Psychiatric treatment for extremely traumatized civil war refugees from former Yugoslavia

Possibilities and limitations of integrating psychotherapy and medication

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Abstract
Patients with a history of extremely traumatic experiences show a complex pattern of psychological and physical disorders which represents a special challenge for psychiatric care. This problem is described using the example of the psychiatric/psychotherapeutic treatment of 13 civil war refugees with a history of traumatic experiences from former Yugoslavia in psychiatric treatment at the Psychiatric Clinic of the University of Ulm. One substantial problem encountered by these patients is that, in addition to the original traumatization in their country of origin, the unstable psychosocial conditions of their legal exile condition can lead to re-traumatization which must be responded to with psychiatric treatment.

Key words: post traumatic stress disorder, Bosnia-Herzegovina, refugee, psychiatric treatment, re-traumatization

Introduction
Posttraumatic stress disorder (PTSD) is one of many possible psychological reactions to traumatic experiences. It is a diagnosis, only having been included in the major international diagnostic classification systems since 1980 (DSM-III) and in 1992 (ICD 10). A criterion for diagnosis, apart from the symptoms, is that the person must have suffered an actual traumatic event, such as armed combat or a violent attack. Similarly, having observed or somehow shared a life threatening event to another person may also represent such a trauma. Characteristic symptoms are recurrent memories or flashbacks of the traumatic event, a constant avoidance of stimuli which are associated with the trauma and a flattening of general activity level as well as constant symptoms of heightened arousal. In addition to these specific characteristics, an extreme trauma experience also involves intentionally inflicted bodily harm, which is often connected with strong pain. Beating, violent shaking or pulling body parts may over-stretch joints and connective tissue, and may lead to cerebral oedema or damage nerves to such an extent that the patients are faced with long lasting body symptoms. It is potentially misleading when in DSM-IV the physical consequences of extreme and man-made trauma are merely described by somatization, as it gives the impression that it is a mental phenomenon, i.e. that psychological damage is expressed on a somatic level.1,2

An extremely traumatic experience nor-
mally strikes a person outside the realm of their previous experience and completely or partly overestretches the person’s ability to cope with stress, which has developed throughout the person’s life. The later consequences of the trauma are formed from several characteristics of the acute traumatic situation:

1. It can not be fully processed cognitively and behaviorally,
2. it is unavoidable, and
3. it disturbs all normal social bonds.

The lifetime prevalence of PTSD for both sexes is 7.8%-12.3%. Depending on the kind of trauma, the development of PTSD is thought to occur in 22.3-38.8% of men and 48.5% of women. The occurrence of PTSD in risk populations has mainly been studied in refugees from South East Asia, where prevalence rates of between 10% and 86% were found. An American study found that 13 of 20 Bosnian refugees suffered from PTSD. In a Norwegian study the prevalence of PTSD in 150 Bosnian refugees varied over the course of 12 months from 45% to 82%. Thulesius and Hakansson found a prevalence of between 18% and 33% in a cohort of 206 Bosnian refugees who sought asylum in Sweden in 1993, depending on which diagnosis procedure of the Posttraumatic-Symptom-Scale is used. The disorder normally occurs within the first few months following the trauma. The time directly after the trauma is often characterized by a state of shock or acute stress. Spontaneous recovery of PTSD has been reported in 30% of sufferers within the first 12 months, in 50% after about 4 years, and 30% showed symptoms of the disorder after 10 years. An intensification of the symptoms can occur after critical life events or role change in the biographical context. A delayed onset of PTSD after a symptom-free period of months or years is rare. A chronic irreversible course is described in ICD 10 as personality change after extreme traumatization, e.g. concentration camp detention, torture, catastrophe, prolonged life-threatening situations.

Controlled studies demonstrate the importance of the following psychoactive medication: Antidepressants of the SSRI type are indicated, also when no depressive symptoms are shown. Tricyclic antidepressants seem to bring about improvement in depression and anxiety symptoms and in avoidant behavior but not in intrusive symptoms. Benzodiazepines may be prescribed with the necessary caution and briefing in addition to an antidepressant if anxiety occurring spontaneously persists. Buspirone has been applied with the favorable result of significant reduction in all symptom categories. Anticonvulsives (carbamazepine and valproate) and lithium have so far only been tested in uncontrolled studies. The use of neuroleptics is treated with serious caution. They are indicated when psychotic symptoms (e.g. paranoia, visual or acoustic hallucinations of the traumatic experiences) or aggressive behaviors are present.

Various psychotherapeutic interventions have proved their effectiveness: Confrontation with the traumatic memory images is the main constituent of the behavior therapy for PTSD. The goal is habituation, i.e. the decline of the PTSD symptoms through repetitive cognitive activation of the scene of the trauma. Special attention is paid to the patient imagining the traumatic event in all of its sensory and emotional qualities, i.e. with the accompanying visual, acoustic, olfactory and tactile properties as well as all forms of aversive feelings and altered bodily sensations. Only in this way can a comprehensive back-formation of the fear structure be achieved. Exposure treatments show positive effects in
the reduction of avoidant behavior, intrusions and over-arousal. Cognitive techniques utilize a comprehensive anxiety management procedure, self assertiveness and stress inoculation training, as well as a cognitive therapy especially developed for PTSD and a cognitive technique directed at the intrusions. Techniques such as thought stopping for haunting memories, recognition of irrational thoughts, model learning, and cognitive restructuring are applied to identify and correct distorted perceptions and beliefs. Both therapeutic methods are often combined with each other and with relaxation training or breathing exercises. The integrative psychodynamic-cognitive therapy of Horowitz is based on an information processing theory, the focus of which is the processing of cognitive conflicts and ambivalent feelings related to changes in personal schemata. The aim of the treatment is the integration of (old and new) schemata and consequent reduction of the state of stress. The general techniques are fine-tuned depending on the personality dispositions (histrionic, obsessive-compulsive, narcissistic) of the patients. Finally, self-help groups and group therapy can also be helpful in the reduction of the existential feelings of alienation towards others.

All of the examined psychotherapeutic treatments cause sustained reduction in PTSD symptoms (as long as follow-up studies have been carried out). The most influenced symptoms were intrusions and nightmares, chronic hyperarousal and shock reactions as well as impulsiveness and anger. Less able to be mastered were the symptoms of emotional numbness, the feeling of alienation and restricted emotional scope. Generally, several treatments and techniques are combined in a patient-oriented, flexible procedure consisting of several phases.

Examined and treated patients
Among other patients, a group of 13 severely and continually traumatized civil war refugees from former Yugoslavia were examined and treated at the Psychiatric Ambulatory Clinic of the University of Ulm in close cooperation with the Rehabilitation Center for Torture Victims Ulm. Among these patients were eight women aged between 26 and 50 and 5 men between 33 and 50, who fled to Germany between 1992 and 1995 (see Table 1).

<table>
<thead>
<tr>
<th>Patient</th>
<th>Age</th>
<th>Gender</th>
<th>Marital status</th>
<th>Level of education</th>
<th>Social background</th>
<th>Interpreter necessary: yes/no</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.S.</td>
<td>26</td>
<td>f</td>
<td>divorced</td>
<td>M</td>
<td>Bosn. Moslem, RS</td>
<td>no</td>
</tr>
<tr>
<td>B.S.</td>
<td>28</td>
<td>f</td>
<td>not married.</td>
<td>L</td>
<td>Moslem Federation</td>
<td>no</td>
</tr>
<tr>
<td>C.A.</td>
<td>32</td>
<td>f</td>
<td>married.</td>
<td>L</td>
<td>Moslem RS</td>
<td>yes</td>
</tr>
<tr>
<td>D.N.</td>
<td>33</td>
<td>f</td>
<td>widowed.</td>
<td>M</td>
<td>Moslem RS</td>
<td>no</td>
</tr>
<tr>
<td>S.S.</td>
<td>33</td>
<td>f</td>
<td>married.</td>
<td>M</td>
<td>Moslem RS</td>
<td>no</td>
</tr>
<tr>
<td>S.A.</td>
<td>35</td>
<td>f</td>
<td>married.</td>
<td>M</td>
<td>Bosn. Croat Federation</td>
<td>no</td>
</tr>
<tr>
<td>K.S.</td>
<td>36</td>
<td>m</td>
<td>married.</td>
<td>M</td>
<td>Moslem RS</td>
<td>no</td>
</tr>
<tr>
<td>S.N.</td>
<td>37</td>
<td>f</td>
<td>not married.</td>
<td>M</td>
<td>Moslem RS</td>
<td>yes</td>
</tr>
<tr>
<td>S.Z.</td>
<td>38</td>
<td>m</td>
<td>married.</td>
<td>H</td>
<td>Bosn. Croat RS</td>
<td>yes</td>
</tr>
<tr>
<td>J.M.</td>
<td>39</td>
<td>m</td>
<td>married.</td>
<td>M</td>
<td>Bosn. Croat RS</td>
<td>yes</td>
</tr>
<tr>
<td>B.R.</td>
<td>42</td>
<td>f</td>
<td>widowed.</td>
<td>L</td>
<td>Moslem RS</td>
<td>yes</td>
</tr>
<tr>
<td>H.K.</td>
<td>50</td>
<td>f</td>
<td>widowed.</td>
<td>M</td>
<td>Moslem RS</td>
<td>yes</td>
</tr>
<tr>
<td>K.M.</td>
<td>50</td>
<td>m</td>
<td>married.</td>
<td>M</td>
<td>Moslem RS</td>
<td>yes</td>
</tr>
</tbody>
</table>

Level of education: L (low) = secondary school without professional training, M (middle) = completed professional training and H (high) = tertiary education; RS = Republic of Srpska: Serbian part of Bosnia; Federation: non-Serbian Bosnia.)
The diagnosis of these patients is difficult, as they have what is referred to in DSM IV as a particular cultural characteristic, but is more appropriately described as a particular behavior difficulty in the immigration situation: Individuals who have recently emigrated from areas of considerable social unrest and civil conflict may have elevated rates of Posttraumatic Stress Disorder. Such individuals may be especially reluctant to divulge experiences of torture and trauma due to their vulnerable political immigrant status. Specific assessments of traumatic experiences and concomitant symptoms are needed for such individuals.

All patients suffered from prolonged and repeated traumatic experiences (see Table 2). Two female patients did not experience violence directed specifically at them but were witnesses of abuse of close relatives and of the deaths of countless compatriots. One female patient had been held in a Croatian camp and was repeatedly raped; another was the victim of violent attacks by Bosnian Moslems; four patients survived Serbian extermination camps with the month-long abuse for which they are known; one patient was held prisoner in his own house by Serbian militia and his Serbian neighbors; one patient was witness to the abuse and abduction of her husband and victim of sexual violence; one patient was brutally raped in her house by two Serbians; one patient experienced the abuse and detention of her husband and soon after the life-threatening firearm injury of her eight-year-old son as well as the refusal of Serbian physicians to treat this Moslem child; and one female patient was repeatedly raped in Serbian camps.

Patients also showed high comorbidity with other mental disorders: According to DSM IV and ICD 10, as well as PSTD, the symptoms of a major depression episode and/or somatization disorder, an anxiety disorder and/or an acute psychotic disorder were diagnosed. They all showed a history of illness extending over several years with predominant somatic complaints such as headache, stomachache, back pain or heart complaints as well as persistent sleep disorders.

To examine the trauma-related symptomatology, we used the Serbo-Croation version of the Harvard Trauma Questionnaire (HTQ), which was developed specifically as a culturally universal instrument for use with victims of extreme traumatization, such as torture, and political persecution. It is a self-rating questionnaire which covers various traumatic experiences and symptoms, which were compiled by evaluation of clinical experiences and studies of the treatment results in various groups in the Indonesian Psychiatric Clinic23 and is applied in various institutions for the treatment of traumatized people. Thirty trauma symptoms are evaluated according to their severity (total score), of these 16 correspond to the DSM-III-R criteria (PTSD score). Scores > 2.5 (with a maximum of 4) support the presence of PTSD (see Table 2).

**General characteristics of patients and history of treatment**

Most patients were admitted for psychiatric treatment via the Rehabilitation Center for Torture Victims Ulm. Three patients were admitted via the practice of a psychiatrist and three women on the initiative of social welfare services. At that time one patient had been treated with medication for pain by general practitioners and specialists. In two cases a secondary benzodiazepine abuse was reported. Only six patients had alluded to the traumas in discussions with their general practitioner. Since their traumatization, all
patients had experienced intrusive symptoms, avoidance behavior and hyperarousal to varying degrees. Apart from five patients, all had found work and were determined to build a new future in their country of exile. The patients who were not working were counting on permanent residency status.

A pattern of symptom worsening emerged in all the patient histories between 1996 and 1998, a time at which the legal residence status of refugees in Germany changed. A law that made it compulsory for the patients to return to their country of origin was introduced and the residency status was changed to residency toleration. Renewal deadlines of 1 to 3 months lead to a clear increase in anxiety symptoms (Germany is a country with the possibility of

Table 2. Severity and type of traumatization in terms of PTSD symptomatology.

<table>
<thead>
<tr>
<th>Patients (PTSD)</th>
<th>HTQ</th>
<th>HTQ (TS)</th>
<th>Trauma exposure</th>
<th>Retraumatization</th>
</tr>
</thead>
<tbody>
<tr>
<td>B.S.</td>
<td>3.3</td>
<td>3.6</td>
<td>Camp detention, rape, life-threatening event, physical violence, witness to violence</td>
<td>Questioning by police as a witness for the War Crimes Tribunal in The Hague, legal complications with residency status</td>
</tr>
<tr>
<td>H.K.</td>
<td>3.25</td>
<td>3.26</td>
<td>Physical violence, sexual violence, sexual abuse, witness to violence</td>
<td>Ordered to leave the country, problems with residency status</td>
</tr>
<tr>
<td>S.A.</td>
<td>na</td>
<td>na</td>
<td>Life-threatening event, physical violence, witness to violence</td>
<td>Ordered to leave the country, problems with residency status</td>
</tr>
<tr>
<td>D.N.</td>
<td>3.31</td>
<td>2.76</td>
<td>Camp detention, life-threatening event</td>
<td>Ordered to leave the country, problems with residency status</td>
</tr>
<tr>
<td>S.S.</td>
<td>3.43</td>
<td>3.10</td>
<td>Camp detention, life-threatening event, physical violence, witness to violence</td>
<td>Ordered to leave the country, problems with residency status</td>
</tr>
<tr>
<td>C.A.</td>
<td>na</td>
<td>na</td>
<td>Rape, life-threatening event, physical violence</td>
<td>Asylum court hearing, repeated conflicts in the community lodgings, ordered to leave the country, problems with residency status</td>
</tr>
<tr>
<td>K.S.</td>
<td>3.18</td>
<td>2.6</td>
<td>Camp detention, life-threatening event, physical violence, witness to violence</td>
<td>1998 ordered to leave the country, problems with residency status</td>
</tr>
<tr>
<td>S.N.</td>
<td>3.9</td>
<td>3.6</td>
<td>Camp detention, rape, life-threatening event, physical violence, witness to violence</td>
<td>1996 sexual abuse by official, problems with residency status</td>
</tr>
<tr>
<td>S.Z.</td>
<td>3.18</td>
<td>2.88</td>
<td>Camp detention, life-threatening event, physical violence, witness to violence</td>
<td>Problems with residency status</td>
</tr>
<tr>
<td>J.M.</td>
<td>3.37</td>
<td>3.2</td>
<td>Camp detention, life-threatening event, witness to violence</td>
<td>Ordered to leave the country</td>
</tr>
<tr>
<td>B.R.</td>
<td>3.45</td>
<td>3.37</td>
<td>Life-threatening event, witness to violence</td>
<td>Death of husband ordered to leave the country</td>
</tr>
<tr>
<td>M.S.</td>
<td>3.25</td>
<td>2.76</td>
<td>Life-threatening event, physical violence, witness to violence</td>
<td>Repeated physical violence by husband, divorce, ordered to leave the country</td>
</tr>
<tr>
<td>K.M.</td>
<td>2.56</td>
<td>2.93</td>
<td>Camp detention, life-threatening event, physical violence</td>
<td>Problems with residency status, Asylum court hearing</td>
</tr>
</tbody>
</table>

HTQ/TS = total score from 30 items, HTQ/PTSD-score of the 16 DSM IV items, na = not available.
forced expulsion). The longer the uncertain situation of residency toleration persisted and the fear increased that they would be sent back to the place or to the vicinity of trauma with the danger of encountering those who abused them, the more the symptoms of the illness increased. In addition there are mental health effects of mandatory detention and subsequent temporary protection on refugees. An Australian study revealed the risk of ongoing PTSD, depression and mental health-related disability where longer detention was associated with more severe mental disturbance, an effect that persisted for an average of three years.24

Treatment concept
In abstract terms, the treatment proceeded in phases, which should not, however, be considered linear, but rather as a spiral-like process. Of special importance in the first phase of treatment is the conveyance of security and trust and the development of meaningful personal contact between the refugee and the therapist as well as developing a safe therapeutic environment.25,26 In the second phase, the treatment of psychosomatic problems is central. In this phase, it is favorable to use interdisciplinary forms of treatment in which the patients learn relaxation and are also treated with physical therapy. The third and most difficult phase of therapy involves the supported confrontation with the experienced trauma. The fourth phase is designed to enable a reinterpretation of the experience (normalization of the abnormal) and attention is directed at social integration.21,27

Quantitative information on the various phases of the psychotherapeutic treatment (numbers represent total estimated time invested in hours, whereby there may be overlap between the categories of therapy) are given (see Table 3). In addition to the actual therapeutic work, a substantial part of the workload comprised the legal safeguarding and counseling of the patients, which involved at least 10 hours per patient.

Security: This phase involves recovery of control over the body, feelings, and thoughts. Therapeutic strategies must satisfy the patient’s need for a feeling of security in all of these areas: physical means, medication, relaxation training and strategies for cop-
ing with stress, cognitive methods for the recognition and naming of the symptoms, making concrete plans for obtaining a feeling of security, developing a trusting therapeutic relationship, social strategies in cases of social alienation, self help organization, mobilization of the social environment, creating a secure environment, and utilizing pre-traumatic resources.\textsuperscript{25,28}

**Self control:** In this phase of the treatment the focus is on coping with pain and lowering the hyperactive level of arousal. The modern cognitive behavioral methods for coping with pain involve deep relaxation which can be learned well regardless of the cultural background of the torture victims and which represents a ‘first aid’ in coping with the physical pain.\textsuperscript{29} In addition, the high level of arousal of the patients may be reduced, and in combination with physiotherapy, the patients begin once again to experience their body in a positive way. The introduction of relaxation techniques also offers the opportunity to develop a model of the reciprocity between physical stressors and bodily reactions together with the patient. Finally, these therapeutic experiences are important for the patients because they learn to become active rather than stay as a passive victim. Self control, active participation, and trust are the goals of this phase of treatment.

**Remembering and Grief:** Here too, the general principle of personality strengthening and special attention to the need for a sense of security is applied. Exploration of the life situation before the trauma and the circumstances which caused the trauma is carried out at this point. After that, the reconstruction of the trauma is essential. The trauma is not transformed during this stressful reconstruction work but rather it becomes more present and real. The transformation with the highly developed behavior techniques of stimulus confrontation or the creation of witness accounts aims at taking the horror out of the events through repetitive and controlled reliving of one memory after the other. The process of grieving is accompanied by the processing of revenge fantasies, and reparation wishes, deep feelings of guilt and shame, but also the search for positive experiences and the strengthening of the bonding and relationship-forming capacity. This phase is of variable duration, and mostly takes longer than the patient (and the therapist) would wish.

The reconstruction of the trauma can not be fully completed in the therapy. Each new stage of life brings with it new conflicts and challenges, which unavoidably reawaken the trauma and expose a new aspect of the traumatic experience. The main body of work is completed when the trauma can be considered to be past in a time continuum and the patient participates in life with regained hope and energy.

**Reintegration:** Creating a future, development of a new “self”, starting new relationships, searching for meaning and activities, and adaptation to a new situation are integral parts of this phase. In this phase, problems of the first phase are often approached anew, not defensively, but actively. The patient should be prepared for the fact that in new stages of life, and in times of high stress, posttraumatic stress symptoms can reoccur.

The psychotherapeutic treatment was complemented by medication or the precondition for psychotherapeutic intervention was established by the medication (see Table 4). Detailed information about the necessity for medication, about the type and effect spectrum of each of the substances allowed for good compliance. The initially strong and partly culturally rooted reservations about psychiatric and especially pharmaceutical treatment were overcome in this way. We
treated the patients with antidepressants of the SSRI (citalopram) or NaSSA (mirtazapine) types, partly in combination with an atypical neuroleptic (olanzapine) drug.

**Treatment evaluation**

The evaluation of the treatment was conducted in two ways. The therapy protocols were examined for signs of change. This was done with the use of an evaluation schema in which the reduction of PTSD symptoms, sleep disorders, pain and pain reducing medication, and improvement in self esteem, trust of other people, and general life satisfaction (feeling of security) were noted. This examination was complemented by post hoc interviews in the context of the psychiatric treatment. A quantification of the therapeutic evaluation was not attempted as no corresponding evaluation instruments in the patients’ language is available and for this purpose the employment of an interpreter would only have produced a pseudo exactness.

All patients showed an improvement in sleep behavior with a shortened time to fall asleep and lessening of nightmares. Most patients also showed a reduction in intrusive symptoms and hyperarousal. Avoidance behavior was interpreted by us in this first phase of treatment as an active protection mechanism against intrusions and was

**Table 4. Pharmaceutical treatment with various substance classes.**

<table>
<thead>
<tr>
<th>Patient</th>
<th>SSRI</th>
<th>Buspirone</th>
<th>NaSSA</th>
<th>Benzodiazepines and Hypnotics</th>
<th>Atyp. Neuroleptics</th>
<th>Typ. Neuroleptics</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.A.</td>
<td>Sertraline 50 mg</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.R.</td>
<td></td>
<td></td>
<td>Mirtazapine 30 mg</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B.S.</td>
<td>Citalopram 40 mg</td>
<td></td>
<td></td>
<td></td>
<td>Olanzapine 5 mg</td>
<td></td>
</tr>
<tr>
<td>D.N.</td>
<td>Sertraline 50 mg</td>
<td>30 mg</td>
<td></td>
<td>Zopiclone</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C.A.</td>
<td>Sertraline 100 mg</td>
<td></td>
<td></td>
<td>Lorazepam w.n.</td>
<td>Olanzapine 15 mg</td>
<td></td>
</tr>
<tr>
<td>M.S.</td>
<td>Citalopram 40 mg</td>
<td>30 mg</td>
<td></td>
<td>Lorazepam w.n.</td>
<td>Olanzapine 5 mg</td>
<td></td>
</tr>
<tr>
<td>K.S.</td>
<td>Fluvoxamine 150 mg</td>
<td></td>
<td></td>
<td></td>
<td>Olanzapine 5 mg</td>
<td></td>
</tr>
<tr>
<td>S.N.</td>
<td>Citalopram 40 mg</td>
<td></td>
<td></td>
<td>Lorazepam 2 mg</td>
<td>Olanzapine 20 mg</td>
<td>Flupentixol 10 mg</td>
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<tr>
<td>S.Z.</td>
<td>Sertraline 50 mg</td>
<td></td>
<td></td>
<td></td>
<td>Olanzapine 2,5 mg</td>
<td></td>
</tr>
<tr>
<td>K.M.</td>
<td>Fluvoxamine 200 mg</td>
<td></td>
<td></td>
<td>Lorazepam w.n.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H.K.</td>
<td>Fluvoxamine 150 mg</td>
<td></td>
<td></td>
<td></td>
<td>Olanzapine 5 mg</td>
<td></td>
</tr>
<tr>
<td>J.M.</td>
<td>Citalopram 40 mg</td>
<td></td>
<td></td>
<td></td>
<td>Olanzapine 5 mg</td>
<td></td>
</tr>
<tr>
<td>S.S.</td>
<td>Sertraline 50 mg</td>
<td></td>
<td></td>
<td>Zopiclone</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Numbers are daily doses, w.n. = when needed, i.e. after consultation with the patients with flashbacks or overwhelming anxiety.
supported. The positive effect observed by patients of the antidepressant treatment normally started after several weeks and was described in terms of more liveness, courage, and interest, which lead to a reduction in avoidance behavior (see Table 5).

Discussion
We offered the patients an examination and treatment atmosphere which unified a high degree of empathy with the necessary professional distance. The cooperation with the Rehabilitation Center for Torture Victims Ulm and our specialized trauma consultation session showed that an experienced trauma can be encountered and does not have to be made taboo. At the same time, the institution of a university psychiatric clinic allowed for the necessary competent diagnostic and differential diagnostic examination of the symptoms.

Professional, or at least experienced native speaking, interpreters (corresponding to the ethnic background of the patient) are necessary for the treatment if the patients and therapists cannot communicate in one language. However, interpreters without specials training are very often not able to function within a meaningful therapeutic relationship. Instead of translating they tend to speak with the patient. Summarizing to the therapist is also a problem. Another problem is that traumatic experiences and emotional responses are often difficult to put into words even in the mother tongue for the patients. In such cases an interpreter is left alone with constructing the meaning to the therapist. Occasionally patients are accompanied by a relative for translation and they will not disclose some traumatic experiences because of emotional responses like shame or guilt. However the quality of the personal relationship between the refugee and the therapist is more important than correct translations.

The connection between the symptoms and the traumatic experiences was, if not spontaneously reported by patients, actively examined, e.g. “How long have the symptoms been there and in what context did they first occur? Have you got your own explanation for why you have suffered from them since then? Have there been events since then which have especially stressed

<table>
<thead>
<tr>
<th>Patient</th>
<th>Reduction PTSD criteria</th>
<th>Reduction sleep disorders</th>
<th>Reduction pain and visits to physician</th>
<th>Reduction pain medication</th>
<th>Improvement self esteem</th>
<th>Increase trust</th>
<th>Increase satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>S.A.</td>
<td>Y Y Y</td>
<td>Y</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>B.R.</td>
<td>Y Y O</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>B.S.</td>
<td>Y Y Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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No therapeutic success is indicated by 0, therapeutic success is indicated by Y.
you and which you often think about?" We always asked why the patients emigrated from their homeland to Germany and under what conditions. Of particular importance is that the interviewer must be sure that he or she can withstand the reports of the patients without being secondarily traumatized. The danger exists that the descriptions in their full horrible and gruesome nature with the accompanying emotional exasperation or petrification and the rage and helplessness which they cause, can lead to a kind of helpless therapeutic activity or a distancing defense mechanism manifesting itself in secondary traumatization, compassion fatigue or burn-out of the therapeutic personnel.

Speaking about the events can only relieve the patient when the clinician directs attention to the fact that being emotionally overwhelmed can be avoided by encountering the traumatic memories. In this way the patients were asked to report only as much as they felt comfortable with, since this distinguishes the examination and treatment situation from the traumatic event (during the latter control and termination were not possible). Only then will the patient realize that another approach to the traumatic memories and to the combination of defense (avoidance = constriction) and uncontrollable emotional overload (flashbacks = intrusions) can be possible.

It is also important to look into the current social situation of the patient, including the legal and residency status related conditions, since this can be the source of intensive worry and the background to oppressive anxiety. Knowledge of the particular situation of foreign patients and their culture is helpful and should be present.

All patients profited in this setting from a pharmaceutical treatment embedded in an educative procedure, conducted with great care, informing the patients about the mechanisms of their suffering. The knowledge about the psychobiological nature of the connections between the symptoms and the traumatization lead to substantial relief. Mostly patients were very afraid of being or becoming crazy or of having obtained permanent organic damage from their abuse.

Limitations of the therapy

The uncertain external life circumstances of the patients did however set limits to our therapeutic efforts. For example, it could be observed that all symptoms of PTSD, which were receding during therapy, increased with respect to frequency of occurrence and severity when the residency toleration deadline was reached, even with constant or increased medication. The constant uncertainty as to whether the residency toleration would be extended or not represented subjectively for the patients a repetition of their trauma, and of their exclusion experience, their expulsion, and their self perception of worthlessness. It re-traumatized them and hindered the therapeutic process. Only when the immigration authority could be convinced that the above described special circumstances existed, thereby establishing secure life circumstances for the patients, was it possible to continue the therapeutic process unimpeded by this re-traumatization.

The creation of life circumstances which offer external security is a sine qua non for being able to conduct successful psychiatric treatment and offering a safe therapeutic environment for traumatized refugees, thereby substantially reducing suffering and preventing the development of chronic disorders. Returning to the patients’ homeland, in which they were abused by neighbors, teachers and former friends, and where the risk of extreme stressful situations is high, should only occur voluntarily and can only be safe
for health if the patients are sure of their reaction to meetings with former perpetrators.

Under current German immigration policy it is often necessary that the treating physician takes active steps for the protection of his or her patient from mandatory expulsion or even worse, deportation. Unfortunately usual clinical medical certificates with etiology and diagnosis are not enough, and in addition to the diagnosis of PTSD, the causality between the disorder and the traumatization experienced in the patients’ homeland must be included. This is possibly even a reason why the medical treatment is being carried out now and not on an earlier occasion. It is also advisable to point out that a treatment of this kind with a chronic course of illness could be a slow process and requires several years in order to prevent chronicity or re-traumatization. Such therapeutic complexities and extensions carry the risk of intra-role conflicts, particularly if exploiting or even deceiving (in rare cases) of helpers occur. Recently Pross argued in this journal that among other means like supervision, solids professional training, and self-awareness, a proper professional distance must be maintained in order to prevent burnout and vicarious traumatization.

In summary, the examined group of extremely traumatized refugees with PTSD can profit from a specific psychiatric treatment in their country of exile which combines pharmaceutical and psychotherapeutic treatment.

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Should discrepant accounts given by asylum seekers be taken as proof of deceit?*

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Abstract

Background: In order to recognise a refugee in a receiving state, decision makers have to make a judgment based on background information and the account given by the individual asylum seeker. Whilst recognising that this is a very difficult decision, we examine one of the assumptions made in this process: that an account which is inconsistent is probably fabricated for the purposes of deceitfully gaining asylum status.

We review some of the psychological processes at work when a person applies for asylum, and report a study offering empirical evidence of some of the reasons why accounts of traumatic experiences may be inconsistent.

Methods: In the study reported, 39 Kosovan and Bosnian (UNHCR) program refugees in the UK were interviewed on two occasions about a traumatic and a non-traumatic event in their past. They were asked specific questions about the events on each occasion.

Findings: All participants changed some responses between the first and second interview. There were more changes between interviews in peripheral detail than in the central gist of the account. Changes in peripheral detail were especially likely for memories of traumatic events. Participants with higher levels of Post Traumatic Stress Disorder (PTSD) were also more inconsistent when there was a longer delay between interviews.

Interpretations: We consider this and similar studies in the light of asylum decision making, proposing that these decisions, often a matter of life and death to the applicant, must be based not on lay assumptions, but on established empirical knowledge.

Keywords: memory, post-traumatic stress disorders, refugees, adult, depressive disorder, law

1. Introduction – claiming asylum

Each year hundreds of thousands of people come to Western countries to ask for protection from persecution in their own country. They ask to be recognised as refugees, as defined by the 1951 Geneva Convention, which states that a refugee is a person who,

“owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group


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or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country."¹

Although this definition is internationally agreed, by the signatories to the convention, each individual state has the freedom to implement its own structures for assessing the validity of requests made for recognition – that is, for the assessment of claims for asylum.

In the UK, the process of claiming asylum consists of attending an interview with a Home Office case worker and, for some, filling out a Statement of Evidence Form. On the basis of the information gathered, the Home Office will then make a decision about the success or failure of the claim. If the decision is negative, the claimant may appeal, in the first instance to the Home Office, and subsequently, through the Courts.

From the point of view of the decision maker the judgment is a very difficult one to make. In other jurisdictions where an individual is presenting a case there can be corroborating evidence, character witnesses, eye witnesses to events, documentary evidence, to name but a few of the sources that may inform a decision. In an asylum claim there is often none of this. Consequently, apart from background information about the claimant’s home country, decisions very often turn on the “credibility” of the claimant themselves.

Unfortunately, there are strong reasons to believe that the decision making process may be flawed. UK government statistics show that in 2004, the Immigration Appeals Authority (IAA) overturned 10,845 negative decisions by the Home Office (19% of those heard).² Many of these people would have been given up to possible human rights atrocities had they not questioned the original decision and taken it through the legal process.

One of the ways in which credibility is judged by decision makers is the assessment of the account given by the claimant of his or her experiences of persecution. This paper will address one area of decision making regarding judgments of credibility which seems not to be based on the best scientific knowledge, but on incorrect lay assumptions about how memory works. We will review the assumption that inconsistency in the claimant’s account suggests that the account is false and explore some of the reasons that this may not be the case. We will then report an empirical study which explores one of these areas, traumatic memory, in more detail.

We will be referring to procedures in the United Kingdom for the purposes of illustration. In most of the practices described, the UK is not unusual. Our comments are probably most applicable in the context of first world regions, European countries in particular, whereas in other regions, different rules may apply.³

**2. Inconsistency in the asylum process**

If an applicant gives different (discrepant) accounts of their experiences in the various forms and interviews involved in applying for asylum and appealing a negative decision, it is easy to assume that they have fabricated a story to try and obtain permission to stay here. Indeed this is one of the planks of evidence often cited by the Home Office in individual refusals and is included in the official guidance to Immigration staff making these decisions, under the section entitled Credibility.⁴ Thus the consistency of an asylum seeker’s account has become a central question in determining asylum status. In a report on Home Office decision
making, Amnesty International UK\(^5\) cite a “reasons for refusal letter” which states

“There are significant differences between your various accounts, and … these cast doubts on the credibility of your claim. For instance, in your Statement of Evidence Form (SEF) you stated that you were in hiding at your friend’s house for 4 days but in your Asylum interview this was reduced to 3.” (p. 21)

A study in Sweden has shown that, there too, discrepancies and inconsistency are seen as cues to a belief that a person is lying.\(^6\) Granhag and his colleagues approached members of the Swedish Migration Board, on the assumption that they, like police and judges, are “expert lie detectors”. They were asked about how they made judgments of whether someone is lying or telling the truth, and then the researchers compared their answers to the findings of the psychological literature on cues to detecting deception. Although some of the heuristics these decision makers made did concur with research findings (e.g. “there is no difference in gaze behaviour between liars and truth-tellers”), in both open and closed questions, the belief that inconsistency was an indication of lying was endorsed as “a rule of thumb” by 21\% and “the most important factor” by 18\% of the group.

However, research evidence increasingly suggests that this underlying assumption is incorrect and inconsistency between accounts in the asylum process cannot be relied on in this way.

There are broadly two reasons why there may be inconsistency. The event may be recalled accurately but there is some barrier to disclosure. Alternatively it may arise from a failure to recall a traumatic event in the same way on successive occasions. Both are relevant to this discussion.

3. Barriers to disclosure
3.1 The interview

Even if the applicant does generally recall the experience consistently, inconsistencies may be introduced in the interview processes. In order to arrive at information that is both accurate and complete, it is important to understand and implement the principles of interviewing. In the medical field, as one example, an initial open question will be followed up by focused and then closed (not leading) questions to go into more details. However, the clinician will then return to another open question to ask if there is any other problem. We see examples of immigration interviews where details have been elicited about one period of detention, but the individual was not then asked if there were any other detentions. Consequently later interviews would appear to be uncovering further material – thus producing apparent discrepancies or new disclosures – whereas the interviewee may be giving details of a different period of detention to the one first described. This effect may be exacerbated by unprofessional or insufficiently trained interpreters.

In a recent study of disclosure in asylum interviews in the UK, the attitude of the Home Office interviewer was cited by the majority of participants as a factor facilitating disclosure. Indeed, many of the participants interviewed did express a willingness to talk about their experiences, but said that they had not been given the opportunity to do so or had been prevented by the interviewer from discussing their experiences.\(^7\)

There may also be insensitivity to gender and cultural issues. Despite UNHCR guidelines, female claimants continue to be interviewed by male case workers, with male interpreters. In some cases the presence of a female claimant’s husband can inhibit disclosure of rape, due to the cultural im-
peratives placed on the family in such a situation. Men also have to disclose being raped, a matter which also requires a high level of sensitivity.

Amnesty International UK’s report states “Many Home Office caseworkers appear to lack basic interviewing techniques”, and recommends “long term and continuing training”, monitoring and assessment of caseworkers.5

3.2 Trust
Refugees, by definition, have a well-founded fear of persecution, persecution that has been allowed, if not sanctioned by the state in which they lived. Whether such tolerance is by weakness or intent on the part of the state, a degree of mistrust of, or at least a marked ambivalence of feeling towards, state officials of whatever origin would be entirely understandable. Guidelines for immigration interviews in the UK recommend that assurance is given that all material disclosed is confidential. Nonetheless, for many people, and understandably given their experience, this is hard to believe completely. This would lead to reluctance to give a complete disclosure and may lead some people to gloss over parts of their story. It is often the experience of clinicians that one meeting is insufficient time for an individual to be able to consider whether s/he can take the risk of trusting his/her interviewer. Where an individual has been submitted to torture, which directly or indirectly targets the breaking down of trust in others, this effect can be significantly stronger.

3.3 Cognitive and emotional difficulties
Refugees have typically had complex experiences including those to do with persecution and trauma. As a consequence, although many escape psychological injury, as a group they are at increased risk of emotional difficulties.8 Four common psychological themes have been identified describing these reactions:9

- Symptoms of Post Traumatic Stress Disorder (PTSD), related to direct exposure to (often malicious) violence.
- Symptoms of depression, related to bereavement and loss.
- Somatisation, for example where physical violence has been used to force psychological change.
- the “existential dilemma” of the refugee whose core beliefs about the world have been seriously challenged.

Pre- and post-traumatic events are important in this context. For example, the risk of PTSD is affected by the quality of social support and by concurrent life stresses.10 Similarly, in a group of refugees from Iraq, poor social support was a stronger predictor of depression than past trauma factors.11 What is important to note is that, although categorical diagnoses may apply to some individuals, it is also possible to see a constellation of symptoms which do not meet the diagnostic criteria. One may be experiencing nightmares and having difficulty sleeping, without necessarily having sufficient other symptoms to be diagnosed with PTSD or depression. The absence of a categorical diagnosis should not prevent us from being aware of the impact of the difficulties which people may be having. The following sections should be read in this context.

Avoidance
People have often learned over time to avoid thinking about traumatic events in order to minimise the fear and other emotional responses to what happened to them. Many people report managing to escape their situ-
ations, taking care of children and navigating their migration into a new country, by deliberately avoiding “thinking about the past”. Avoidance is a central part of the PTSD response (for example, consider the avoidance response of the survivor of a railway crash, now avoiding train travel). The individual has not forgotten the event but because of overwhelming emotions when it is recalled, or when similar triggers are encountered, tries to avoid mentioning it. A study of people diagnosed with PTSD following a history of torture, found that where there is a history of sexual torture, the avoidance symptoms of PTSD\textsuperscript{12} (e.g. trying not to think about the event, avoiding triggers, emotional numbing, psychogenic amnesia) are much more prominent than is the case after other forms of torture. This survival strategy has to be suppressed in order to tell all in an asylum interview and this may be very hard, very distressing, and possibly detrimental.

Dissociation
A common correlate of traumatic experiences is the experience of episodes of dissociation. Dissociation is defined as “a disruption in the usually integrated functions of consciousness, identity, memory and perception”.\textsuperscript{13} This is a psychological condition that may be evident during severe stress (perhaps as a psychological protection mechanism) and later there may be a psychogenic amnesia for some, or all, of the trauma. However, it may also recur with memories of the incident, especially at times of high arousal, such as during the retelling of an account. There may be a large impact on performance in spite of the fact that often these phenomena are relatively subtle (unlike the very obvious disturbances of consciousness associated with post-traumatic epilepsy).

Shame
The person being interviewed by the Home Office or appearing in court might be ashamed to disclose some of the worst events in their lives. Typically, experiences of forced betrayal and sexual assault (including rape) are often associated with the dominant emotion of shame rather than fear. There are some experiences that sometimes simply cannot easily be shared with anyone. Bogner’s study on disclosure, as well as replicating the finding that people with a history of sexual violence scored higher on PTSD avoidance symptoms, also found higher levels of shame. Not surprisingly, this group also reported finding it more difficult to disclose sensitive personal information during asylum interviews.\textsuperscript{7}

This consideration of barriers that may lie in the way of disclosure to state officials when applying for asylum is not comprehensive. The contexts of asylum interviews are considered in Proof, Evidentiary Assessment and Credibility in Asylum Procedures\textsuperscript{14} and other issues including head injury and chronic pain are discussed by Cohen\textsuperscript{15} and by Herlihy.\textsuperscript{16}

4. Memory for trauma
It seems that there a number of barriers to making disclosures in asylum interviews. In addition to these, there may also be general and specific problems of memory itself.

4.1 PTSD and depression symptoms
Both in PTSD and Depression, impairment of concentration is a common symptom. The DSM-IV\textsuperscript{13} diagnostic manual lists “inability to recall an important aspect of the trauma” and “difficulty concentrating” as two of the characteristic elements of PTSD. Similarly, it identifies a “diminished ability to think or concentrate, or indecisiveness” as a characteristic of depression (Major Depressive
Disorder). There is an established literature on the effect of depression on memory – the bias towards recalling events with negative meaning for the self and a difficulty remembering specific events, preferring instead general descriptions of past periods.\textsuperscript{17}

As noted above, many of these difficulties may be experienced without necessarily reaching the full criteria necessary to receive a psychiatric diagnosis.

4.2 Autobiographical memories – normal and “traumatic” memory

Autobiographical memory, as the name suggests, is the recall of events in one’s personal history. We know that the recall of normal memory involves the relatively easy and elective construction of a verbal narrative – we can, if and when we choose, produce a story of what happened to us yesterday, or last year on holiday; a story with a beginning, a middle and an end. The memory might also be updated by, perhaps, looking at the photos of the holiday. A critical feature of a normal memory is that when we think of it we are aware that it happened in the past.

There is now a substantial body of evidence showing that when we experience something traumatic (threatening to our life or our physical integrity, or that of someone close to us), although there may be some memories of this normal type, there may also be traumatic memories which have a very different nature.\textsuperscript{18} The characteristic of traumatic memories is that they are fragments, usually sensory impressions; they may be images, sensations, smells or emotional states.\textsuperscript{19} Importantly, probably because of the nature of the memory store in which they are held, they do not seem to carry a “time-stamp” so they are often experienced as if they were not memories of the past at all, but current experiences.\textsuperscript{20} These types of memories are usually not evoked at will, as a normal memory can be searched for and produced, but they are provoked by triggers, or reminders of the event. This means that when someone is interviewed and asked about an experience that was traumatic, and has only, or largely, memories of this fragmentary type, they are unlikely to be able to produce a coherent verbal narrative, quite simply because no complete verbal narrative of their experience exists.\textsuperscript{21} Because these memories are triggered, and are not subject to simple conscious control, it is likely that different aspects will be recalled depending on the triggering events in the interview. The interviewee will report only fragments and impressions, which are likely, incidentally, to evoke the feelings that were felt at the time of the original experience – which may be fear, distress, shame, humiliation, guilt or anger.

4.3 Central and peripheral details

Generally, the more detail a memory has, the more believable and convincing the account is. The gist of an autobiographical memory (central information) can be reconstructed from general (historical or schematic) knowledge, whereas details of a specific event (peripheral details) cannot. Recall of peripheral details is thus often seen as a good way of distinguishing between “accurate recollection and plausible reconstruction”.\textsuperscript{22} This is presumably the principle that, in part, guides state authorities’ reliance on consistent details as an indication of credibility.

However, another aspect of memories for traumatic or distressing events is the automatic focus on the “centrality” of the details recalled. A classic experiment demonstrated how the type of details recalled of an event can depend on how distressing the event is to the witness. Loftus and Burns\textsuperscript{23} asked participants in their study to watch
one of two video recordings of a simulated armed bank robbery, at the end of which the robbers run away past a young boy with a rugby shirt with a number on the back. The recordings were identical except that in one version one of the robbers turns and shoots the boy in the face. In the other the robbers merely run away. The experimenters found that the participants who watched the video with the shooting were less likely to be able to recall the number on the boy's back, compared to those who had watched the "non-traumatic" video. This was not a study of people with PTSD and the traumatic event, on the scale of the experiences of many people who have been tortured, was relatively mild. Yet the simulated shooting was sufficient to lead to an automatic focus away from peripheral detail. This effect has been replicated and a distinction is now made when talking about disturbing or distressing memories, between "central" details of a story – that is, what is important to the gist of the narrative or the emotional content of the account – and "peripheral" details, such as the number on a boy's rugby shirt.

5. An Empirical Investigation

In the light of all of the different possible explanations for discrepancies in an asylum seeker's accounts of their experiences, and in particular the suggestions from the psychological literature on memory, the following study was conducted to demonstrate what specifically might be happening in repeated interviews focusing on traumatic memories.

Method

We invited 27 Kosovan Albanians and 16 Bosnians to take part in research about memory. We had contacted them through community groups and reception centres. Twenty-three were men and twenty were women, all aged between 18 and 64 (mean 39.5 (SD 14.5)). All participants had been granted leave to remain in the United Kingdom under the United Nations High Commissioner for Refugees group programmes – that is, none of the participants had given accounts of their experiences in order to gain their asylum status. We obtained written (translated) informed consent from all participants, explaining that the research had no connection at all with any decision-making state authorities. The research was approved by the Research and Ethics Committee of Camden and Islington Mental Health and Social Care NHS Trust.

We interviewed all participants twice, with the help of interpreters. The time between interviews ranged from three to 32 weeks. At the first interview we used a translated form of the Post-traumatic Diagnostic Scale to assess the level of symptoms of PTSD.

Participants were asked to recall a traumatic event from their experiences ("I'd like you to think about an event in [your country] when you thought that your life was in danger – preferably a time that you haven't talked about too much, but that wouldn't upset you too much to talk about now."). Fifteen predefined questions were asked about the chosen event – for example, "what was the date?"; "what were you wearing?" Similar questions were asked about a nontraumatic event. After answering each question, participants were asked to rate that particular detail as central or peripheral to their experience. At the second interview participants were prompted about the event reported in the first interview ("do you remember the events you told me about last time"; if they didn't, they were reminded), and asked to recall the same two events. The same 15 questions were repeated. At this second interview we assessed symptoms of depression by using a translated form of the Beck Depression Inventory.

Both measures in Bosnian and Kosovan Albanian had been translated and back-translated and used in previous studies.
Calculation of discrepancy rates and analysis

Discrepancy rates were calculated by dividing the number of discrepant details between answers at the two interviews (including new information) by the total number of units of information in the first interview. Four separate rates were calculated per participant: central details of traumatic memories, peripheral details of traumatic memories, central details of nontraumatic memories, and peripheral details of nontraumatic memories.

A second rater coded 70% of the transcripts according to written coding procedures. Intraclass correlation estimates for the four rates ranged from 0.65 to 0.81. General linear model univariate analyses and bivariate correlations were used to compare the discrepancy rates of participants who scored high on the Posttraumatic Diagnostic Scale with those of participants who scored low on the scale. General linear model repeated measures tests were used to analyse the interactions between the types of detail (central versus peripheral) and the type of event recalled (traumatic versus nontraumatic). SPSS software was used for all analyses.

Results

All participants reported traumatic experiences. Scores of symptom severity on the Posttraumatic Diagnostic Scale (maximum 51) ranged from 5 to 50 (mean 27.3 (s.d. 10.9)). Participants were divided into high and low PTSD scorers: scores of >26 were categorised as high (n = 19); scores of <25 were categorised as low (n = 21). The depression scores (maximum 63) ranged from 7 to 52 (mean 24.2 (s.d. 11.6)). Of the 39 scores, 31 indicated probable clinical depression (score > 14); 21 indicated moderate or severe depression (score > 20).

No significant differences in psychopathology between the two groups were found.

Differences between the groups

Four of the Bosnian participants left the study after the first interview.

The mean age of the Bosnian group was greater than that of the Kosovan group (46.2 v 35.5 years; p < 0.05) and the average time between interviews was significantly longer for Bosnian refugees than for Kosovan refugees (159 v 29 days; p < 0.0001). To reduce the limitations of these differences on interpreting the results, and to take account of the loss of four subjects from the Bosnian group, each of the hypotheses was tested on the whole sample and then on the larger of the two subsets – the 27 Kosovan participants – alone. Only significant findings are reported.

Discrepancies

Discrepancies between the two accounts were found for all participants. The mean (overall) discrepancy rate was 0.32 (s.d. 0.14; range 0.01 0.65).

Significantly more discrepancies were observed in peripheral details than in the central gist of the account (p < 0.05). The type of information (central or peripheral) had a significant effect on the discrepancy rate when memories were traumatic (F1,32 = 4.42, p < 0.05), but not when they were nontraumatic (F1,32 = 1.25, p = 0.27). See Figure 1.

In the Kosovan subsample, more discrepancies were found in peripheral details than in central information. The main effect of type of detail (central or peripheral) was in the same
direction as the whole sample and marginally significant ($F_{1,24} = 4.25, p = 0.05$).

The length of time between interviews had a significant effect on discrepancy rates. Testing for homogeneity of regression in the two groups (high or low levels of posttraumatic stress symptoms) showed an interaction ($p < 0.05$) between the levels of posttraumatic stress symptoms and length of time between interviews. In the group with high levels of posttraumatic stress there was a positive association between the number of discrepancies and the length of delay ($r = 0.70$, $p < 0.01$), but this difference was not seen in the group with low levels of posttraumatic stress symptoms ($r = -0.122$) See Figure 2. Delay and discrepancies.

Discussion of the empirical study and its findings
This was a research investigation in people who had come to the United Kingdom under a UN sponsored programme. There was no obvious motivation to deceive. Nonetheless discrepancies (including the provision of new information) were shown to occur between autobiographical accounts given by the same individual on two occasions up to seven months apart. For refugees with high PTSD, more discrepancies were found with longer times between interviews. In the UK asylum process, there may be months or years between the original interview and an appeal hearing. In addition, more discrepancies are found in details rated by participants as peripheral, compared with recollection of the central gist of the event. Discrepancies therefore cannot be taken as automatically implying fabrication.

These findings demonstrate that the assumption that discrepancies necessarily indicate a fabricated story is incorrect. This research cannot provide any causal explanation as to why they do occur, but it can point to some possibilities. A common difficulty reported was related to the experience of repeated events that are similar. This may have led to the recall of an event similar in type but different in detail at the second interview, or to the mixing up of two or more events.

The emotional state of the refugee at the time of the interview may also have affected his or her responses. For example, one participant changed his description of his treatment by military police from “we were slapped around” to “we were badly beaten.” In states of depressed mood, recall is biased towards negative memories. Reminiscence is the phenomenon of new information about an event becoming available over repeated recall. It has been shown clearly in the laboratory but has received little interest in applied areas. One explanation for reminiscence is that, once a person has initiated a search in memory, the search continues. Indeed, one participant reported asking her mother about the answers she had given in her first interview. This may lead to the checking of memories with others who were present at the time, or the gradual remembering of more detail. Or this process may happen less consciously. Both of these factors would be associated with discrepancies and may increase in importance over time.

![Figure 2. Delay and discrepancies.](image-url)
Length of time between interviews

Although it was not hypothesised initially, and we must consider the possibility of type I error, the effect of the interaction of posttraumatic stress and length of time between interviews on discrepancies is probably the most important finding in relation to asylum policy. If discrepancies continue to be used as a criterion for regarding a case as lacking credibility, then asylum seekers who have symptoms posttraumatic stress at the time of their interviews are systematically more likely to be rejected the longer their application takes.

As has been discussed above, theory suggests that memories are different when they are “traumatic memories” – particularly seen but possibly not exclusively – with a diagnosis of PTSD and these certainly merit further exploration in the context of asylum applicants and refugees.

Summary

This study shows the danger of concluding that asylum seekers are fabricating their histories solely on the basis of discrepancies between interviews, even when the interviews are only weeks apart. Discrepancies are common, especially (although not exclusively) when the person has PTSD and has to wait a long time between interviews. Discrepancies are more likely to arise when the details required are peripheral to the interviewee’s experience and when the content is traumatic to the interviewee.

All of these factors are present in many asylum applications, and they may be increasing the risk of incorrect judgments.

6. Other research

This empirical study is supported by some recent experimental work from the USA in which Morgan III and colleagues studied over 500 military personnel going through so-called “survival schools” (described as mock prisoner of war (POW) camps run by the US military). These were fit volunteers. They knew that ultimately they would be safe. They were exposed to a simulation of wilderness evasion, followed by mock captivity in the POW camp. The details of the training are described as “classified” but included interrogations and stressors “modelled from the experience of actual military personnel who have been prisoners of war”. There were high and low stress interrogations starting after 12 hours of captivity. These interrogations involved either one or two people in a well-lit room (different people for the high and low stress conditions). All participants had been exposed to the stress of uniform sleep and food deprivation for about 48 hours prior to being subjected to interrogation stress. Upon release, they were given access to food and rest. Twenty-four hours after release, they were tested for recognition of their interrogator. The best result for recognition of the high stress interrogator (using photographs of interrogators in the identical clothes to improve performance) was a 66% correct positive identification.

If fit young military personnel exposed to much less trauma than many refugees and tested only 24 hours afterwards make mistakes like this, it is certain that very many asylum seekers asked questions months or years later about their traumas will have unreliable memories. The authors of the US study conclude that “all professionals would do well to remember that a large number of healthy individuals may not be able to correctly identify suspects associated with highly stressful, compared to moderately stressful, events. Furthermore, these data raise the possibility that other types of stress-induced memory deficits (such as narrative memory) may also exist in healthy individuals.”

7. Conclusions

We have presented substantial empirically-based reasons for concern in the application
of the naïve assumption that inconsistent accounts of torture or other traumatic experiences should be taken as indicating fabrication or lying. Yet inconsistent accounts have been demonstrated in a Swedish study to be the most important factor in evaluating fabricated stories, used by about 1 in 5 of decision-makers.6

We strongly believe that decision making should be informed by empirical scientific evidence (whichever way this appears to point). In this area, studies now exist that have important implications for national and international policy in the assessment of asylum seekers. If the process of recognising refugees is to be a just one, then decisions must be based on sound scientific knowledge. This will go some way to providing consistent and high quality decisions for some of the most crucial (and difficult) judgments that states are called upon to make.

References
2. www.homeoffice.gov.uk/rds/pdfs05/hosb1305.pdf


Mental states of adolescents exposed to war in Uganda: finding appropriate methods of rehabilitation

Kennedy Amone-P’Olak, MSc*

Abstract
Background: Reintegration after war brings with it enormous challenges. One such challenge is to find appropriate methods of rehabilitation during the reintegration process. This article describes the rehabilitation, using traditional therapy, of formerly abducted adolescents exposed to war events who have experienced psychological distress.

Methodology: In a cross-sectional design, 294 adolescents aged 12 to 19 at three rehabilitation centres participated in the study. Two checklists specifically designed for the study were administered to the adolescents and social workers: the War Experiences Checklist and Psychological State Checklist. The War Experiences Checklist includes 54 different war events broadly categorised under nine themes: separation, role in combat, deprivations, rituals in captivity, injury and being a victim of violence, witness to traumatic war events, laying landmines and staging ambushes, participation in violence, and sexual abuse. The Psychological State Checklist consists of 22 items. Structured interviews were used with centre coordinators and traditional leaders to elicit information on strategies of rehabilitation and traditional therapies of rehabilitation respectively. Descriptive statistics were used to analyse data from the checklists while data from the interviews were triangulated and subjected to thematic examination in a multistage analyses.

Results: Adolescents were exposed to disquieting war events and participated in dreadful atrocities. Consequently, many were psychologically distressed with unhealthy mental states that needed cleansing according to the native Acholi traditional practices of reconciliation and reintegration. Four rituals used in the rehabilitation and reintegration are critically examined in this paper.

Conclusion: Although mired in controversy over legitimacy, scope, and disagreement over procedures, the traditional structures for reconciliation and reintegration, such as the cleansing rituals, are still widely recognised and can play an important role in the process of reintegration at the local level.

Key words: mental states, adolescents, war experiences, rehabilitation, Uganda.

Introduction
This section sets the background to the conflict in Northern Uganda involving the Uganda government army, the Uganda People’s Defence Force (UPDF), the Lord’s Resistance Movement/Army (LRM/A) and the Sudanese People’s Liberation Movement/Army (SPLM/A).

Background to the conflict in Northern Uganda
The conflict in Northern Uganda is an intricate one. Two rebel groups have been
fighting since 1983: the LRA has been fighting against the UPDF in Northern Uganda and Southern Sudan since 1986 and the SPLA fought against the government of the Sudan in Southern Sudan from 1983 to 2005 when they signed a peace accord. Northern Uganda shares a border with Southern Sudan. The LRA has had bases in Southern Sudan and the SPLA had safe havens in Northern Uganda. The government of Uganda has supported the SPLA for a long time and used it to fight the LRA. Until recently, the LRA has had the support of the government of Sudan and has used the LRA in turn to fight the SPLA. Both countries, in effect, were involved in a proxy war with each other. Subsequently, on both sides of the border, two civilian populations are trapped between the fighting forces.\(^1,2\)

The LRA is a rebel group fighting in Northern Uganda where the Acholi ethnic group traditionally live and where more than 90% of the population are internally displaced and are unable to return home due to the war. Led by Joseph Kony who claims to be a spirit medium, the LRA claims it is fighting to establish a government based on the biblical Ten Commandments. The rebel group professes to fight a spiritual war but has committed many atrocities, like abduction of young boys and girls, rapes, killing of unarmed people, mutilation, sexual enslavement, etc. against the people whom they purport to fight for.\(^3,4\)

The SPLA operates from across the border with Uganda in Southern Sudan. They purport to represent the interest of the Southern Sudanese who are subjugated and oppressed by the Islamic and Arab regime in the north of the country. Just like the LRA, the SPLA is known to have forcibly recruited adolescents and children into its ranks and have committed human rights abuses against the civilian population.\(^1\)

The people in Northern Uganda loathe the LRA for its cruelty against them and they do not like the UPDF either for human rights violation against them and for failure to protect them from the marauding LRA fighters who have internally displaced an estimated 1.7 million people, especially women and children. The local people also accuse the government of lack of political will to end the rebellion.\(^3,5\) Although the civilian population in Northern Uganda loathes the LRA for their pernicious activities against them, 85% of the LRA fighters are made up of their own children whom the LRA has forcibly abducted and conscripted into their ranks.\(^2,3,6\)

**Abductions of children and adolescents**

The most notorious aspect of the conflict in Northern Uganda is the forced recruitment and abduction of young boys and girls and the torture, physical and sexual abuse, and enslavement of those abducted by rebel commanders. To date, it is estimated that the LRA has abducted over 25,000 children.\(^4\) Subsequently, Jan Egeland, the United Nations Undersecretary for Humanitarian Affairs, has described the conflict as “the world’s biggest neglected humanitarian crisis”. In captivity, the abductees live in constant terror of sudden attacks from UPDF soldiers, sexual abuse by rebel commanders, threat of death, diseases, and extreme deprivations and hardships such as lack of water, food, and clothing, among others. The children and adolescents are forced to kill, mutilate, torture, raid, burn villages, loot and commit other hideous atrocities against each other and against their communities in the region.\(^1,2,5\)

However, since 2000, there have been drastic changes in the conflict. Four major factors have accounted for this change. Firstly, in 2001, the United States govern-
ment blacklisted the LRA as a terrorist organization. This subsequently led to the second major reason for the change: an increase in cooperation between the governments of the Sudan and Uganda to rout out the rebels and the cessation of support to the rebels by the government of the Sudan which did not want to be seen by the West as supporting a terrorist organisation. Consequently, many rebel commanders have been killed and large caches of their weapons and ammunitions captured in Southern Sudan and Northern Uganda. This cooperation has enabled the government of Uganda to send troops into southern Sudan to destroy rebel bases there. Thus, coupled with lack of support from the Sudanese government, the rebels have been tremendously weakened. The third reason for a major change in the conflict has been the peace pact between the SPLA and the government of the Sudan that has enabled the SPLM to participate in the government in Sudan leaving little room for the LRA to maintain bases in Southern Sudan. Finally, the International Criminal Court (ICC) has indicted five top commanders of the LRA and has issued an international warrant of arrest for the indicted rebel leaders. This has led to renewed international interest in the war and thus pressure has mounted on the UPDF and LRA from all sides leaving the rebels in disarray.

Literature review
Adolescence is usually recognised as a stressful period of development in which, physical, social and intellectual transformation and adjustments have to be dealt with concurrently. Exposure to war disrupts this transition further and makes adjustment even more complicated. This disruption is linked to difficulties with social, psychological, health, and physiological functioning such as depression, withdrawal, alienation, somatic complaints, behavioural problems, attachment disorder, Posttraumatic Stress Disorder (PTSD) symptoms and crucial etiological factors in the development of psychopathology in adulthood. War experiences like sexual abuse, killings, beating, fighting in battles and exposure to dead bodies and body parts, smelling burning bodies, hearing screams for help, violent death of a parent, witnessing the killing of close family members, separation, displacement, terror attacks, and bombardments are associated with acute posttraumatic stress symptoms and behavioural and emotional problems.

Past studies have shown that trauma due to conflict and violence may have serious consequences for future adult development of adolescents. However, other studies have also indicated that it is not always true that all adolescents in difficult circumstances become troubled adults or develop emotional problems; in fact, recovery from emotional and behavioural problems before reaching adulthood is fairly common. Cultural differences in registering trauma and methods of rehabilitation may be important in explaining the difference in the studies. Subsequently, it is imperative that the methods of rehabilitation are studied. The use of western therapeutic methods of rehabilitation in non-western settings have been invariably criticised for its medical and individual leaning and labelling of survivors. Yet few studies have explored traditional methods of psychotherapy within the local cosmology in a non-western setting especially in Africa. This article is an assessment of war experiences and mental states and is a critical examination of traditional methods of rehabilitation used by three rehabilitation centres in the districts of Gulu and Kitgum in Northern Uganda where formerly abducted children are being rehabilitated be-
fore reintegration with their parents/guardians or relatives in the community. For example, cleansing rituals are one way that rehabilitation draws on what happened to the children in the past as a means of coming to terms with and making sense of the present.

Methodology

Participants and rehabilitation centres

The study was conducted in three rehabilitation centres in the districts of Gulu and Kitgum in Northern Uganda from August to October 2004. Participants were adolescents who were abducted, lived in rebel captivity, and experienced war situations ranging from one month to ten years (M = 7.8 months, SD = 2.01) and were rescued or escaped within the six months previous to the study: 166 (56.5%) less than a month before, 98 (33.3%) between one and three months before and 30 (10.2%) between three and six months before carrying out the study. A total of 294 out of 852 adolescents resident in three rehabilitation centres: Gulu Support the Children’s Organisation (GUSCO) with 249 residents, World Vision Children of War Rehabilitation Centre (WVC) with 438 residents, and Kitgum Concerned Women’s Association rehabilitation centre (KICWA) with 165 residents were invited to participate in the study. GUSCO and WVC are located in Gulu District and KICWA is located in Kitgum District. A simple random sampling using random table numbers was performed to select the required number of adolescents from the three centres. Those who were randomly selected were then asked to participate in the study. A total of 294 adolescents aged 12-19 participated (M = 14.6), of which 216 (73.5%) were boys and 78 (26.5%) were girls. Of these, 57 (19.4%) adolescents were from KICWA, 86 (29.3%) from GUSCO, and 151 (51.4%) from WVC. The adolescents identified themselves as Catholics (68.4 %), Anglicans (26.9%), Muslim (1.7%) and others (2%).

Procedures

Permission was obtained from the Uganda National Council for Science and Technology, local district authorities, centre coordinators, social workers and individual adolescents to conduct the study. The Research Committee of Gulu University approved the study. Informed consent was obtained from all adolescents aged 18 years and above. Those below 18 year of age assented to participating in the study prior to the investigators obtaining consent from their parents, guardians, or centre coordinators in situations where their parents or guardians could not be traced. The centre coordinators and social workers at the three rehabilitation centres also agreed to participate in the interviews. The centre coordinators invited the adolescents who accepted to participate in the study. The items in the checklist about their war experiences were read out aloud to them individually and the research assistants filled the checklist for them. Reading the items aloud was considered appropriate because some of the adolescents were illiterate. The questionnaire took between 30 and 45 minutes to fill. The interview with the centre coordinators and social workers took about 30 minutes while that of the elders/traditional leaders who performed the ceremonies took between 45 and 60 minutes. The social workers at the centres filled in the Psychological State Checklist to rate the mental states of the adolescents. It is important to note here that some adolescents and their parents did not agree to participate in the traditional rituals and instead opted to attend Pentecostal Churches and pray for their children instead. It was not possible to establish the number and characteristics of
adolescents or their parents/guardians who did not agree to participate in the rituals.

**Measurements**

There were two checklists used in the study: one was to measure mental states and the other war experiences. Mental states were measured using a 22-item Psychological State Checklist specifically designed for this study to collect information from the centre about the mental states of the adolescents based on records available. This was filled out by the social workers well versed with the mental states and psychological distress of the adolescents invited to participate in the study. The War Experiences Checklist consists of 54 items structured around the themes of: “separation from parents and relatives”, “exposure and role in combat”, “deprivations and other hardships”, “participation in rituals while in captivity”, “injured and was victim of violence and intimidation”, “witness to beatings, mutilation, abduction, killings, and village raids”, “laying landmines and staging ambushes”, and “sexual abuse”. Both checklists consist of “yes” and “no” items.

There were two structured interview schedules: one was for the centre coordinators to document the strategies of rehabilitation being used at particular centres. The principle investigator and research assistants visited each centre for at least two weeks to observe the methods of rehabilitation used to corroborate the information given by the centre coordinators and social workers at the centres about the strategies for rehabilitation. The second structured interview was for elders (traditional leaders) to document why and when the rituals were performed, the requirements for the rituals, who performed them and why, the procedure of performing the rituals and their meanings. The protocols were developed for the purpose of this study and were all translated and back-translated from English to Luo, the native language of the Acholi ethnic group and the participants. Both the checklists and interview schedules were developed in collaboration with the centre coordinators and social workers on the basis of assessment tools used by Non-governmental organisations (NGOs) in the field of rehabilitation such as World Vision, UNICEF, GUSCO, and KICWA, among others.

**Demographic characteristics**

Demographic characteristics (age, religious affiliation, school attendance, whether both parents are living or not, length of stay in captivity, time of rescue, etc.) were included as items in the participants’ questionnaires and interview schedules.

**Data analyses**

Descriptive statistics were used to analyse the adolescents’ war experiences and mental states. Frequency counts of the endorsements were taken and percentages of the total endorsement by participants tabulated and presented. Data from records of responses from the structured interviews with the social workers, centre coordinators and the traditional leaders or elders who performed the rituals were carefully analysed and transformed into meaningful broader content categories by the research assistants and the principle investigator, to arrive at the methods of rehabilitation used at the centres through group discussions and analysis.

Data from the records about the rituals were examined and triangulated by interviewing other traditional leaders and elders to ascertain whether the reasons for carrying out the ritual, when the ritual is normally performed, requirements, who carried out the rituals, procedure for carrying it out and the meanings were the same. In analys-
ing the themes about the rituals, records of interviews by the different Research Assistants were compared, discussed, and carefully analysed and transformed into meaningful content categories covering why, when, how, and by whom the rituals were performed. Data from the interview were again cross-examined, triangulated, and validated by the research assistants and principal investigator and later all the recordings were compared, discussed, and consensus reached.

Results

War experiences
The adolescents were exposed to a wide range of war events while in rebel captivity. These experiences were grouped into eight categories based on thematic analyses and similarity. The categories included: “separation from parents and relatives”, “exposure to and role in combat”, “deprivations and other hardships”, “participation in rituals while in captivity”, “injured and was victim of violence and intimidation”, “witness to beatings, mutilation, abduction, killings, and village raids”, “laying landmines and staging ambushes”, and “sexual abuse” (Table 1).

Experiences highly endorsed by participants were: thinking that they would be killed, long distance treks, death threats, seeing dead bodies and body parts. About 75% of the adolescents participated in beating or killing captured escapees, often their village mates, relatives or friends, while 22% burnt houses with people inside and another 5% reported that they mutilated captives. Over 4% witnessed their parents being killed and slightly above 6% killed their relatives. About 18% were forced to lie on dead bodies or carry dismembered body parts, which was believed to imbue courage and make them hard hearted. More than 75% saw people dying of hunger and 16% drank urine instead of water to quench thirst. Sixty-five of the 78 girls in the sample reported that they were sexually abused and none of the male adolescents reported being sexually abused. The war experiences were therefore the basis upon which the rituals were performed. The adolescents who agreed to participate in the rituals attended the general rituals such as traditional African dances and drama, stepping on an egg, burning clothes that the participants returned with from rebel captivity. Girls who were sexually violated and those who participated in killing either intentionally or were forced to kill had to elaborate rituals to cleanse them from the activities they participated in or were subjected to.

Mental states of the adolescents
while at the rehabilitation centres
In addition to the war experiences the adolescents were exposed to, a catalogue of signs were used to assess the mental state of the adolescents at the centres (Table 2). In all the centres, at least 94% reported some form of mental state associated with their war experiences. The following mental states were dominant: “hopelessness” (89.8%), “sensitive” (65.3), “suspicious” (63.9), “interrupted thoughts” (57.1) and “depressed” (55.8). Alternately, the following mental states were less reported: “Crying, screaming and groaning” (18.3%), “Aggressive” (16.3), “The social workers found the adolescent difficult to deal with” (14.9%), “Self-destructive” (12.9%), “Paranoia” (12.2%), and “Compulsive behaviour” (11.2%). However, there were gender differences in reporting the following mental states: depression (Boys: 47.7%; Girls: 78.2%), crying, screaming and groaning (Boys: 8.3%; Girls: 46.2%), aggression (Boys: 22.7%; Girls: 7.7%), and “Self-destructive” (Boys: 13.4%; Girls: 6.4%). According to the Acholi traditional culture, these symptoms of severe emotional and psychological distress in the
<table>
<thead>
<tr>
<th>Table 1. Categories of war events experienced by 294 adolescents in rebel captivity.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Separation from parents and relatives</strong></td>
</tr>
<tr>
<td>1. I thought I would be killed while in rebel captivity</td>
</tr>
<tr>
<td>2. I thought I would never see any of my relatives or friends again</td>
</tr>
<tr>
<td>3. I was told that my parents were already dead</td>
</tr>
<tr>
<td>4. I dropped out of school</td>
</tr>
<tr>
<td>5. I am the only survivor in the family</td>
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<tr>
<td><strong>Exposure to and role in combat</strong></td>
</tr>
<tr>
<td>6. I witnessed people being abducted during a village raid</td>
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<tr>
<td>7. I carried heavy loads over long distances</td>
</tr>
<tr>
<td>8. I saw dead bodies or body parts after battles</td>
</tr>
<tr>
<td>9. I saw seriously wounded people during battles</td>
</tr>
<tr>
<td>10. I narrowly escaped death during a battle</td>
</tr>
<tr>
<td>11. I participated in battles with government soldiers</td>
</tr>
<tr>
<td>12. I participated in killing a person (people) during battle(s) apart from relatives</td>
</tr>
<tr>
<td>13. I was injured or wounded in battle</td>
</tr>
<tr>
<td><strong>Deprivations and other hardships</strong></td>
</tr>
<tr>
<td>14. I walked long distances without rest</td>
</tr>
<tr>
<td>15. I slept in the bushes</td>
</tr>
<tr>
<td>16. I ate grass, leaves, and other wild plants previously unknown to me</td>
</tr>
<tr>
<td>17. I was imprisoned in rebel captivity</td>
</tr>
<tr>
<td>18. I saw people dying of hunger</td>
</tr>
<tr>
<td>19. I was so hungry and nearly starved to death</td>
</tr>
<tr>
<td>20. I survived death after a serious beating with wire locks and slapped with hot machetes</td>
</tr>
<tr>
<td>21. I ate one meal a day and sometimes a few times a week</td>
</tr>
<tr>
<td>22. I drank urine instead of water</td>
</tr>
<tr>
<td>23. I participated in nursing seriously wounded rebel fighters</td>
</tr>
<tr>
<td><strong>Participated in rituals while in captivity</strong></td>
</tr>
<tr>
<td>24. I was anointed with oil and ochre (sign of cross put on my forehead, back, chest, and back of hands)</td>
</tr>
<tr>
<td>25. I was forced to lick human blood to give me courage and keep away ghosts</td>
</tr>
<tr>
<td>26. I was forced to smear myself with the blood of a dead person</td>
</tr>
<tr>
<td>27. I was told to lie on dead bodies or carry dead body parts to give me courage</td>
</tr>
<tr>
<td>28. I smeared myself with human blood in order to be brave</td>
</tr>
<tr>
<td>29. I participated in eating cooked human flesh to give me courage</td>
</tr>
<tr>
<td><strong>Injured and was victim of violence and intimidation</strong></td>
</tr>
<tr>
<td>30. I was threatened with death if I failed to obey orders</td>
</tr>
<tr>
<td>31. I was injured in a Helicopter Gunship attack by government troops</td>
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<tr>
<td>32. I was beaten up and sustained serious injuries in rebel captivity</td>
</tr>
<tr>
<td>33. I was injured in battle with government soldiers</td>
</tr>
<tr>
<td><strong>Witnessed beatings, death and mutilations</strong></td>
</tr>
<tr>
<td>34. I witnessed people being flogged or beaten</td>
</tr>
<tr>
<td>35. I witnessed people being killed with machetes, or knives</td>
</tr>
<tr>
<td>36. I witnessed people being mutilated</td>
</tr>
<tr>
<td>37. I witnessed the family home being burnt</td>
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<tr>
<td>38. I was forced to carry a dead person for a long distance</td>
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<tr>
<td>39. I witnessed a sibling being killed</td>
</tr>
<tr>
<td>40. I witnessed my parent being killed</td>
</tr>
<tr>
<td>41. I witnessed children being exchanged for guns and ammunitions</td>
</tr>
</tbody>
</table>
Participation in beatings, mutilation, abductions, killings, village raids

42. I participated in abduction of other people and village raids 230 78.2
43. I participated in beating and killing captured escapees 219 74.5
44. I participated in burning houses without people inside 90 30.6
45. I participated in burning houses with people inside 66 22.4
46. I participated in killing my own relatives 18 6.1
47. I participated in mutilating body parts of people captured 14 4.8

Laying landmines and staging ambushes

48. I participated in ambushing a vehicle 65 22.1
49. I saw a vehicle with passengers blown up in a land mine blast 50 17
50. I witnessed people being blown up in a land mine blast 49 16.7
51. I participated in laying land mines 16 5.5

Sexual abuse (only girl participants reported sexual abuse)

52. I was sexually abused by rebels or fellow abductees 65 83.3
53. I have child (ren) with rebel fighters 38 48.7
54. I was sexually abused by fellow abductees 13 4.4

Table 2. The mental states of the adolescents as recorded in their files (N = 294).

<table>
<thead>
<tr>
<th>Signs used to describe the mental state</th>
<th>Males (n=216)</th>
<th>Females (n = 78)</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Worried and upset</td>
<td>198</td>
<td>72</td>
<td>270</td>
<td>91.8</td>
</tr>
<tr>
<td>2. Hopelessness</td>
<td>201</td>
<td>63</td>
<td>264</td>
<td>89.8</td>
</tr>
<tr>
<td>3. Sensitive</td>
<td>140</td>
<td>52</td>
<td>192</td>
<td>65.3</td>
</tr>
<tr>
<td>4. Suspicious</td>
<td>128</td>
<td>60</td>
<td>188</td>
<td>63.9</td>
</tr>
<tr>
<td>5. Interrupted thoughts</td>
<td>139</td>
<td>29</td>
<td>168</td>
<td>57.1</td>
</tr>
<tr>
<td>6. Depressed</td>
<td>103</td>
<td>61</td>
<td>164</td>
<td>55.8</td>
</tr>
<tr>
<td>7. Absentmindedness</td>
<td>133</td>
<td>28</td>
<td>161</td>
<td>54.8</td>
</tr>
<tr>
<td>8. Lack of concentration</td>
<td>129</td>
<td>28</td>
<td>157</td>
<td>53.4</td>
</tr>
<tr>
<td>9. Irritation</td>
<td>109</td>
<td>28</td>
<td>137</td>
<td>46.6</td>
</tr>
<tr>
<td>10. Memory problems</td>
<td>113</td>
<td>23</td>
<td>136</td>
<td>46.3</td>
</tr>
<tr>
<td>11. Tense</td>
<td>116</td>
<td>18</td>
<td>134</td>
<td>45.6</td>
</tr>
<tr>
<td>12. Calm</td>
<td>101</td>
<td>28</td>
<td>129</td>
<td>43.9</td>
</tr>
<tr>
<td>13. Passive</td>
<td>83</td>
<td>38</td>
<td>121</td>
<td>41.2</td>
</tr>
<tr>
<td>14. Hallucinations</td>
<td>67</td>
<td>21</td>
<td>88</td>
<td>29.9</td>
</tr>
<tr>
<td>15. Phobic</td>
<td>53</td>
<td>21</td>
<td>74</td>
<td>25.2</td>
</tr>
<tr>
<td>16. Incoherent speech pattern</td>
<td>48</td>
<td>20</td>
<td>68</td>
<td>23.2</td>
</tr>
<tr>
<td>17. Aggressive</td>
<td>49</td>
<td>6</td>
<td>55</td>
<td>18.7</td>
</tr>
<tr>
<td>18. Crying, screaming and groaning</td>
<td>48</td>
<td>20</td>
<td>68</td>
<td>23.2</td>
</tr>
<tr>
<td>19. Difficult to deal with</td>
<td>31</td>
<td>13</td>
<td>44</td>
<td>14.9</td>
</tr>
<tr>
<td>20. Paranoia</td>
<td>28</td>
<td>8</td>
<td>36</td>
<td>12.2</td>
</tr>
<tr>
<td>21. Compulsive behaviour</td>
<td>21</td>
<td>11</td>
<td>33</td>
<td>11.2</td>
</tr>
<tr>
<td>22. Self-destructive</td>
<td>29</td>
<td>5</td>
<td>34</td>
<td>11.5</td>
</tr>
</tbody>
</table>

adolescents are taken to be a sign of contamination, that the gods were unhappy, and of being possessed by “cen” (bad spirits), the spirits of those they have killed or harmed. They are therefore thought of as “contaminated” where this can come out anytime to cause unpredictable conduct that might harm others. Consequently, there was need to cleanse them of these “bad spirits” and reconcile them with the community.
That the adolescents were forcibly recruited into rebel ranks gives a strong motivation to forgive, reintegrate and reconcile them with the community they committed so many crimes against.

**Strategies for rehabilitation at different centres**

For the purpose of this study, the following general rituals were performed to most of those who returned from rebel captivity and agreed with the practice: traditional music, dances, and drama. Besides these general rituals, this study will focus on four major rituals: stepping on an egg, burning of clothes, ritual for sexually violated girls, and ritual for those who killed deliberately or were forced to kill while in rebel captivity. Traditional leaders and elders from the Acholi Council of Elders (Rwodi Moo), under the tutelage of the Paramount Chief of the Acholi, were the ones who normally conducted these rituals using traditional leaders and elders from the communities.

*Traditional music and dances*

Native Acholi traditional music and dances were performed in all three centres. The music and dances performed are the common ones normally performed in communities in the Acholi area where the adolescents originate. The adolescents at the centre sing songs of forgiveness, reconciliation, and perseverance. All Acholi traditional dances are normally accompanied by songs, ululations, drumming, and an array of traditional instruments. The traditional dances include *Laraka raka* (a native courtship dance), *Bwolla* (a native royal dance), and *Dingid-ingi* (a native dance for young girls). These dances are usually performed with elegance, pride, joy, and gusto intended to promote positive self-image, rejuvenate the sense of pride, make them happy, and boost their self-esteem apparently dampened by the traumatic experiences they underwent while in rebel captivity. The adolescents also learnt to be together and cooperate for the purpose of being happy and making other people happy, contrary to what they experienced while in rebel captivity. This is therefore a general therapy where most adolescents at the centres participate irrespective of what they went through while in rebel captivity.

*Drama*

The adolescents at the centres performed several plays and role-plays. Again, the themes in these plays are on reconciliation, forgiveness, and perseverance just like in the songs and traditional dances. The drama is intended to change the attitudes of the adolescents and to heal the social dislocation and personal vendettas associated with the war and eventually enable them to live in harmony with each other and the community to which they are to be integrated. The plays are coloured with humour to make the adolescents not only laugh but also be happy again after years of unhappiness and suffering in rebel captivity. Although this is a western therapy, it has been adapted to the local reality and culture.

*Traditional cleansing rituals*

In this article, four traditional cleansing practices are reported. Many other traditional practices besides these are performed in communities. Stepping on an egg and burning old clothes are general practices for all who were abducted, missing, or who have stayed in an unknown place or in the wilderness for long, and who are believed to be contaminated with some alien spirit. However, there were specific rituals for those sexually violated and those who killed intentionally or inadvertently. These four traditional practices are described below.
Stepping on an egg
In ancient Acholi tradition (native tradition of the participants), any member of a community who stays away from home as in having been lost, abducted, missing, or simply stayed away for long, is believed to be contaminated with alien spirits. Therefore, upon return, at the entrance to the courtyard, the individual is made to step on a freshly laid egg of a hen put between a plant (locally known as “pobo” – a slippery and smooth plant used as ropes in local construction) split into two. The egg is subsequently broken by the footstep and the person enters the compound. At the entrance of the parents’ house, water is poured on the roof so that it drips on the returnee as he or she enters the house. The following day, a goat is slaughtered, local beer is brewed, and villagers are invited to celebrate and welcome the individual back into the community. This ritual is performed by the elders in the home and is meant to decontaminate and purify the individual. The egg symbolises a fresh start, a new beginning, and the beginning of life. It also symbolises purity and innocence. The slippery local plant symbolises a smooth return and the water washes away the impurities and cleanses the individual.

Burning clothes
In all the three centres, the clothes that the adolescent returned with from rebel captivity are burnt. Just like in stepping on the egg and breaking it, burning clothes believed to be “contaminated” or “tainted” represent a break with the past and thus, the individual has a fresh start in life. The rebels usually loot clothes from the villages or remove clothes from those whom they have killed. They distribute the clothes to the combatants or those in captivity. Burning these clothes therefore accentuates a break with the past life while embracing a new identity and viewing themselves using new “spectacles”.

Traditional cleansing ritual for a sexually violated girl
Any act of rape or forceful carnal knowledge of a girl or woman was treated with disdain and perpetrators were severely punished and reprimanded in the Acholi tradition. Such acts were associated with bad luck and misfortune on the part of the girl or woman violated and therefore the girl or woman needed cleansing. Usually a girl directly, or through the mother, confesses that she has been violated. A meeting of traditional leaders and elders is convened to establish the truth and decide on what to do. Once the elders or traditional leaders establish the truth and the perpetrator is known, a ritual was performed to cleanse both the girl and boy of the shameful act. The elders on both sides would gather in the village, usually in the home of the village elder, and the perpetrator was required to produce a goat.

The boy or man who violated the girl was required to hold the head of the goat, admit his guilt, and say that the goat will die for his own fault and that the goat will wash away his sins. He then spits in the mouth of the goat. At the same time, the girl or woman who was violated also spits in the mouth of the goat and holds the hind legs of the goat. The goat is then slaughtered and the waste matter from the stomach of the goat is smeared on the back of their hands and legs and on the chest to cleanse them of the act both were involved in. The elders eat the carcass and bless the girl, wish her good health, and assure her that nothing bad will happen to her now that the ritual has been performed. The bones from the carcass and the water used for washing hands are poured on their legs. Compensation in the form of
cows or goats, as decided by the elders, is given to the girl’s parents, or husband in the case of a married woman. Thereafter, the boy is strongly reprimanded and warned never to indulge in such acts again. The parents of the boy or man are asked to teach their child to behave well. However, if the girl was related to the boy (incest), the same ritual was employed but no compensation was involved. In former days, if the girl was of the age of marriage, the boy or man was forced to marry her if there was no blood relationship. However, in circumstances where the perpetrators were unknown or were known but unable to appear before the elders or traditional leaders such as in the case of the adolescent girls, a goat was slaughtered to cleanse the girl of the “bad spirit” associated with the sexual violation. The Acholi people considered any sexual act in the bush as a bad omen, especially on the part of the girl. The goat is slaughtered, waste matter from the goat is smeared on the girls’ hands, feet, and chest and the girl is blessed and reassured by the elders of a normal life without the torment of the “bad spirits” associated with her past ordeal.

Cleansing ritual after deliberate killing and manslaughter
In the traditions of the Acholi, the taking of human life is abhorred. An elaborate cleansing ritual therefore followed deliberate or inadvertent killing. Normally, the following four steps are involved in the process after seeking neutral third party mediation acceptable to both sides.

a) Acceptance of responsibility by establishing the precise truth about the incident, that is, exactly how the incident happened and asking for forgiveness.
b) The guilty repenting and asking for forgiveness.
c) Payment of compensation in the form of animals (or daughter in ancient times) as is the practice and agreed upon by the council of elders (locally known as “Rwodi Moo” in Acholi). This compensation is usually used to marry another girl whose first child will be named after the person who was killed so that the deceased rests in peace.
d) Reconciliation (locally known as “Mato Oput”). Mato in the native Language of the Acholi means to drink, and Oput is a plant commonly found in the Acholi region. Wherever the plant is found, many others are found in the same place. It is this togetherness that is cherished by the Acholi to symbolise coming together. The root of the plant is also bitter symbolising the bitterness, pain, suffering, and death that occurred between the two parties.

After all these steps have been followed – acceptance of third party mediation, acceptance of responsibility, knowing the precise details of how the incident happened, and acceptance to pay compensation – a day is appointed to perform the reconciliation ceremony (“Mato Oput”). The mediator then invites both parties to the ceremony usually held by the roadside away from homesteads. Each party approaches the venue from their side of the road. The elders come with the roots of an Oput plant that they have dug from the wild. The outer cover of the roots of the Oput plant is pounded by a virgin girl and mixed with water and local brew and put in calabash. The elders and the mediators stay by the roadside waiting for both parties.

When all is ready, the elders dispatch messengers to call each side to approach the venue. The aggrieved side approaches in an aggressive manner while hurling insults and swearing at the party that killed their
child. The side of the perpetrator accepts responsibility, asks for forgiveness, and agree to compensate. However, the perpetrators will also say they are ready to fight should the other party fail to accept their terms. At this point, the elders come in and hold a long stick (locally known as layibi) between the two parties and ask them to restrain themselves, stop, put down their spears, and accept reconciliation. They then point their spears downwards to pay heed to the council of elders. Both parties bow their heads and pass the long sticks to the other side. Each side will have come with a sheep. The sheep will be put side-by-side (touching each other) facing the opposite direction.

Both sheep will then be cut completely in half while the blood from both sheep will drop in the concoction (the outer cover of the root of Oput plant pounded and mixed with water and local brew made from sorghum) already in the calabash. Each group will select an agreed number of members who will bend with both hands behind their backs to drink from the concoction in the calabash. If the deceased were male, they would drink three times each and if the deceased was a female, they would drink four times each according to tradition. The sheep will be shared between the two parties. The head from one sheep and the bottom from the other will be given to either party who will go ahead to cook it. After each party has cooked, they share the food and eat together, thus the broken relationship has now been normalised and restored. They can now greet, shake hands, eat together, intermarry, visit, etc.

Discussion and conclusion
This study set out to assess exposure to war experiences, mental states, and methods using traditional therapies for rehabilitating adolescents exposed to war. Traditional music and dances, drama, and traditional cleansing rituals are used in a programme of rehabilitation before the adolescents are reunited with their parents or guardians in the communities. The adolescents are reconciled and accepted by their communities after the traditional cleansing ceremonies and are subsequently reintegrated into the community. This comes in the wake of criticism against the use of western psychotherapies in non-western settings.18,22

Mental states
War impacts on the mental health of adolescents in many ways. In the case of the participants in this study, worries, hopelessness, sensitivity, suspicion, interrupted thoughts, among others, were reported. Also commonly reported were gender differences in the manifestation of mental states. Girls surpassed boys in showing depressive symptoms; crying, screaming and groaning while boys manifested more aggression and self-destructive behaviours. This is consist-
ent with past studies in Palestine, Sierra Leone, and Bosnia Herzegovina. Among the girls in this study were those who returned with children fathered by rebel commanders. These child mothers will face the added burden of looking after the children, discrimination against them and their children, and their children being living reminders of their ordeal in captivity. This is probably the reason why girls surpassed boys in reporting distress symptoms. Adding further strain, formerly abducted children may find themselves in a discriminatory and insecure environment because of the uncertainty about when the war will end.

Rehabilitation methods
The successes of western therapeutic methods have come under scrutiny in several non-western theatres of war recently. Evidence emerging from a study on the impact of the traditional methods of rehabilitation and reintegration at the rehabilitation centres in Northern Uganda suggests that the children who spent time in the centres, including those who participated in the rituals, might have better mental health and psychosocial well-being compared to those who have not gone through the centres. Many of the formerly abducted children and some of their parents and guardians besides the community believe in the traditional rituals. This is consistent with studies carried out in Zimbabwe and Mozambique where adolescents exposed to similar violence were subjected to similar traditional healing resources of rehabilitation and reconciliation. If the traditional methods of rehabilitation prove to be successful, it will be very useful in the healing process of not only individuals but also members of a community traumatised by violence within the local cosmology. The traditional methods such as compensation may perhaps settle the indebtedness of one lineage or community to another. Thus the transgenerational nature of such violence, personal vendettas, and societal dislocation resulting from the conflict can then be settled.

Limitations of the cleansing rituals
Although traditional structures have a big role to play in reconciliation and reintegration at the community level, there are many inherent weaknesses. Forced migration has led to scattered settlements in displaced people’s camps, leaving the traditional leaders with no homogenous communities to culturally supervise. Poverty and material deprivation consequent upon the unending war have left the traditional structures fragmented and weak. Both the traditional leaders and the community are too poor to provide the material requirements for the rituals. Often the NGOs have come in to support the traditional structures, but this is not sustainable. Another weakness is the disagreement over who the real traditional leaders are. Some people in the communities regard the current traditional leaders as people who are interested in material gains from NGOs and government.

There is belief in some parts of the community that the scales of the atrocities and war events spanning over two decades are unprecedented, overwhelming and beyond the scope of traditional structures. For instance, the international dimension of the conflict is beyond the reach of traditional structures. Another factor is that, it is simply not easy to establish who killed who in the circumstances, as it is enormously difficult to establish the truth due to the scale of the war, spiritual nature of the conflict. A lot remains to be known about the war. In addition, the majority of the perpetrators were children forced to commit gross and horrendous crimes against their own communities,
thus making it difficult to distinguish perpetrators from victims.

Another complexity is that, while in rebel captivity, many hideous rituals were also performed on the children and many have bad recollections of such rituals. It is therefore difficult to determine whether the rituals currently performed represent the belief systems of the adolescents or reinforce what they have gone through already. Also, although the fundamentals and interpretations are alike, there are minor procedural disagreements regarding the rituals, as the elders do not completely agree on the procedures. There are minor variations from one community to another.

In spite of these inherent weaknesses and some disagreements, many people still believe in cleansing rituals as methods of reconciliation, and reintegration after decades of psychological trauma. Because the society to which the adolescents are to be re-integrated are still very communal in nature, the communal approach and nature of the traditional rituals are more meaningful and important for repairing damage caused by decades of war and maintaining social cohesion. Subsequently, at the local community level, traditional structures offer the possibility for reconciliation and reintegration.

Limitations of the study
The present study is based on cross-sectional data. It is important to recognise that no conclusions can be drawn about causality or directions of influence. Another limitation of the design was that the detection of mental states as well as the methods of rehabilitation was made on the basis of self-reported evaluations and observations, which may have caused some bias. In addition, our sample comprised a specific sample of Ugandan adolescents who have been exposed to violence. Generalizing the findings beyond the sample would only be possible after several replications with similar samples and populations, while including longitudinal studies. However, if these results can be established, they carry important implications for the focus and content of intervention for, and prevention of, mental health problems of adolescents after the experience of traumatic events.

Suggestion for further research
This study is a precursor to longitudinal studies that are required to address the effectiveness of the traditional therapies for rehabilitating adolescents exposed to violence and cultural coping mechanisms and how these can inform interventions. Also important to study are other rituals not included in this study.

References


Macroscopic changes
The significance of skin lesions is mostly related to the documentation of the history of torture. Acute lesions may give health problems, for example pain and secondary infections, including problems with healing, especially when located in an area with venous or arterial insufficiency. Scars located close to a joint may induce contracture, decreased mobility of the joint and pain during activity. Apart from this, scars seldom inconvenience the patient, although they can sometimes be of cosmetic importance since they may be a reminder of the torture and add to the changed sense of identity induced by torture.

A detailed history of the alleged torture and of the symptoms it induced is important in order to evaluate the significance of the observed lesions on the skin. Information about the position of the victim and of the torturer during the torture is particularly important, as well as information about the shape of instruments in contact with the skin. In cases with no or uncharacteristic lesions, a characteristic history may be the only support to the allegation of torture, as for example in some cases of electrical torture. Also a history of skin diseases and non-torture-related lesions are of importance.

The examination should include the entire body surface to detect signs of:

1) Skin diseases
2) Non-torture-related lesions
3) Torture-related lesions

Torture sequelae related to the skin may be:

1) Lesions resulting from direct physical injuries
2) The occurrence of new, or aggravation of existing, skin diseases, provoked by physical or psychological trauma

When a doctor writes a certificate after conducting a medical examination of a person who alleges having been tortured, it is extremely important that the doctor states the degree of consistency with the history of torture. A conclusion indicating the degree of support to the alleged history of torture should be based on a discussion of possible differential diagnoses (non-torture-related injuries, self-inflicted injuries included, and skin diseases). The degree of support should be indicated as follows:
1) A high degree of support
2) Consistent with the alleged torture, moderate degree of support
3) Consistent with the alleged torture, slight degree of support
4) The changes cannot support the history of torture

Acute lesions are often characteristic since they show a pattern of inflicted injury that differs from non-inflicted injuries, for example by their shape and distribution on the body. Since most lesions heal within a short period of time, leaving no or non-specific scars, a characteristic history of the acute lesions is important. Also a history of the development until healing is of importance.

**Description of skin lesions**

Description of skin lesions should include the following points:

1) Localisation (use body diagram) symmetrical, asymmetrical
2) Shape: round, oval, linear, etc.
3) Size: use ruler
4) Colour
5) Surface: scaly, crusty, ulcerative, bullous, necrotic
6) Periphery: regular or irregular, zone in the periphery
7) Demarcation: sharply, poorly
8) Level in relation to surrounding skin: atrophic, hypertrophic, plane

The following findings are supportive of external infliction:

1) Lack of symmetry (may also be the case for some skin diseases)
2) Linear lesions in irregular or criss-cross arrangements
3) A linear zone extending circularly around an extremity
4) A regular, narrow, hyperpigmented or hypertrophic zone surrounding a scar (sequels to an inflammatory zone around a necrotic area); this may also be the case with skin diseases with necrotic areas, for example necrotic vasculitis

**Blunt trauma**

Blunt trauma may leave ecchymoses, contusions or lacerations with extravasation of blood in the skin and subcutaneous tissue, in some cases reflecting the shape of the instrument used, for example from beating with a stick (Figure 1). Two parallel linear le-

*Figure 1. 1) Alleged torture involving beating with a stick on several areas of the skin, including the back of the thighs and the buttocks, five days previously. 2) Massive haematomas are seen in the gluteal regions and on the upper part of the back of the thighs, containing areas with parallel, linear, a few cm broad, haemorrhagic lesions circulating obliquely around the gluteal region and the upper part of the thigh. 3) The lesions show signs of recent external inflictions from beating with a stick. No dermatological condition can explain the oblique, linear pattern. 4) Conclusion: A high degree of support to the history of torture because of the pattern of the lesions.*
sions (“tramline bruises”) result from a blow with a rod or stick (figures 2, 3, 3a). The haemorrhagic areas often move down the body during the following days. Deep tissue bruises might not be seen on the surface. The lesions change colour from dark red, to dusky purple, to brown, to green, to yellow and to hyperpigmented brown, or they disappear. Severe beating on the soles of the feet, “Falanga”, may leave contusions in the arch of the feet and swelling of the feet extending from the arch to the medial aspects of the feet and ankles (Figures 4, 5). Blunt trauma often leaves no or uncharacteristic

Figure 2. The formation of “tramline” bruising from the application of a rectangular or cylindrical object.3

Figure 3. 1) Alleged torture involving beating with a broom handle. 2) Approximate parallel bruises are seen, and several of them, especially the lowermost, have a double “tramline” appearance, typical of the impact of a round or square-section rod. 3) The lesions show signs of recent external infliction. The pressure in the centre may have compressed the vessels, so that they do not bleed. No dermatological condition can explain the oblique, linear pattern. 4) Conclusion: A high degree of support to the history of torture, because of the pattern of the lesions.3

Figure 3a. 1) Unknown history of injuries. The injuries were observed on a detainee. 2) Several parallel bruises are seen on the back of the detainee in criss-cross arrangements; some of them with a double “tramline” appearance. 3) The lesions show signs of external infliction. 4) Conclusion: The lesions might be caused by a round or square-section rod. Published with permission from Red-Cross (ICRC)
scars (Figure 6). Flogging or beating with canes or truncheons may, however, leave characteristic scars, for example asymmetric, linear, straight or curved or “tramline”-shaped scars, showing a pattern of external infliction. The scars may be hypertrophic with a narrow, regular, hyperpigmented area in the periphery, representing “arrowline” bruises or an inflammatory zone appearing around necrotic tissue in the acute phase (Figures 7-9). A differential diagnosis could be plant dermatitis, usually dominated, however, by shorter scars, with a narrow zone of hyperpigmentation in the periphery (Figure 10). In one case, the alleged torture was beating and scalding on the back. Symmetrical, atrophic, depigmented, linear changes typical for striae distensae were observed on the back and in both axillary regions (Figures 11, 12). The skin changes could not support the history of torture. The patient, however, may have been unaware of the changes on the back before the torture. Prolonged application of tight ligatures

Figure 4. 1) Alleged torture involving “Falanga”, i.e. severe beating on the soles of the feet. 2) Erythema with a slightly haemorrhagic appearance of the skin in the arch of the feet and a swelling of the feet extending from the arch to the medial aspects of the feet and ankles. 3) Typical for “Falanga”, since it is unlikely that other types of blunt injuries could give such changes in that part of the foot, with oedema extending to the rest of the foot and ankle. 4) Conclusion: A high degree of support to the history of torture. Reprinted with permission from the Danish Medical Association.

Figure 5. 1) Alleged torture involving “Falanga”. 2) Haemorrhagic areas are seen on the distal part of the sole of the foot, as well as dermatitis around the toes. 3) In this case, the patient had been walking in the mountains without shoes, which could be a differential diagnosis. 4) Conclusion: Consistent with the alleged torture, but only slight degree of support because of the location of the injury to the distal part of the sole. Reprinted with permission from the Danish Medical Association.

Figure 6. 1) Alleged torture involving blunt violence from a blow five years previously. 2) Hyperpigmented area with an irregular and indistinct limitation. 3) The lesion might be secondary to haemorrhage from ruptured blood vessels, but it lacks indication of the shape of the instrument used. 4) Conclusion: The lesion is consistent with the alleged torture, its support being of a slight degree. Reprinted with permission from the Danish Medical Association.
Figure 7. 1) Alleged torture involving flogging six months previously. 2) Long, straight or curved, linear scars in an asymmetric pattern on the back. They are curved particularly corresponding to the outlines of the body, where they have a broader, irregular end, and vertically directed in the centre. One straight scar is located vertically on the lower part of the trunk. The centres of the scars are depigmented, hypertrophic and surrounded by thin, hyperpigmented stripes. 3) The scars show signs of an external infliction with a pattern underlining the history of flogging. The torturer could have been standing behind the patient. The vertical direction of the scars in the centre of the trunk can, however, not exclude self-infliction. A differential diagnosis could be plant dermatitis, but this shows shorter, linear scars with hyperpigmented stripes in the periphery. 4) Conclusion: The scars are consistent with the alleged torture, their support to the history being of a moderate degree, since self-infliction cannot be totally ruled out.6

Figure 8. Same patient as Figure 7.

Figure 9. Same patient as Figure 7.

Figure 10. Plant dermatitis with short, linear scars with a narrow zone of hyperpigmentation in the periphery. Differential diagnosis to Figure 7.
may leave a linear zone extending circularly around the arm or leg, in one case with lack of hair indicating cicatricial alopecia (Figure 13). No differential diagnosis in the form of a spontaneous skin disease exists because of the location of the scar.

**Sharp trauma**

Sharp trauma, for example caused by the use of a razor blade, knife or bayonet, gives characteristic ulcers and usually leaves recognisable scars. In some cases, self-infliction should be considered, particularly when
located on a wrist (Figure 14).6,7 If pepper is applied to the open wounds, the scars may become hypertrophic (Figures 15-17).6 A differential diagnosis could be traditional healers, African ritual scar-tattooing or art on the body (Figures 18, 19).10 In one case, where the depth of a scar, allegedly following the use of a sword, was doubted, the use of a high-frequency ultrasound could demonstrate a considerable, deep scar.11 Afterwards, the patient was granted refugee status.

**Thermal injuries**

Burning with cigarettes, hot instruments or hot fluids leaves acute burns of varying degrees. Burning is the form of torture that most frequently leaves scars, often of diagnostic value. Cigarette burns often leave 5-10 mm large, circular and macular scars with a depigmented centre and a hyperpigmented, relatively indistinct periphery (Figure 20).12 Dermatological conditions, for example sequels to pustules, might be a differential diagnosis. Burning via the transfer of larger amounts of energy to the skin than that transferred when stubbing a cigarette on the skin often produces markedly
atrophic scars. They present a narrow, regular, hyperpigmented or hypertrophic periphery, originating from the inflammatory zone, which surrounds the necrotic tissue in the acute phase (Figure 21). While their shape reflects the shape of the instrument used, their size relates to the amount of energy transferred to the skin. Following alleged torture from burning on several areas of the skin with a heated, circular metal rod, the size of a cigarette, mostly circular scars with an atrophic centre and a regular, narrow, hyperpigmented or hypertrophic zone in the periphery were observed. Their diameter varied from below 1 cm to around 2 cm, and the patient had 35 scars distributed on several areas of the skin (Figures 22-24).

A differential diagnosis could be sequels to abscesses, but such scars usually do not show the typical, narrow zone in the periphery. Burning material from a rubber tyre, placed above the head of a woman, running down on her head and body, left keloid changes on the central area of her chest (the medial areas of her breasts not included). The periphery of the scar was irregular and demarcated via a narrow, well-defined zone of hyperpigmentation, and its shape corresponded to damage caused by material running down the body. A scar following alleged torture from burning with a glowing metal rod placed across the broad area of the calf was primarily suggested to represent changes induced by venous insufficiency. The scar was shaped like a boat, and was placed across the broad part of the calf; it had an atrophic centre and a regular, narrow zone of inflammation in the periphery (Figure 25). The shape of the scar thus corresponds to a lesion induced by a rod pressed against the soft calf, and the appearance of the scar to a third degree burn because of its atrophic centre and the narrow hyperpigmented zone in its periphery. In
Figure 22. 1) Alleged torture involving burning on several areas of the skin with a heated, circular metal rod, the size of a cigarette, one year previously. 2) Circular scars with an atrophic centre and a regular, narrow, hyperpigmented zone in the periphery are seen. (The patient had 35, mostly circular, scars distributed on several areas of the skin, some of them with a hypertrophic zone in the periphery. Their diameter varied from below 1 cm to around 2 cm). 3) Dermatological conditions, such as abscesses, could result in similar scars, but would lack the regular, narrow zone in the periphery, corresponding to the inflammatory zone appearing around the necrotic tissue in the acute phase, in particular at a third degree burn. Electrically injured lesions appear in segments within the influenced area. 4) Conclusion: A high degree of support to the history of torture because of the narrow, regular zone in the periphery.9
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Figure 23. Same patient as figure 22.9
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Figure 24. Same patient as Figure 22.9
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Figure 25. 1) Alleged torture involving burning with a glowing metal rod placed across the broad area of the calf four years previously. 2) A scar shaped like a boat, placed across the calf, with an atrophic centre and a narrow zone of hyperpigmentation in the periphery. 3) The scar has a shape corresponding to a lesion induced by a rod pressed against the soft calf. The scar is typical for a third degree burn because of the regular, narrow zone in the periphery. The scar was primarily suggested to represent changes induced by venous insufficiency, but such skin changes show an indistinctly limited hyperpigmentation distally on the lower leg. 4) Conclusion: A high degree of support to the history of torture because of the location, shape and zone in the periphery.14
Reprinted with permission from Sår.
contrast, venous insufficiency leaves indistinctly limited hyperpigmentation and scars from ulcers located distally on the lower leg (Figure 26). Afterwards, the patient was granted refugee status. When the nail matrix is burnt, subsequent growth produces striped, thin, deformed nails, sometimes broken up in longitudinal segments. If the nail is also pulled off, an overgrowth of tissue may occur from the proximal nail fold (Figure 27). Changes caused by lichen planus may be a relevant differential diagnosis, while fungus infection is characterised by thickened, yellowish, crumbling nails, different from those mentioned above (Figure 28).

**Corrosive injuries**

Corrosive injuries, caused by acid thrown against a victim, caused linear scars, a few cm wide, with a depigmented centre and a regular, narrow, hyperpigmented zone in the periphery, located on the thighs and buttocks (Figure 29). They were arranged in an asymmetric pattern, mostly obliquely directed down the legs. They showed signs of external infliction in agreement with a liquid running down the legs, and they indicated sequels to necrotic areas as expected following a corrosive injury.

**Electrical injuries**

Electric current follows the shortest route between the two electrodes through tissue with the lowest resistance, i.e. blood vessels, nerves and muscles. When using high-voltage stun weapons, the current flow cannot, however, be limited to the pathway between the electrodes. The possibility of finding signs of electrical influence in the skin, particularly histological signs, is related to the type of electricity transferred, since the electrolytic action will be most pronounced by transfer of direct current and will not be present following transfer of high-frequency...
Figure 29. 1) Alleged torture involving acid thrown against the victim. 2) Linear scars, a few cm wide, with a depigmented centre and a regular, narrow, hyperpigmented zone in the periphery are seen on the thighs and buttocks. The scars appear in an asymmetric pattern, mostly obliquely directed down the legs. 3) The scars show signs of external infliction in agreement with a liquid running down the legs. They show sequels to necrotic areas with a narrow hyperpigmented zone in the periphery. 4) Conclusion: A high degree of support to the history of torture because of the location, the shape and the narrow zone in the periphery. Reprinted with permission from Elsevier.

Figure 30. Battery-driven shock baton, used for electrical torture. Reprinted with permission from the Danish Medical Association.

Figure 31. Sections of the shock baton showing slightly convex, circular electrodes with a diameter of 12 mm. Reprinted with permission from the Danish Medical Association and Elsevier.

Figure 32. Transfer of 50 Hz alternating current to the skin of a fully anaesthetised pig via two circular electrodes measuring 12 mm in diameter, 24 hours previously. One to two mm large, red-brown, crusty segments are seen within the influenced areas, the current selecting tissues with low resistance. Reprinted with permission from the Danish Medical Association and Elsevier.
alternating current, where the concomitant heat generation dominates.\textsuperscript{16} Also, the amount of energy used plays a role for a domination of burn injuries in the lesions, particularly concerning low frequency alternating current. In some of the cases, electric torture leaves acute lesions on the skin. Unlike burn lesions, these lesions usually do not reflect the shape of the instrument used, but appear in segments within the influenced areas, since the current selects areas with low resistance (Figures 30-33).\textsuperscript{18,19} Electrical torture via electrodes shaped like a knitting needle, “Picana”, leaves clusters and linear arrangements of 1-5 mm wide lesions, covered by red-brown crusts, sometimes surrounded by a 1-2 mm broad, erythematous zone with irregular and indistinct edges (Figure 34).\textsuperscript{2} Lesions in lines following a linear application of the electrodes may also be seen. The crusts probably correspond to an electrical injury and may contain deposits of metal from the electrodes.\textsuperscript{20,21} The concomitant heat development has not been sufficient to induce a regular inflammation in the periphery. Differential diagnosis may be insect bites or scratching. Many red lesions, a few mm large, have been seen following the use of a battery-driven electrical instrument (Figure 35).\textsuperscript{22} A contact dermatitis may be a differential diagnosis. Well-demarcated, serpiginous lesions, measuring 1-2 cm across, with an irregular, narrow, elevated, peripheral zone and a central area containing several black spots, each measuring 1-2
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Figure 35. 1) Alleged torture involving a battery-driven electrical instrument, probably inducing high-frequency alternating current. 2) Many red lesions, a few mm large, are seen on the side of the trunk. 3) The appearance in segments and the red colour support the influence of electric current. A dermatitis might be a differential diagnosis. 4) Conclusion: Consistent with the history of torture, but only to a slight degree since contact dermatitis cannot be excluded.\(^{23}\)
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Figure 36. 1) Alleged torture involving electrical wires. 2) Shortly afterwards, well-demarcated, serpiginous lesions, measuring 1-2 cm across, with an irregular, narrow, elevated, peripheral zone and a central area containing several black spots, each measuring 1-2 mm, are seen. The lesions are seen on the left side of the chest and on the left arm. 3) The lesions show indications of electrical injury because of their irregular periphery and the 1-2 mm large, black segments at their centre, probably involving blood vessels. Electrical current follows the shortest route between the two electrodes through tissue with the lowest resistance, i.e. blood vessels, nerves and muscles. Vasculitis or haemorrhagic herpes zoster might be a differential diagnosis. However, vasculitis is chiefly located at the lower extremities and is symmetrical, while herpes zoster is located to an area innervated by a single ganglion. 4) Conclusion: A high degree of support to the history of torture because of its appearance in 1-2 mm black segments.
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Figure 37. Same patient as Figure 36.\(^{23}\) Reprinted with permission from Lippincott, Williams and Wilkins.

mm, have been observed shortly after electrical injuries on the left side of the chest and on the left arm (Figures 36, 37).\(^{23}\) The lesions show indication of electrical injury because of their appearance in 1-2 mm large segments and because of the involvement of blood vessels. Vasculitis or haemorrhagic herpes zoster might constitute a differential diagnosis. The location might be helpful since vasculitis is chiefly located at the lower extremities, is symmetrical and is sometimes more diffusely located, while herpes zoster is located in an area innervated by a single ganglion and is unilateral. Clusters of round, red macular scars, about 1 mm in diameter, have been observed four weeks after “Picana” (Figure 38).\(^{12}\) Eight weeks later, many of the scars had disappeared. The remaining scars were small, white or red-brown spots. Among the skin diseases leaving pigmented scars is lichen planus leaving about 2 mm large scars.

Electrical torture has been reported to induce 6-8 mm large, irregular, red-brown, keloid scars on the helix of both ears.\(^{24}\) Differential diagnosis might be a chondrodermatitis helicis, but this is usually covered by a scale, and is pale and painful. Six months after the use of a 45 cm long stun gun, delivering 150,000 V, with a screw 4 mm in
diameter at its end and 12 small places from which electricity is also emitted from the lower part of its side, a sharply demarcated bluish line 1 mm across, forming a complete circle 5 mm in diameter and a second mark of similar characteristics completing only two-thirds of a circle, were observed. Similar fractions of a narrow red ring appearing in segments have been seen in the days after defibrillation using 2736 V along the periphery of the pad (Figures 39-41). They have been found to be due to a high current density under the perimeter of the electrodes.

Skin diseases

An example of a skin disease being psychologically provoked by torture may be the concomitant occurrence of an urticarial eruption. Physically provoked skin diseases may be the development of psoriasis or lichen planus in the traumatised area, as a...
“Koebner reaction” (Figure 42). However, such skin changes have little diagnostic significance in relation to torture.

**Microscopic changes**

If a victim agrees, a 3-4 mm punch biopsy, under local anaesthesia, might be helpful in supporting an allegation of electrical torture (Figures 43-58). Previously, only a few cases of electrical torture have been studied histologically (Figures 59-64). In only one case, in which lesions were excised seven days after the injury, were alterations in the skin diagnostic of electrical injuries observed (deposition of calcium salts on dermal fibres in viable tissue located around necrotic tissue at the surface and on collagen fibres deep in the dermis). Lesions excised a few days after the alleged electric torture showed segmental changes and deposits of calcium salts on cellular structures, consistent with the influence of an electric current, but with only a moderate degree of support. A biopsy taken five days after alleged electrical torture via the use of a battery-driven electrical instrument, probably delivering high-frequency alternating current, where the concomitant heat development dominates, showed non-specific alterations with subepidermal bullae consistent with thermal injuries. Toxic contact dermatitis could be a differential diagnosis, the support to the history of torture being of a slight degree.

Even if an examination does not reveal any abnormal findings, the possible use of electrical torture cannot be excluded. The use of high-frequency ultrasound may be helpful in discovering the location of calcium deposits in order to select an area for biopsy.

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*Figure 42.* 1) Alleged torture via kicks on the leg 12 years previously. 2) Lichen planus element on the leg. 3) Lichen planus (like psoriasis) can be initiated by a trauma, known as a “Koebner reaction”. 4) Conclusion: The plaque is consistent with the history of torture, the support is only of a slight degree because of its secondary nature.

*Figure 43.* Epidermis, 24 hours after the transfer of thermal energy to the skin of a fully anaesthetised pig. The cytoplasm of the epidermal cells is granular and fibrillar, the cells stretched with elongated, parallel nuclei. The changes have been found to be typical for thermal injuries in the first 3-4 days. In addition, a subepidermal bulla was seen in second degree burn lesions, and, following the highest temperatures, small areas with slightly pale, homogeneous cytoplasm were seen.
“Vesicular nuclei”, i.e. irregular and enlarged nuclei with clear nucleoplasm sometimes containing large, irregular clumps of chromatin, are seen. The cytoplasm is pale and homogeneous. The changes have been found to be typical for electrical influence at the cathode in the first 3-4 days.\(^\text{27}\)

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Figure 45. Epidermis, 24 hours after the transfer of electrical energy via direct current to the skin of a fully anaesthetised pig, the anode area. In the stratum corneum, yellow iron containing clumps of keratin are seen. In the epidermis, small, round, “empty nuclei” surrounded by a pale and homogeneous cytoplasm are seen. These alterations are found to be typical of electrical influence at the anode in the first 3-4 days.\(^\text{27}\)

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Figure 46. Epidermis, 24 hours after the transfer of high voltage direct current to the skin of a patient during defibrillation, the anode area. The nuclei are small, round and “empty” and surrounded by pale homogeneous cytoplasm. The rise in temperature around the electrode foil edge was found to be between two and four degrees Celsius. Thermal influence via 50 degrees Celsius for 40 seconds did not leave epidermal changes in pig skin.\(^\text{26}\)

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Figure 47. The skin, 24 hours after transfer of electrical energy via direct current to the skin of a fully anaesthetised pig, the cathode area. The epidermis shows a pale and homogeneous cytoplasm and small, dark nuclei, “white necrosis”. These changes have also been found to be typical for electrical influence at the cathode.\(^\text{19, 27}\)

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**Figure 48.** The skin, 24 hours after the transfer of electrical energy via 50 Hz alternating current to the skin of a fully anaesthetised pig. A conical segment with “white necrosis” in the epidermis and necrosis in the dermis is seen. Yellow, iron-containing clumps of keratin are seen in stratum corneum. Low frequency alternating current produces a mixture of cathode and anode changes. A slight thermal influence may also occasionally be observed because of the concomitant heat generation, particularly when large amounts of energy are used.\(^\text{19, 27}\)

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**Figure 49.** Dermis, 24 hours after the transfer of electrical energy via direct current to the skin of a fully anaesthetised pig, the cathode area. “Vesicular nuclei” are seen in a sweat duct, surrounded by unaffected connective tissue, the current selecting areas with low resistance.\(^\text{27}\)

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**Figure 50.** Dermis, 24 hours after the transfer of electrical energy via direct current to the skin of a fully anaesthetised pig, the cathode area. “White necrosis” is seen in sweat glands.\(^\text{19, 27}\)

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**Figure 51.** The skin, four days after the transfer of electrical energy via direct current to the skin of a fully anaesthetised pig, the cathode area. Part of a conical segment of necrotic tissue is seen in the upper part of the skin. A narrow zone containing small, dark areas of calcified collagenous tissue is seen to surround the necrotic area at some distance. This is a typical finding at the cathode area.
**Figure 52.** The skin, five days after the transfer of electrical energy via direct current to the skin of a fully anaesthetised pig, the cathode area. The dark, calcified area in the dermis is seen surrounded by normal connective tissue. A necrotic area is seen in the upper part of the skin.

**Figure 53.** The skin, two days after the transfer of electrical energy via direct current to the skin of a fully anaesthetised pig, the cathode area. A narrow zone of calcified collagenous tissue is seen surrounding the necrotic area at the surface, separated from it by a zone of viable tissue. Alizarin red S stained section (a positive reaction for calcium salts). Reprinted with permission from Elsevier.

**Figure 57.** The skin, seven days after the transfer of electrical energy via 50 Hz alternating current to the skin of a fully anaesthetised pig. An area of calcified collagenous tissue is seen below the newly formed epidermis. Deposits of calcium salts on collagen fibres have only been seen in a few cases following 50 Hz alternating current. Alizarin red S stained section. Reprinted with permission from Lippincott, Williams and Wilkins.

**Figure 58.** The dermis, seven days after the transfer of thermal energy to the skin of a fully anaesthetised pig. Deposits of calcium salts on cellular structures are seen. Can be seen after both electrical and thermal injury.

**Figure 59.** 1) Alleged torture via electrical wires seven days previously (same patient as Figure 36). 2) Biopsy of the skin. Dark, calcified collagenous areas are seen below the newly-formed epidermis in the periphery of the lesion in both sides. 3) Diagnostic for electrical injury. Calcinosis cutis is a rare observation, the calcium deposits usually not restricted to the collagen and elastic fibres. 4) Conclusion: A high degree of support to the history of torture. Reprinted with permission from Lippincott, Williams and Wilkins.

**Figure 60.** Same patient as Figure 59. Calcified collagen fibres are seen in an area deep in the dermis. Reprinted with permission from Lippincott, Williams and Wilkins.
Figure 61. Same section as Figure 60, in magnification.

Figure 62. Same patient as Figure 59. The current passed through the nerves to the heart. Tissue from the thoracic cavity. Calcified collagenous tissue is seen close to a neuron. Reprinted with permission from Lippincott, Williams and Wilkins.

Figure 63. Same patient as Figure 59. The thoracic cavity. An area with calcified collagenous tissue is seen.

Figure 64. 1) Alleged electrical torture one month previously. 2) Skin biopsy showing a conical scar at the surface, 1-2 mm broad, with an increased number of fibroblasts and tightly-packed, thin collagen fibres arranged in parallel to the surface. 3) Other injuries may have caused a similar scar. 4) Consistent with the alleged torture because of the presence of a conical scar with signs of recent development, a slight degree of support.

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Psychology and U.S. psychologists in torture and war in the Middle East

Gerald Gray, LCSW*, & Alessandra Zielinski, researcher

Abstract
The involvement of U.S. psychologists and their influence on torture in Cuba, Afghanistan and Iraq provides previously unrevealed evidence of U.S. torture and military tactical policy, and points to probable military goals the U.S. Administration has denied. What is revealed is that current torture has been designed and used, not so much for interrogation as the Administration and the media insist, but for control by terror. Further, Iraqi civilian deaths may be deliberate and for the same purpose. That is, discovery of involvement of the U.S. psychological professions is a clue to torture, and perhaps killing, as policy, not accident.

Keywords: torture, U.S. psychologists, Abu Ghraib, Guantanamo, Stanford Prison Experiment

Introduction
To understand the current contribution of the psychological professions to U.S. torture, it is important to know some of their history in the military because particular facts in that presence reveal a current influence and a use previously hidden. The U.S. government denies it has a policy of torture; U.S. psychologists have been major contributors to developing it, to hiding it, and to hiding its purpose in Iraq and Cuba.

First, U.S. psychologists and other professionals in the psychological fields have been involved in designing torture since at least the Vietnam War. The CIA’s KUBARK manual, ostensibly written for interrogation purposes in the 1970s, contains such ideas and wording as the following, which is clearly not written by laypersons:

“All coercive techniques are designed to induce regression … The result of external pressures of sufficient intensity is the loss of those defenses most recently acquired by civilized man … ‘Relatively small degrees of homeostatic derangement, fatigue, pain, sleep, loss, or anxiety may impair these functions’.1 And at another iteration, about dread: “If the debility-dependency-dread state is unduly prolonged, the subject may sink into a defensive apathy from which it is hard to arouse him. It is advisable to have a psychologist available whenever regression is induced” 2,3

Second, the U.S. has also had an official (but nonpublic) military policy of torturing at least since Vietnam. At that time for instance, Interrogation Translation Teams visited military field hospitals and touched the wounds of enemy prisoners who were patients there in order to induce pain.4 The
torture seemed to be for interrogation at times (though tortured bodies were left out as lessons) but torture was policy in any case, even if hidden from the U.S. public.

Just as the present U.S. government denies torture has been policy, it also attempts to deny that present treatment of Iraqi and other prisoners is torture. It is either called “abuse”, or torture is redefined so as not to include methods now publicly acknowledged to be in use. It should be pointed out that in addition to knowing its own past policy of torture, the U.S. government knows the presently reported behavior at Abu Ghraib and Guantanamo is torture. In legislation passed by the U.S. Congress and signed by President Bush before the Abu Ghraib scandal broke, there is a description of acts later reported by the media and by the military itself to have occurred at Abu Ghraib:

“Some specific examples of physical and psychological torture (are) systematic beating, sexual torture, electrical torture, suffocation, burning, bodily suspension, pharmacological torture, mutilations, dental assaults, deprivation and exhaustion, threats about the use of torture, witnessing the torture of others, humiliation and isolation”.

Moreover, these and other behaviors reported from Abu Ghraib, Guantanamo, and elsewhere have been accepted of years as examples of torture in political asylum appeals in U.S. immigration courts. The Bush Administration only began to try to change the definition later, apparently as it anticipated public opposition to its public use of torture.

Torture in Guantanamo
Torture methods in Guantanamo have been widely reported and include methods of isolation, sensory deprivation, sleep deprivation, confinement in space, beatings, extreme temperature, painful forced positions, rape disguised as body searches, and nudity.

Equally important, however, are the conditions of prisoners at Guantanamo and some of their reactions to these conditions, notably self-destructive behavior in suicide attempts, which have long been predictable to psychologists. We know government psychologists read the torture treatment literature (e.g., see the bibliography on the Iraq War Clinicians Website). Thus they can be assumed to know that experiments with rats in similar conditions to Guantanamo have produced, for instance, self-destructive behavior. Knowledge of this clinical literature implies that Guantanamo is an experiment, but one with involuntary human subjects, not rats, and that the suicides were predictable and thus variously a form of murder, or extra-judicial killing, or criminal negligence. The further implication is that all this is policy involving the use of psychology.

Moreover, the Guantanamo prisoners were first interrogated at length in Afghanistan and apparently drained of most information there before any “interrogation” of them took place in Cuba. This, coupled with reports in the media that various military revealed the prisoners were low-ranking and knew little, again points to torture that is not for interrogation. The names, ranks, and service branches of psychologists and psychiatrists at Guantanamo have appeared in the press, revealing their knowledge of this experiment. That this is an experiment in torture methods makes sense of the fact that prisoners in Cuba know little, yet few are released. They are apparently not tortured for what they know, but for what they can teach.

Torture in Iraq
Media reports and photos of torture at Abu Ghraib show even more clearly that torture at Abu Ghraib and similar Iraqi prisons is not for information. Clinicians worldwide whose patients are torture survivors can
recognize this type of torture as being for political control. Masses of people who know nothing are tortured. They are not even questioned and are shown or released into the rest of the populace dead or alive to terrify others into submission. We have seen such torture closer to hand in the wars in Central America and elsewhere. This type of torture is also evidence of policy.

Moreover, the methods of torture used in Cuba and Iraq also indicate planning, and thus policy. Modern torture uses methods that leave little or no physical evidence (and no psychological evidence the public could be expected to recognize): rape, forced watching of torture, beating of soft tissue, suffocation, sensory deprivation, electric shock. These methods are used for the purpose of leaving little evidence for human rights groups, doctors, the Red Cross and others to easily see. Revelation of this sort of torture and its purpose comes of course from survivors as well as clinicians, but also from torturers who have been captured, from captured, leaked, or released documents, from writings, and from torturers in the U.S. and other countries who turn up at homeless shelters, drug treatment centers, veterans’ hospitals, and elsewhere (torturers too, can be ruined).

There is other evidence from the field of psychology that torture in Iraq is a policy of control; military psychologists are again implicated. Psychologists have long known of the 1973 Stanford Prison Experiment, in which student volunteers, screened for pathology, were at random divided evenly into guards and prisoners in a secret mock prison. No instructions were given to either group as to how to behave. In a few days the experiment had to be stopped by the psychologists as the guards had become controlling and brutal, with the most brutal always establishing the norm for treatment. Now we do not even have to deduce Administration knowledge of the Stanford experiment as a summary of it is contained in the report on Abu Ghraib produced by former U.S. Defense Secretary Schlesinger. The publication of information about this experiment in an official document, linking it to conditions in U.S. military prisons, further reveals chain of command responsibility for policy. The two experiment excerpts from the Schlesinger report make the point:

“The negative, anti-social reactions observed were not the product of an environment created by combining a collection of deviant personalities, but rather, the result of an intrinsically pathological situation which could distort and rechannel the behavior of essentially normal individuals. The abnormality here resided in the psychological nature of the situation and not in those who passed through it.”

And again:

“The use of power was self-aggrandizing and self-perpetuating. The guard power … was intensified whenever there was any perceived threat by the prisoners and this new level subsequently became the baseline from which further hostility and harassment would begin. The most hostile guards on each shift moved spontaneously into the leadership roles … Not to be tough and arrogant was to be seen as a sign of weakness by the guards and even those ‘good’ guards who did not get as drawn into the power syndrome as the others respected the implicit norm of never contradicting or even interfering with the action of a more hostile guard on their shift.”

This appears to be the experiment that informs torture in Iraq and one of the original authors of this study may understand this. A situation is created – made worse by understaffing, danger, and no outside independent controls – and with a little
encouragement (never specific instructions to torture) guards do torture. This situation and this torture are now widely reported in U.S. prisons in Iraq (more than 50,000 went through these prisons as long ago as 2005)\textsuperscript{16} currently the U.S. has 10 known prisons and plans at least 7 more\textsuperscript{17}. The U.S. administration’s advantage in the Stanford experiment “situation” is that it provides deniability – there are no orders to torture, but the situation can be predicted to cause it. It is consistent with this process that only low-ranking staff are punished, and only a few and then lightly. To remove impunity from higher ranks would destroy the structure because they could protect themselves by preventing torture.

Note the Stanford experiment is an experiment with guards as well as prisoners. Since doctors and psychologists are now involved in carrying out torture at various sites, they too are subjects of this experiment. There is now evidence that clinicians at Guantanamo act as the guards do,\textsuperscript{10,18} and most recently doctors there have kept hunger strikers alive with the result they will be available for more torture.\textsuperscript{19} With the Stanford experiment in place, someone is monitoring conditions under which clinicians can be made to torture or accept torture, what they will do, how to silence those who may talk, etc.

The construction of this “situation” finally makes sense of the fact that Geoffrey Miller, the general in charge in Guantanamo, was put in command of the prisons in Iraq. Using torture mainly to ruin people, rather than to interrogate them, is an attempt to control politically through torture.

It is this experience of seeing types of torture (for interrogation or for control) over recent years that should keep us from another mistaken impression. That is, if in Cuba and Iraq we are not looking primarily at interrogation and if current torture in Iraq really is for control, then it is a mistake for Schlesinger, the media, and human rights groups to use Abu Ghraib to argue for internal prison reform or clearer definitions of permissible interrogation methods. Only the intrusion of the outside world into prisons in the form of unannounced, frequent, complete inspections with penalties may guard against deterioration into the conditions of the Stanford experiment.

**Civilian deaths in Iraq**

Torturing large numbers of people in a country of 25 million is not sufficient for control even in a small area like Central America. Killing civilians in targeted areas was added\textsuperscript{20} In Iraq, U.S. soldiers are put into combat under the conditions of the Stanford experiment: young, inexperienced, fearful, undermanned, heavily armed troops are given a role and thrown into house-to-house fighting in a strange country with another language. The enemy looks like civilians. Without being ordered to kill civilians, soldiers predictably must do so in large numbers. Letting such killing occur in targeted cities and regions (e.g., the city of Fallujah) may be another tool for political control by terror; many militaries have used it elsewhere. This makes sense of a report in the BMJ, The Lancet, of 100,000 civilian deaths from all causes since the start of war into 2004.

The 2005 U.S. Department of Defense report is different and has its estimate of insurgent-caused deaths at about 6,475 in a later 20 month period.\textsuperscript{21,22} The estimate of deaths in U.S. Department of Defense figures is a necessary interpolation by Iraq Body Count; the DOD counted only insurgent-caused deaths and injuries and did not sort one from the other. It would be impossible to run a battlefield experiment like the
Stanford prison experiment, so the battlefield doubles as the experiment. Psychology can be used here as it is in torture for control. This would reveal some of the policy. Or are we to believe that the government of a military that massively tortures a populace will not also kill it?

What can be the intent of a policy of torture and killing, beyond the discovery that it is for control of Iraq? This part is not answered by psychology, but discovering the use of psychology leaves the question open. Political torture is always to support military power, and the U.S. is building its own large bases in Iraq which, like the prisons, suggest a long occupation and more torture. If in the case of Iraq we discard the Administration’s successive claims about weapons of mass destruction, overthrowing a formerly supported tyrant, interest in democracy (under torture), then all other motives must be considered.

With this much evidence, we can now see the notorious “ticking bomb” argument that has been used for U.S. torture (that torture is justified to interrogate someone who knows of a death threat) must in fact be deliberately misleading. It is so because it is an argument for the use of torture for interrogation, and so leads the public away from discovery of the subtle use of a psychological experiment for the overriding real purpose of torture by the U.S. The real question is not, “What justifies torture?”, but “What justifies the military occupation revealed by torture for control?”

Finally, the leaking in 2005 of a paper calling for invasion of Iraq well before evidence for invasion was alleged, written by policymakers now in the Administration, along with the torture and killing, suggests one specific reason why the U.S. opposed the International Criminal Court. That is, not fear of frivolous lawsuits as was said, but the intent to torture, perhaps to kill, with impunity wherever it chooses.

**Impunity for clinicians?**

While change in U.S. policy requires a shift in the center of power, aided hopefully in part by education from the torture treatment movement, members of this movement are faced with their very own, immediate, political challenge. Is there to be no penalty for U.S. clinicians who participate in torture, whose names, rank, and branch of service are published, or whose job resumes or memberships reveal their history in torture? Will they be accepted at international symposia, will their papers be published, will they be given university posts, fellowships, or other jobs? Sorting this out will take work, particularly with American clinicians so ubiquitous. But so once were German troops in Norway, yet ordinary citizens refused to sit next to them in public transport, while other resistance grew. How to act against torture, not whether, is our only issue.

**References**

15. Website of prof. Phillip Zimbardo: www.zimbardo.com
20. Note that Bush’s director of national intelligence, John Negroponte, formerly ambassador to Honduras 1981-1985, was ambassador to Iraq in 2004-5.
22. www.iraqbodycount.net
Sir,

I am writing in response to a scientific article by Christian Pross (Torture 2006;16(1):1-9.) on “Burn out, vicarious traumatization and its prevention”.

I wonder whether a case history should be consistent, and the conclusion drawn from the paradigmatic case should base on real observations and experience. A combined profile of a constructed person with elements from different biographies cannot lead to the conclusions Pross made in his article. In other words: the person in his second case does not exist. She is fictitious. Fictions can produce myths but are far away from scientific explanations. Pross admits (Fn 14) that he had changed facts and details but questions are raising: If the author changes the sex of a case person from male to female, he leaves the consistency of his example. Women work and suffer different from men, at least in a microsocial way of experience and communication. If one attributes male features to a female psychologist there is something wrong, and it is impossible to create consistency between case and conclusions. Scientific integrity demands conclusiveness. Otherwise, nothing remains but science fiction.

Of course, I accept that case persons are presented in an anonymous way. Constructing a fictitious person to prove the evidence of so called scientific conclusions is dishonest and has nothing to do with making a case person unidentifiable.

If the author speaks about colleagues as cases who have not agreed to publish their painful developments into burn-out (what ever that is) and disease, this seems, in my opinion, near to mobbing. The author takes a position of an evaluator of colleagues in the public which is a kind of violation, if he has not asked for permission to publish.

In the article I am missing an analysis of the effects of team dynamics. In my view of the problem of “escaping into disease” the main factor for exhaustion and developing symptoms in the work with traumatized patients is hierarchy of teams, rivalry, getting to the top (in subgroups), image neuroses etc., what Pierre Bourdieu called the permanent fight in the field, where e.g. the author takes up a position to find his position in the social field.. This has, according to my experience, more influence on the personal health than the stories of persecuted and tortured refugees.

We find so called burn-out persons in many professions, not only in trauma therapists. Regarding this fact there must be a connection in the causality, an analytical problem which is not solved by avoidance.

Sepp Graessner, MD*
The author’s answer

The case history (case 2 in my article) Sepp Graessner refers to is a construct, an exemplification of typical phenomena of burnout and secondary trauma in caregivers working with victims of violence. I have frequently observed these in colleagues and in myself during the 16 years I have been working in this field. Certain phenomena may ring a bell in one reader of my article, certain others in another reader. I welcome this because by publishing this article I intended to initiate a process of self-reflection about the risks and pitfalls in this difficult work. It is what happens in every professional supervision and intervision.

I agree with the commentator’s point, that team dynamics play a key role in this issue. I am in the process of publishing an extensive study on team dynamics and structural deficiencies in trauma centers as a source of burnout and secondary traumatization.

Christian Pross**
Sir,

Children and Torture

We really appreciate the articles of this journal and have with interest read the three sections on “Medical physical examination in connection with torture” by Dr. Rasmussen and coworkers (Torture 2006;16(1):48-55). We are, however, afraid, that the audience is missing some substantial and essential information in relation to the paragraph on “Examination of children” (p. 52-3) – perhaps because of uncertainty among the authors.

The first group (Amnesty International) in the world on “Children and torture” was established in Copenhagen, Denmark in 1976 by Jørgen Cohn and coworkers. We will give a short outline on our experience throughout the last thirty years 1-4:

1. The majority of children in the world are inhabitants in areas of war and armed conflicts, thus being the most exposed group of human beings. In addition, children are considered as “adults” from the age of six to eight in many geographical territories. The rather small children are obliged to taking care of their siblings, work as street children, in the industries or as prostitutes. These “children” are – very often – subjected to violence and torture, especially if they are enforced to act as child soldiers, religious martyrs or given other extremely dangerous tasks.1

2. There is – in our opinion – almost no difference between the number of boys and girls respectively in relation to exposure to violence and torture.2

3. The methods of torture used on children are similar to those of adults – the most common is sexual humiliation, harassment and, of course, oral, anal and vaginal rape, besides multiple – more or less – perverted methods of sexual torture.3

4. The consequences and repercussions of torture on children are also similar to adults: Injuries causing fractures, amputation, castration, blindness, brain and spinal damage, burning and severe cosmetic trauma – infectious diseases as hepatitis, AIDS and other sexually transmitted disorders, tuberculosis, gastroenteritis – malnutrition and starvation – and pregnancy. The psychological complaints are legion: almost all these children suffer from the “posttraumatic stress syndrome”. All children are, of course, sad, depressed and anxious with nightmares. Many of them commit suicide. The children become disillusioned and mistrustful without confidence or faith in other human beings.4

In conclusion

Children, girls as well as boys, are exposed to the same methods of torture as adults,
especially sexual torture. The physical consequences are similar to those for adults – longstanding and probably lifelong sequelae, thus impairing the development of the child, physically as well as socially and psychologically, resulting in disabled children. There are no typical symptoms/consequences/repercussions for children. The term “The child torture syndrome” does not exist. Perhaps “The battered child syndrome” may be a useful description.

Let us at last quote F.M. Dostoevskij: The greatest crime is to rape a child.

Jørgen Cohn, Professor, MD*

References

The author’s answer
We welcome the additional attention Professor Cohn puts on the important issue of children and torture. The authors do not promote nor use the term: “Child torture syndrome”.

However we would like to stress that there is little research available on the long-term sequel among people who were tortured as a child; and on how torture affects the development of the child.

For an article on “Children and sexual torture” we would like to refer to Torture 2002;12(1):3, »Sexual torture of children: an ignored and concealed crime«.

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Guidelines for authors

Preparation of manuscripts
For detailed and updated information on the requirements for submission of manuscripts for biomedical articles, please visit the website of the International Committee of Medical Journal Editors at www.icmje.org.

Based on these guidelines, the following is specific to TORTURE:

The paper should be typed on one side only with double spacing on A4 (297 × 210 mm) paper or the nearest equivalent. Pages must be in numbered sequence. A short abstract or summary should be included (see below).

A statement giving the author's name, title and present position, as well as an address where he or she may be contacted by readers, should be provided on a separate sheet.

We prefer articles, reviews and other material to be sent as a formatted text file, for example MS Word or WordPerfect, and that they be sent either by email or on a disc.

Footnotes and references
Footnotes and references should be numbered consecutively and typed on separate sheets. Literature references should be typed in the Vancouver Standard and consist of the author's name and initials, title of the book (followed by the place of publication, name of publisher, year, and page or chapter numbers) or of the paper (followed by the title of the journal, year, volume number, and page numbers).

Abstracts
A short abstract or summary of between 200 and 300 words outlining the paper and indicating its principal conclusion should accompany the typescript on a separate sheet. Use a semi-structure if possible, mentioning background, methods, findings and interpretation.

Keywords
In addition to the abstracts, three to six key words should be provided that will assist indexers in cross-indexing the article. Terms from the Medical Subject Headings list of Index Medicus should be used. If these are not available, other terms may be used.

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Do not use patients’ names, initials or hospital numbers, especially not in illustrative material. Indicate whether the procedures followed were in accordance with the ethical standards of the responsible institutional or regional committee on human experimentation and with the Helsinki Declaration of 1975, as revised in 1983.

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The manuscript should be accompanied by a covering letter with the name, address, telephone and/or fax number, as well as e-mail address, if available, of the corresponding author. The letter should give any additional information that may be helpful to the editor.

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The publisher will not put any limitation on the personal freedom of the author to use material contained in the paper in other works which may be published, provided that acknowledgement is made of the original place of publication.

The corresponding author should state that he or she had full access to all the data in the study and has had final responsibility for the decision to submit for publication.

**Aims**

*Torture* is an international journal intended to provide a multidisciplinary forum for the exchange of original research and systematic reviews among professionals concerned with the biomedical, psychological and social interface of torture. The journal is dedicated to studying the effects of torture. There is a growing awareness of the need for exploring optimal remedies to restore physical, psychological and social harm as well as various interactions against torture. The journal seeks to enhance the understanding and cooperation in this field through the varied approaches represented.

There will be focus not only on medicine and psychology, but also on epidemiology, social sciences and related disciplines. The editors wish to encourage dialogue among experts whose diverse cultures and experiences provide innovative and challenging knowledge to existing practice and theories.

Priority will be given to articles that give new knowledge and information with comparative and interesting perspectives.

**Editorial policy**

**Reviewing of articles**

The selection process may involve that papers are rejected on the basis of an in-house assessment. Such a decision will be announced quickly. The articles are reviewed by an international board of reviewers who read the submitted manuscripts on the basis of anonymity. This implies that manuscripts, thus recommended for publication, will be published in the first section of the journal.

The editors of *Torture* identify reviewers based on bibliometric data, i.e. the selection is based on registered publication activity within the torture field in general and in the area addressed specifically by the manuscript.

The journal also contains contributions from other sources, mostly by health professionals or correspondents on development in the field of human rights.

When submitting a paper, the author should make a statement to the editor about all submissions and previous reports that might be regarded as redundant or duplicate publication of the same or very similar work.

**What to do before submission**

- Covering letter
- Manuscript – see above
- Figures
- Authors’ contribution – see above
- If conflict of interest – give a description
- Patients’ consent and permission to publish
- Copies of correspondence from other journals and reviewers, if previously submitted.

**Scope**

Torture is divided into sections of which the first part fulfils international standards as a scientific journal and is dedicated to 2-4 in-depth original analyses with focus on torture, using a biomedical, health and human rights framework. Articles categorised as clinical trials, research methodology papers, data based population examinations, critical or explaining case descriptions may be preferred.