despite cost concerns, most participants were open to change in this area, recognising the benefits of interpreters for both patients and health professionals. This aligns with a study on refugee maternity care and the use of interpreters during birth, where 57% of healthcare professionals felt confident when working with an interpreter and appreciated their professionalism.[94] However, time constraints when an interpreter was present were a concern. Healthcare staff called for a policy on interpreters and extended consultation times when those individuals were needed. Similarly, participants in the present study expressed concerns about the limited use of interpreters for assisting survivors.

Regarding assisting survivors who exhibited extreme reactions like aggression during or after treatment, participants described these occurrences as horrifying for both patients and medical staff. According to them, there was no set of procedures for assisting patients with strong reactions or supporting patients who experienced flashbacks. A case study[29] on a torture survivor

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suffering flashbacks postsurgery provided suggestions for their support. It cautioned against medication because it could exacerbate the patient's condition, recommending grounding techniques instead. It also proposed having a familiar person in the recovery room to prevent or help manage flashbacks. The study emphasised that healthcare professionals should be sensitive to a patient's culture, language and specific traumatic triggers and vulnerabilities during all stages of surgical treatment. None of these practices is generally included in surgical departments.

Due to the lack of established protocols for handling flashbacks in trauma survivors, our participants used delirium procedures when survivors exhibited flashbacks or strong reactions during treatment. Crosby (2007) states that flashbacks can occur independently, concurrently or modify the presentation of other delirium causes. While flashbacks and delirium share similarities, flashbacks lack the fluctuating disorientation typical of delirium and can co-occur with postanaesthesia delirium.[29] It remains unclear whether delirium interventions also manage flashbacks. Therefore, we added recommendations on managing postsurgical flashbacks and on potential medications to prevent flashbacks in surgically treated survivors.

Participants in the present study highlighted challenges in comforting survivors displaying strong postsurgical reactions and noticed a deterioration in patient conditions with sedative use. This aligns with Crosby's (2007) study, which suggested unique approaches for managing flashbacks in PTSD patients. It emphasised that healthcare professionals need to understand a patient's specific history for targeted assessment and intervention. It also indicated that situations triggering prolonged flashbacks can be avoided.[29] This underscores the importance of identifying torture survivors in a clinical setting, which forms the first section of our guidelines.

Participants in the present study felt that our guidelines could positively influence health personnel's decisions when assisting torture survivors, thus enhancing service quality and preventing retraumatisation. These indicators of acceptance are vital for future implementation. Another study has identified practitioners' lack of knowledge as a major barrier to guideline implementation.[95] This suggests that knowledge-enhancing activities like training in the subjects of torture and retraumatisation could facilitate effective guideline implementation. Using these guidelines, participants proposed developing educational programmes for healthcare professionals and students in relevant fields.

Research indicates that torture survivors appreciate a clinical environment that fosters trust, respect and personal safety.[5 68] Therefore, anyone interacting with survivors should receive training on torture's impact on their health and relationships, especially with healthcare professionals.[96] A training programme could focus on trauma awareness, safety emphasis and enabling survivors to gain control in a clinical situation.

Key actions in implementing the guidelines

Addressing the prevalent issue of inadequate understanding can improve guideline implementation. Providing education on torture to healthcare professionals can reduce retraumatisation risk, improve attitudes and facilitate guideline implementation.[97] In the second phase of the present study, detailed project information was disseminated to interested departments, setting the stage for future guideline implementation.[50]

For global guideline implementation, a Delphi study with experts on a global level is crucial. Their insights can evaluate the guidelines' usability and relevance in various settings.[98] The DELPHI approach allows for comprehensive assessment and improvement, ensuring that the guidelines are flexible enough to address the unique challenges faced by healthcare providers caring for torture survivors around the world.

Healthcare professionals generally praised the guidelines for their clarity and practical utility. Despite these positive responses, ongoing efforts are needed to further tailor the guidelines to specific organisational structures and processes within healthcare institutions. Digitisation can enhance accessibility and usability, allowing for continuous refinement and adaptation to evolving healthcare practices and policies.[99] However, collaboration with mental health professionals remains crucial for optimising surgical care for survivors, which requires initiative from leaders and healthcare organisers.

Limitations and strengths

Our study provides in-depth insights into the challenges healthcare professionals face when treating torture survivors in surgical departments. To the best of our knowledge, our guidelines are the first evidence-based suggestions aimed at preventing retraumatisation during surgical interventions. While tailored to surgical departments, the principles may apply to other somatic healthcare settings and thus potentially benefit a wider range of traumatised patients. However, our study's limitations include the survey participants' predominantly serving a large migrant population, potentially skewing their awareness of the unique needs and available resources for this demographic. The interpretation and application of our recommendations by less well-informed healthcare professionals remain uncertain, highlighting the need for broader dissemination and education initiatives.

Furthermore, the absence of policymakers in our stakeholder cohort represents a notable limitation. Their perspectives could have offered valuable insights into feasibility concerns surrounding the implementation of our guidelines, potentially influencing policy and system-level changes to facilitate their adoption and integration within healthcare systems.

CONCLUSION

This study offers guidelines for preventing retraumatisation of torture survivors undergoing surgical treatment,

based on the literature and self-reported difficulties by healthcare professionals. Challenges include insufficient knowledge and time, identifying torture survivors, understanding their special needs and managing strong patient reactions.

Invasive procedures like surgery can cause flashbacks and nightmares in torture survivors, necessitating TIC from healthcare professionals. Our guidelines emphasise the need for a person-centred approach that considers the unique psychosocial and cultural dimensions of each torture survivor's health assessment and care.

However, additional action is required from educational institutions and healthcare leadership. This includes integrating the topic into educational programmes and offering related educational opportunities. Moving forward, it is crucial to present the guidelines to policy-makers and engage in candid and wide-ranging discussions about implementation strategies.

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Ethics approval The Regional (South-East C) Committee for Medical and Health Research Ethics approved this study in May 2021 (#227624). In accordance with the principles of confidentiality and anonymity, all participants granted written informed consent (online supplementary file 2) to partake in the study and have the results published. Before providing assent, the participants were duly apprised of the study details both orally and in writing. Every stage of the research, encompassing participant selection, data gathering and analysis, was conducted in accordance with the guidelines set forth by the ethical review board.

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