

SPECIAL REPORT

REHABILITATING TORTURE SURVIVORS

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Refugees have often been exposed to torture in their countries of origin. A core issue is the resulting multifaceted presentation of somatic, psychological and social problems in the same individual, leading to severe activity limitations and participation restrictions. An international conference, “Rehabilitating Torture Survivors”, was organized by the Rehabilitation and Research Centre for Torture Victims (a rehabilitation clinic and global knowledge and research centre with government support) in collaboration with the Centre for Transcultural Psychiatry at Rigshospitalet in Copenhagen, Denmark, in December 2008. The main topics were: the context of torture; mental problems including psychotherapy; internet-based therapy and pharmacotherapy; chronic pain; social integration and family; and functioning and rehabilitation. Available evidence highlights the importance of an interdisciplinary approach to rehabilitation, but scientifically rigorous studies of comprehensive rehabilitation programmes for torture survivors are lacking. Therefore, effect studies are urgently warranted. Nevertheless, by combining expertise from different scientific and professional areas, important elements in the problems of torture survivors can be addressed from an evidence base generated both from traumatized and non-traumatized patient populations. Thus, trauma-focused cognitive behavioural therapy and/or eye movement desensitization and reprocessing, as well as interdisciplinary pain rehabilitation, should be components of a successful rehabilitation process, and great attention should be paid to contextual components.

Key words: torture, PTSD, chronic pain, social environment, functioning, rehabilitation, interdisciplinary.

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INTRODUCTION

According to the United Nations (UN) (1), torture is defined as when the following 3 criteria are fulfilled: (i) strong pain or suffering is inflicted, either physically or mentally; (ii) forced confessions, information, or punishments are sought; and (iii) a public authority carries out, encourages or consents to the use of torture. Torture is often used as a political instrument

to help a country's rulers keep control by breaking down the personality of individuals. Torture methods can be both physical and mental, and these are equally detrimental (2). Often, methods that do not create permanent, visible damage are used in order to make it difficult to document torture. The UN Convention Against Torture clearly states that, “No exceptional circumstances whatsoever, [...] may be invoked as a justification of torture.” (Article 2,2 (1)).

A recent study in Denmark (3) among asylum-seeking immigrants indicates that 45% have been subjected to torture in their countries of origin. Thus, it is highly relevant for rehabilitation providers, in both Western and developing countries, to share existing knowledge in the field (4). The international conference “Rehabilitating Torture Survivors” was organized by the Rehabilitation and Research Centre for Torture Victims in collaboration with the Centre for Transcultural Psychiatry at Rigshospitalet in Copenhagen, Denmark, on 3–5 December 2008, and included a joint session with the Danish National Network of Trauma Treatment Centres. There are few or no adequate randomized controlled trials of torture survivor rehabilitation (5). Therefore, the aim was to gain better knowledge from scientifically sound trials, by accepting that the major elements of problems experienced by torture survivors have been studied thoroughly in other patient groups. A core issue is also the multifaceted presentation of somatic, psychological and social problems in the same individual (6–8), leading to severe activity limitations and participation restrictions, in particular with the existing barriers of integration in a new country.

The aim of this Special Report is to summarize the knowledge presented at the conference, containing invited key-note lectures, parallel workshops on rehabilitation issues in practice and free communication on the rehabilitation of trauma survivors, resulting in active discussions and a number of conclusions. In addition, the new *Rehabilitation and Research Centre for Torture Victims Field Manual on Rehabilitation* of torture survivors was presented and discussed. This manual was initiated, produced and financed by the RCT in 2007 and is freely accessible via the web (www.rct.dk; see review (9)).

THE CONTEXT OF TORTURE AND ORGANIZED VIOLENCE

Abdel Hamid Afana, Palestine, spoke about mental health in protracted conflict situations using the Palestinian case as an example. The implications of protracted conflict go beyond the

loss of life and destruction of infrastructure, and the devastating consequences of protracted conflict appear in the social and cultural fabrics of people, their identity and their values system (10). He stressed that the long-term effects have often been reduced to the individual level, through establishing a direct linkage between the traumatic experiences and certain symptoms. However, symptoms are not necessarily accompanied by psychopathology, but rather fall within the range of normal response to overwhelming events. Trauma during protracted conflicts is repetitive, multiple, continuous and trans-generational, and it must be examined not only from the perspective of individual disorders, but also at the family and collective level (11). The disintegration of family and social networks, disruption of local economics, inter-individual and family violence, and spreading of fear and uncertainty all have implications for the health and well-being of survivors.

Concerning the prevalence of torture and organized violence, *Shr-Jie Wang*, Denmark, presented the results of a population-based household survey including 1101 households in the Meherpur district on the western border of Bangladesh. The study established a baseline on collective exposure to organized and political violence (OPV) among the general population and identified a considerable number of silent victim families. This is the first epidemiological survey to confirm the elevated prevalence of OPV-related injury (31% of all households) in a developing country. The high prevalence of injury, violence-related injury, pain and mortality had become a financial burden for the families. The study also revealed the remarkable geographical variation in OPV exposure in the district, indicating the "hot spots" of violence, and clarifying the responsibility of local police stations involved in torture and other violations of human rights.

MENTAL PROBLEMS

Allen S. Keller, USA, spoke about interrelated symptoms and integrated care, and addressed the physical, mental and social dimensions of health in torture survivors. Since the physical, mental and social dimensions of health are interrelated, it is crucial that these 3 health arenas can be evaluated and addressed in a comprehensive, integrated fashion (6) when caring for torture survivors. When any of these dimensions of health is not evaluated and addressed, there is the potential for a profoundly negative impact on the remaining dimensions. He discussed this interrelationship and presented a multidisciplinary model for providing rehabilitative care for torture survivors (12).

Among the mental health conditions following torture, post-traumatic stress disorder (PTSD) (13, 14) is the most frequent condition. The diagnostic criteria for PTSD include a history of exposure to a traumatic event meeting 2 of the following criteria: (i) the person has experienced, witnessed, or been confronted with an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of oneself or others; (ii) the person's response involved intense fear, helplessness, or horror. The patient displays symptoms from each of 3 clusters: intrusive recollections; avoidant/numbing symptoms; and hyper-arousal symptoms. A fifth criterion concerns duration of symptoms and a sixth assesses functioning.

Even where PTSD is present, other psychiatric conditions, such as anxiety or depression, have a documented high prevalence (15). Furthermore, PTSD is part of the reaction, but not necessarily the whole response, and it may, in the concrete case, neither be the most important, nor the most urgent, problem. In addition, torture survivors frequently complain of a broad range of physical symptoms, such as headache and pain in various parts of the musculoskeletal system.

From a diagnostic point of view, *Marianne Kastrup*, Denmark, pointed out a number of controversies regarding PTSD, related to the nosological entity of conditions following extreme stress. Conditions such as Shell Shock, KZ Syndrome, Combat Fatigue and Anxiety Neurosis are among the categories identified over time. The symptoms have been conceptualized as Post Traumatic Stress Disorder since the Diagnostic and Statistical Manual of Mental Disorders version III (DSM-III) classification of 1980 introduced this category. The diagnosis of PTSD has been modified in later versions of the DSM classification and was also introduced in the ICD-10. A pertinent question today is whether PTSD as a diagnostic category sufficiently covers the comprehensive range of psychological effects experienced by torture survivors. In short, the PTSD diagnosis has been criticized for being too narrowly focused on psychological symptoms and thereby not adequately reflecting the entirety of the situation of people suffering from intense symptoms after extreme traumas (16).

In order to grasp the complexity of the condition, a new diagnostic category has been brought forward, known as Disorder after Extreme Stress not Otherwise Specified (DESNOS; 17). The diagnosis of DESNOS requires alterations in 6 areas of functioning: (i) regulation of affect and impulse; (ii) attention or consciousness; (iii) self-perception; (iv) relations with others; (v) somatization; and (vi) systems of meaning, without specifying the degree of change in functioning. Criticism remains, however, as to whether the tendency to focus on a biomedical paradigm such as PTSD and DESNOS is a Western trend that does not sufficiently take the socio-political context of the torture survivors into consideration (18).

On the other hand, *Douglas Bremner*, USA, in his lecture on neurobiology and neuroimaging of PTSD, stated that brain imaging studies have implicated areas including the hippocampus, amygdala and medial prefrontal cortex in PTSD (19). Alterations in hypothalamic-pituitary-adrenal (HPA), noradrenergic, and benzodiazepine systems have also been found. These studies followed up preclinical studies showing that stress is associated with changes in hippocampal morphology (20), inhibition of neurogenesis (21), and memory deficits. Studies in animals showed that both selective serotonin reuptake inhibitors (22) and the epilepsy medication phenytoin block the effects of stress on the hippocampus.

Imaging studies have found a smaller volume of the hippocampus, as measured with magnetic resonance imaging (MRI) in patients with PTSD related to both combat and childhood abuse (23). These patients were also found to have deficits in memory on neuropsychological testing. Functional imaging studies using positron emission tomography (PET) found deficits in function in the medial prefrontal cortex as well as

the hippocampus with provocation of PTSD symptoms using traumatic reminders or emotionally balanced memory tasks. An increased hippocampal volume has been found following treatment with paroxetine in PTSD (24) and a 6% increase in both right hippocampal and right whole brain volume following phenytoin in PTSD (25). These studies suggest that medications may counteract the effects of stress on the brain in patients with PTSD.

Psychotherapy

From a therapeutic standpoint, *Stuart Turner*, UK, made it clear that, in particular in Western countries, medication is still the preferred way of treating PTSD. But is this always the most beneficial intervention? Today, there is considerable evidence for the efficacy of psychological therapies in treating PTSD (26), even though the number of studies based on randomized controlled trials is limited. Based on conclusions derived from published trials, review papers, meta-analyses and clinical guidelines, such as the guideline published by the UK National Institute for Health and Clinical Excellence (NICE; 27) the effects of psychological treatments have a clear evidence base. For PTSD, there is strong support for 2 structured treatments: trauma-focused cognitive behavioural therapy (CBT), and eye movement desensitization and reprocessing (EMDR; 28). A limitation in the findings, however, is that the mentioned trials were not carried out with refugees or torture survivors. Thus, the applicability of the evidence in settings with such populations is less clear.

In his lecture on EMDR, *Udi Oren*, Israel, described this therapy as a highly recognized and widespread treatment that effectively helps persons overcome psychological difficulties, originating from traumatic experiences. Fourteen controlled studies support the efficacy of EMDR (26). In a recent study with people suffering from PTSD according to DSM-IV criteria, 75% of adult-onset trauma subjects receiving EMDR achieved asymptomatic end-state functioning compared with none in an antidepressant-treated control group (29). The theory is that EMDR works directly with memory networks and enhances information processing by forging associations between the distressing memory and the more adaptive information contained in other semantic memory networks. When this occurs, learning takes place, and the experience is stored with appropriate emotions able to guide the person in the future (30). The number of sessions required for EMDR treatment, however, will vary according to the complexity of the issues being dealt with. In general, the more isolated the traumatic memory being treated, the shorter the treatment tends to be.

Inger Agger and her colleagues, Denmark, discussed testimonial therapy as a brief intervention to improve well-being in victims of torture and organized violence. This therapy, provided through trained community workers and human rights activists, helps victims of torture to tell their stories, and to receive psychotherapeutic and community support. Justice is the entry point in the testimony method, which was originally developed in Chile during the military dictatorship in the 1970s (32). Recently, principles of cognitive behavioural exposure therapy and testimony therapy have been combined

in Narrative Exposure Therapy for treatment of traumatized survivors of war and torture (33). A collaborative 3-month pilot training project was undertaken between the Rehabilitation and Research Centre for Torture Victims and the People's Vigilance Committee on Human Rights in Varanasi, India on this technique. After testimonial therapy, almost all subjects demonstrated significant improvements in overall World Health Organization (WHO)-5 well-being score.

Internet-based therapy

Availability of care is an urgent problem in many settings, and most at-risk individuals exposed to various forms of trauma do not get the care they need. Even when trauma survivors break through various cultural, logistical, and psychological barriers to care, they often do not get state-of-the-art, evidence-based treatments. With modern technology, however, it is possible to overcome this lack of accessibility, and tele-health methods may be a suitable choice. According to *Brett Litz*, USA, this internet-based treatment may help to redress stigmatizing, which is one of the major barriers to obtaining care, by focusing on the training aspects more than the therapeutic ones (34, 35). It may provide important training in, for example, managing anxiety triggers and facilitating the individual's reconnection with the community.

Encouragingly, randomized controlled trials have shown that internet-based self-management CBT may be a way of delivering effective treatment to large numbers of trauma survivors with unmet needs and barriers to care (36). The contact between clients and therapists takes place exclusively via the internet, and lets the trauma survivor work in their own setting, on the basis of instructions issued via the internet by an assigned practitioner. It follows a scientifically tested treatment protocol, based on CBT approaches that have proved effective in regular face-to-face-settings.

Christine Knaevelsrud, Germany, presented a randomized controlled trial of an internet-based treatment for PTSD in a mixed sample of 96 participants who had experienced traumatic events (but not torture), on average 8 years earlier (37). The results show significant and enduring improvements in post-traumatic stress symptoms, anxiety and depressed mood, which sustained during an 18-month follow-up. The level of self-efficacy was also increased. The German group currently works with 2 other related projects. One is carried out from the Treatment Centre for Torture Victims in Berlin providing an Arabic Internet-based therapy for survivors of war and torture residing in Iraq or neighbouring countries (38). The other is a study in progress and examines an internet-based biographical testimonial therapy for traumatized child survivors of World War II.

Pharmacotherapy

Jonathan Ipser, South Africa, presented a systematic review on the strength of the evidence for pharmacotherapy in PTSD, concerning the medications that are widely prescribed as first-line agents for this condition (39, 40). A number of expert consensus guidelines have recommended selective serotonin reuptake inhibitors (SSRI), or SSRI in combination with ven-

lafaxine, as first-line pharmacological agents in the treatment of PTSD. In general, guidelines do not outline specific dosages (e.g. 27). Also, the more classical tricyclic antidepressants and monoamine oxidase inhibitors have shown some effect. If drug treatment is effective and tolerated, the clinical recommendations are that it should be continued for at least one year before gradual withdrawal. Other guidelines, for example the NICE guidelines (27), recommend that drug treatments should not be routine first-line treatment for adults. However, in the existence of co-morbid depression, severe hyperarousal or severe sleep problems, drug treatment is indeed indicated. The same holds for those patients who have little benefit from, have contraindications against, or do not want to engage in, trauma-focused interventions (27).

It is well documented that pharmacological treatment can be effective in treating core symptoms of PTSD as well as the associated depression and disability. However, the present drugs still fall short of being ideal, with documented limited response in randomized trials, and the remission rates and the tolerability issues experienced by many. Furthermore, there is insufficient knowledge on assessing the efficacy of pharmacotherapy in different trauma subpopulations, including ethnic and cultural minorities, women, and older individuals. Adequately powered, appropriately designed trials are sorely needed to determine whether pharmacological treatments are superior in terms of efficacy and cost-effectiveness to trauma-focused psychological treatments, and whether they are efficacious and cost-effective in combination.

CHRONIC PAIN

Andrew Frank, UK, spoke about refugees presenting to his rheumatological service with spinal pain, and discussed the medical and psychosocial implications. Audits from his hospital in the 1990s did not describe a single patient who had been tortured. He first reported patients who had been systematically tortured in 2002 (41), and since then increasing numbers have been seen in the back pain clinics. His study included 63 refugees coming from Asia or Africa. Their mean duration of residence in the UK was 65 months. Thirty individuals reported torture/beatings in their countries of origin. Discharge diagnoses were mainly mechanical low back pain (55/63), neck pain (28/63), pain and anxiety/depression (48/63), and PTSD (41/63). Twenty-six subjects reported some kind of gastrointestinal disorder (42). He concluded that most refugees to Western countries seem to have had a horrendous past irrespective of whether they were tortured and emphasized that: "As a basic principle of good rehabilitation practice, emotional agendas need resolution before physical goals can be achieved".

Uwe Harlacher, Denmark, led the workshop discussion about controversies in assessment regarding chronic pain. Measurement of single variables (e.g. pain intensity, pain behaviour) at single points of time without regarding contextual variables is often insufficient. Controversies and problems arise because pain is a complex phenomenon, interacting with other variables (43–45). Solely to focus on pain intensity in the assessment and treatment of chronic pain is common, since it is assumed

that there is a high correlation between physical activity and pain intensity. Rather, there is a high correlation between activity and quality of life. Thus, pain, activity and quality of life should be assessed simultaneously (46).

The controversies and problems discussed were: (i) pain might rather be secondary or subordinated to other problems than a central problem *per se*; (ii) unsuitable measurement of physical performance: the standardized measurement of physical performance, e.g. pre- and post-treatment might give misleading results if not embedded in a wider context of everyday activities; (iii) too narrow a focus on pain: a maximum reduction in pain is not an obvious central goal of treatment; (iv) ignoring the long-term-perspective: short-term strategies for coping with pain might not be suitable in the long run, (v) ignoring subgroups: the population of pain patients is not homogenous regarding, for example, general activity; some are too active, others have low activity; (vi) activity shifts within individuals, e.g. pacing (47).

Amanda C. de C. Williams, UK, in her lecture on rehabilitation of torture survivors – evidence for pain rehabilitation, stated that persistent (non-cancer) pain is commonly treated using psychologically-based rehabilitation to improve quality of life. This is largely because the problems of persistent pain, such as loss of social and vocational activity, pervasive distress, isolation and frustration, result not only from pain, but from the fears and confusions about it, and from dealing with it in ways appropriate only to acute pain problems. In fact, the cognitive, emotional, and behavioural contributions to the persistent pain problem need to be addressed directly.

Treatment using psychologically-based methods usually takes the form of a pain management programme, with psychologists and physiotherapists in active treatment roles, and doctors and others in important educational roles. Forty years of such programmes, partly reflected in the randomized controlled trials incorporated in systematic reviews and meta-analyses (48–50) show consistently good outcomes: reduced disability, reduced distress, and even reduced pain with moderate effect sizes of 0.4–0.9. None of the treatment elements alone is outstandingly effective, although all contribute to better outcome. There is strong evidence of improved function from intensive multidisciplinary rehabilitation compared with active non-multidisciplinary rehabilitation, though work return varies. Less intensive (small treatment volume and/or monomodal) rehabilitation showed little change compared with active or standard care. Treatment that uses predominantly physical exercise and retraining has had somewhat disappointing results (51), and the model of deconditioning as a consequence of persistent pain is undergoing re-evaluation (47). The aims of pain treatment should be to improve control of pain, build realistic understanding of problems, improve function by working towards short- and long-term goals in graded steps, increase participation, reduce distress associated with pain and limitations, and reduce unhelpful interactions with the health system. In summary, pain management works by changing the person's relationship to the pain and the meaning of the pain in his or her life. Hence, the bio-psycho-social model should be used.

Pain is one of the most frequent complaints of torture survivors (8). Overemphasizing the importance of the psychological aspects may result in insufficient somatic pain diagnoses and treatment (52, 53). There is a long history of assigning pain to psychological trauma (54). DSM and ICD models of PTSD perpetuate this, but clinicians also try not to over-medicalize problems. Amanda Williams mentioned that, in a survey of torture care projects internationally in 2002, most projects worldwide described pain in torture survivors as common, very common, or universal. Of the 42 projects (45% response rate), 28 offered medical care as part of their service, 14 had physiotherapy, 31 had psychiatry and/or psychology, 11 had complementary/alternative medicine, but only 6 had pain specialists (Europe, North America, Australia). The great majority wanted to improve their services for pain.

SOCIAL INTEGRATION AND FAMILY

The impact of the post-migratory context and of the quality of social integration on refugee mental health has been demonstrated repeatedly. *Cecile Rousseau*, Canada, in her lecture on social integration of torture survivors, took the point of departure in the knowledge that organized violence severs the social bond, shattering both basic trust and all levels of social networks (55). The popular assumption that integration stems from personal transformation was challenged, and instead a family perspective on social integration and an ecological perspective highlighting the role of host country power relations and ambivalence in integration was proposed.

Research has consistently shown the importance of the post-migratory environment for refugees' health and functioning and the frequent gap between symptoms and social adjustment (56). Key factors for integration are family reunification, migratory status, work availability and educational perspectives for children (57). All domains of integration are tightly intertwined with family dynamic, and systemic rather than solely individually centred interventions and programmes should be the rule. Discrimination against ethnic minorities has risen considerably in many countries since the 11 September 2001 attacks on the World Trade Center in New York City, resulting in a reactivation of traumas among refugees, and this is counteracting integration. *Cecile Rousseau* concluded that a society pushing integration may be a source of violence, while refugees resisting integration may be a sign of strength. Host societies are presently also feeling hurt and threatened and integration should thus focus on taking care of the fear, the hurt and the exclusion on all sides. From a research perspective there is a need to evaluate projects of psychosocial intervention, of multiplying longitudinal follow-up studies documenting psychosocial interactions and adopting a systemic perspective in order to take into account family dynamic and host country context.

Birgit Lie, Norway, spoke about the triple burden of trauma, uprooting and settlement, and presented data from a non-clinical longitudinal study of health and psychosocial problems among refugees in Norway. Refugees arriving in exile have different traumatic pre-flight experiences. Health-related consequences of trauma and migration and the need for targeted

healthcare were the focus of the study investigating changes in psychological symptoms and general health conditions over time. The influence of risk factors (torture, pre- and post-flight traumatic events and demographic status) on psychological symptoms and the potential influence of psychosocial factors on psychological health was examined in a 3-year follow-up community study of a non-clinical group of refugees (58, 59). The results demonstrated persistence of psychological symptoms, indicating the severity and chronicity of the problems. Severe life-threatening trauma and present life in exile with unemployment and unresolved family reunion were risk factors. Refugees with a former history of traumatic experiences of a physical character were less willing to return to their homeland. A decrease over time in all symptom parameters was found in the repatriated group. A targeted and interdisciplinary approach was recommended, with a phase-based orientation as regards psychotherapy.

Solveig Ekblad, Sweden, in her presentation on a meaningful and mental health promoting context for children and the family of torture survivors, stressed the importance of 4 dimensions of resettlement stress that have been identified among adult refugees: social and economic strain, alienation, discrimination and status loss, and violence and threats (60). She presented an ecological adaptive model with focus on 5 important health areas: attachment, security, identity/roles, justice/human rights and existential/meaning. The significance of this model was discussed in 2 studies: One focusing on psycho-educative mental health promotion classes for new coming refugees, and the second on how to approach vulnerable refugee children by using photographs to establish dialogue about everyday life (61). Focusing on a holistic mental health promotion and psycho-educative approach may empower the family of torture survivors and their children. Ethical issues were particularly highlighted in connection with research in post-conflict areas, particularly when foreign experts arrive on the scene to assess the post-conflict situational needs of people. The need to respect privacy, confidentiality, voluntarism and the best interest of the interviewees, as well as the importance of avoiding raising unrealistic expectations during assessments, was stressed.

Edith Montgomery, Denmark, gave a workshop presentation about trauma and resilience in young refugees, and presented the long-term consequences of exposure to torture and organized violence, drawing on the results of an 8–9-year follow-up study of refugee children in Denmark (62, 63). The study showed that the cumulated effect of traumatic experiences seem to be more important than the effect of specific war and organized violence-related experiences for refugee children's mental health. Traumatic experiences prior to arrival seem to be of less importance for recovery during the time in exile than exile-related factors, such as networks of friends, language competencies, school and work. Experiencing discrimination is frequent and counteracts social integration and mental health. Parent's educational level might be an indicator of resources in the family that serve a buffering role (64). Interventions aimed at improving social conditions are likely to have positive impacts, and interventions should focus on the promotion of social competence as well as amelioration of symptoms.

FUNCTIONING AND REHABILITATION

Bengt H. Sjölund, Denmark, advocated an International Classification of Functioning, Disability and Health (ICF) approach to rehabilitation of torture survivors. In the ICF (65) an impairment denotes a significant deviation or loss of function or structure of any part of the body. Thus chronic pain and anxiety may both be considered as impairments (46), without necessitating a debatable diagnostic label from the ICD-10 or DSM-IV. Importantly, according to the ICF, impairments may give rise to activity limitations and participation restrictions, i.e. various types of disability, depending on context. When assessing a person to evaluate whether rehabilitation is necessary, it may be much more meaningful and true to describe a traumatized person using the ICF approach, rather than speculating whether a particular organ system is affected with an uncertain aetiology and adding symptom diagnoses or an empirical psychological categorization. The indications for rehabilitation may be adequately derived from the ICF approach, assessing the impairments, the activity limitations and participation restrictions in the context at hand and focusing rehabilitation to those who are distinctly limited or restricted in their life situation. However, whereas several components of an interdisciplinary rehabilitation programme (such as management of PTSD, depression, or chronic pain) each have been subject to controlled trials, there is a lack of evidence from effect studies of comprehensive rehabilitation programmes for torture survivors. Such studies are highly warranted, especially with outcome measures in the activity/participation domains.

The Rehabilitation and Research Centre for Torture Victims model example of team work in torture and organized violence survivor rehabilitation was presented in a workshop by a team of consulting clinicians from Rehabilitation and Research Centre for Torture Victims in Copenhagen: Uwe Harlacher, Chief Psychologist, Bente Midtgaard, Social Worker, Lise Worm, MD, and Anette Klahr, Physiotherapist. To be admitted to this centre, people who have been exposed to torture or organized violence must have a residence permit in Denmark and a referral from a physician. Approximately 80% of the patients are males with heterogeneous educational and socio-economic backgrounds. Most patients need interpreters in the rehabilitation process.

The patients have multiple problems: PTSD, depression, anxiety, chronic pain, poverty, isolation, inactivity, unemployment and various other social distress factors. All patients undergo an interdisciplinary assessment, which includes a medical, a physiotherapeutic, a psychological and a social examination, followed by a conference. The patients' multiple problems interact highly with each other; thus, they are not reducible to a single central diagnosis or domain of suffering, i.e. the psychiatric, somatic and socio-economic issues are equally important. Accordingly, an interdisciplinary and bio-psycho-social rehabilitation approach has been adopted as a guiding principle (66).

After the assessment, the patient is offered rehabilitation within one of 3 rehabilitation programmes: family therapy-based, group-based, or individual. When merely a combination of improved psychiatric treatment and physiotherapy is judged

to be sufficient (20% of cases), the patient is referred to other treatment facilities.

The core issues in the social domain concern poverty, language knowledge, isolation, occupational clarification, housing, residence status, family reunification, visitation permit and "bridge building" with authorities. The physician assesses previous medical history, co-operates with family doctors (referring) and other medical specialists, evaluates the need of rehabilitation, describes the patient's health status concerning diagnosis and prognosis, helps with pension applications, and with applications for a disability vehicle or a grant, takes part in network meetings, in education and visits the patient's home. The physiotherapist focuses on chronic pain, physical torture-related injuries/lesions, e.g. the sequelae after falanga torture, low or inadequate activity level, low self-rated physical functioning, altered body image, anxiety and stress-related reactions. The physiotherapy goals are to increase the patient's knowledge about body functions and reactions, to increase physical activity and functional ability in activities of daily living, to promote pain management and decrease pain behaviour, to enhance the level of self-efficacy, and to decrease pain intensity. The psychologist/psychotherapist is part of the team with an interdisciplinary perspective. Thus, a consequence is that treatment involves areas that are not part of traditional psychotherapy. He or she conducts psychological assessment, individual therapy, group/family/couple therapy, visits patients' home and network meetings, functions as teacher in group psycho-education, exposure-based treatment of PTSD/anxiety (CBT, EMDR, somatic experiencing). Case examples were presented illustrating the complexity of the target groups' health-related problems as well as the interdisciplinary approach to the rehabilitation process of torture survivors.

Jessica M. Carlsson, Denmark, presented her data on mental health changes in tortured refugees admitted to multidisciplinary treatment. The aim of the study was to extend previous observations on changes in symptoms of PTSD, depression, anxiety, and in health-related quality of life in traumatized refugees admitted to multidisciplinary treatment (67). The study group comprised 45 persons admitted to the Rehabilitation and Research Centre for Torture Victims in 2001–02. Data on background, trauma, present social situation, mental symptoms (Hopkins Symptom Checklist-25, Hamilton Depression Scale, Harvard Trauma Questionnaire), and on health-related quality of life (WHO Quality of Life-brief) were collected before treatment, after 9 months and 23 months. There were no changes in mental symptoms from baseline to the 9 months follow-up. A decrease in mental symptoms was observed in the period between the first and second follow-up, i.e. between the ninth and 23rd month. These changes and factors associated with these changes are currently being analysed. Unfortunately, the activity/participation domains had not been assessed specifically.

There was a panel discussion on feedback concerning the new field manual on rehabilitation of torture survivors. The manual (66) is intended to meet the need for sound, evidence-based and/or consensus-based advice in attempts to rehabilitate survivors of torture or organized violence, in regions with limited physical and human resources that lack specialized medical care. It is specifically directed towards the rehabilitation of survivors

of torture, from 3 months after the trauma onwards (i.e. when soft tissue injury has usually healed), and is written with the awareness that the general knowledge and cultural traditions in a local community are extremely important for the satisfactory outcome of rehabilitation efforts.

The manual is problem-oriented, not professionally oriented, since the torture survivor presents with one or several problems and does not usually have access to multi-professional healthcare. The problems are listed in 3 sections according to the ICF domains: body functions, activities and participation, and context. The advice given is presented at 3 levels: (i) for the healthcare assistant (or layperson); (ii) for the healthcare professional (usually a nurse or a practising physician); and (iii) for the physician with the relevant specialization. A separate section details commonly employed therapies.

CONCLUSION

What should we offer to survivors of torture? There are multiple observations indicating that it is all too common for refugees to have been exposed to torture. Thus, it is highly relevant for rehabilitation providers, in both Western and developing countries, to be sensitive to this possibility in routine clinical assessment. Primary care is often poor on necessary treatment and there may be access barriers to specialist care. Many survivors are excluded from standard rehabilitation because of language, culture, PTSD symptoms, complexity, and multiple social problems. The state of the art underlines the importance of an interdisciplinary approach to rehabilitation, but on the other hand, scientifically rigorous studies of comprehensive rehabilitation programmes for torture survivors are lacking. Therefore, effect studies are urgently warranted.

Nevertheless, by combining expertise from different scientific and professional areas, the present conference illustrates that important elements in the problems of torture survivors can be addressed from an evidence base generated both from traumatized and non-traumatized patient populations. Thus, trauma-focused CBT and/or EMDR, as well as interdisciplinary pain rehabilitation, should be components of a successful rehabilitation process to improve functioning in torture survivors. A prerequisite for a successful outcome is thought to be that great attention is paid to contextual components, in which facilitation of social integration and family relations are crucial.

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