

Evaluating the services of torture rehabilitation programmes:

History and recommendations

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Table of contents

Introduction
Background and history
The complexity of rehabilitation:
Some of the variables
The challenges
Designing outcome studies: study validity
Programme definitions and examples
Outcomes and indicators
Research strategies
Literature review
Examples of instruments available
Recommendations for the future
Acronyms
Website resources
References

Introduction

The authors of this document intend to review the history of evaluation of torture treatment programmes, discuss the challenges, and identify the research conducted to evaluate services. We outline research designs to measure outcome, including symptoms, level of function, and satisfaction. Research design, not data analysis, is the focus of this desk study. The outcomes research literature is summarized and categorized. Finally, we discuss the advantages and limitations of the most commonly used assessment instruments, some of them culturally-appropriate, and recommend the best approaches to measure outcomes of treatment for torture survivors.

This document intends not only to provide the context in which outcome research has been conducted in the past, but how centres can move forward today despite limitations and obstacles.

Background and history

Since the 1970s, programmes for the rehabilitation of politically-motivated torture survivors around the world have been treating survivors of torture. However, the context in which rehabilitation occurs affects the perception of torture's sequelae, diagnosis, treatment, and prognosis. Treatment of torture survivors occurs in their countries

of origin, as well as in countries of both initial and final resettlement. Allodi (1991) defines two categories of treatment settings geographically: 1) "The North," mostly countries of final resettlement, such as the industrialized nations in the continents of Europe, North America, and Australia, and 2) "The South," mostly totalitarian "Third World" countries where torture is practiced. Allodi states that, in "The North," torture was viewed as having the medical and psychological consequences of a traumatic stress, and treatment followed this model. In "The South," on the other hand, torture was viewed as a component of the socio-political process, requiring preventive action and social change. It is important to remember that government-sanctioned torture uses the individual to repress and control the larger society and that both the individual and the society are affected.

The first programmes were in South America. In Chile, on September 11, 1973, the democratic government of Salvador Allende was overthrown by one of the more repressive dictatorships in the western hemisphere. A month later on October 19, 1973, the country's first human rights organization, the Committee of Cooperation for Peace was created. The committee through the "Vicaria de la Solidaridad" (Vicariate of Solidarity) gave legal, medical, economic, and spiritual assistance to victims of repression. In 1975 the first torture rehabilitation programme under the name of "Foundation for Social Help of Christian Churches" (Fundacion de Ayuda Social de las Iglesias Cristianas or FASIC) was created (Reiter et al., 1986).

In Argentina the most repressive and bloody military dictatorship in Latin America was in power from 1976 until 1983. It has been estimated that 30,000 people were "disappeared," later tortured and killed.

The first human rights organization in Argentina was the Mothers of the Plaza de Mayo, founded in April, 1977. The Mothers was an association of Argentinean mothers whose children disappeared during the Dirty War. In 1979, Dr. Diana Kordon started the "Group of Psychological Assistance to the Mothers of the Plaza de Mayo" (Grupo de Asistencia Psicologica de las Madres de la Plaza de Mayo) to psychologically help this group of women. This work continued until the creation in 1990 of the "Argentinian Team of Psychosocial Work" (Equipo Argentino de Trabajo e Investigacion Psicologica or EATIP). In 1980 the "Center for Legal and Social Studies" (Centro de Estudios Legales y Sociales or CELS) was founded to document and provide legal help to the victims and families of the repression (Reiter et al., 1986; Kersner D, 2002).

The democratic government of Uruguay was overthrown on June 27, 1973, and the military dictatorship and repression lasted until 1985. The "Service for Social Rehabilitation" (Servicios de Rehabilitacion Social or SERSOC), founded in October of 1984, was the first rehabilitation center for survivors of torture in that country.

In the past two centuries, at least three major events paved the way in Europe for the development of the movement: 1) France, in 1789, adopted the first human rights declaration denouncing torture. Much of the rest of Europe adopted it soon after. 2) In 1863, swept along with the rising tide of humanism, the Red Cross became the first organization to treat wounded victims during war. 3) With the discovery of the atrocities in German and Japanese prisons and camps during World War II, public awareness of government-sanctioned torture grew and research on the long-term effects of concentration camp internment began (Jaranson, 1995). 4) In 1973, Amnesty In-

ternational officially recognized and first defined torture in its initial worldwide survey on torture. The universally accepted legal definition of torture was published in Article 1 of the Convention Against Torture in 1984 (Amnesty International, 1973).

A military coup overthrew the democratic government of Greece in 1967 and a military junta seized power until 1975. Members of the opposition were subjected to severe repression and systematic torture. The first trial against a torturer since the Nuremberg trials began in Greece in August, 1975 (Amnesty, 1977a).

Elsewhere in Europe, a group of medical doctors from Amnesty's organization in Denmark published a report entitled "Evidence of Torture" (Amnesty International, 1977b) and subsequently, under the direction of Dr. Inge Genefke, founded the Rehabilitation and Research Centre for Torture Victim (RCT) in 1982 and the International Rehabilitation Council for Torture Victims (IRCT) in 1985. At least 235 treatment programmes have been identified worldwide and 144 of them are currently members of the IRCT (Quiroga and Jaranson, 2005, and recent data of the IRCT).

In North America, the Canadian Centre for Victims of Torture (CCVT) in Toronto was informally organized in 1977 and began assessing and treating torture victims in 1983. U.S. Amnesty International medical groups were founded in Los Angeles, San Francisco, Seattle, Washington and Boston in 1979-80. The Program for Torture Victims (PTV) in Los Angeles is the only survivor of these initial Amnesty groups. PTV began to document and treat Chilean survivors of torture in 1980. The Center for Torture Victims (CVT) in Minneapolis was founded in 1985. Currently 26 groups are full members of the National Consortium of Torture Treatment Programmes (NCTTP).

The first descriptive study of victims of torture in the U.S. was presented at a symposium on "Research and practice in treatment and rehabilitation of survivors of torture, terrorism and hostage taking" at the 89th annual meeting of the American Psychological Association in Los Angeles, August, 1981. Later the results were published in a joint paper with Canada (Quiroga et al., 1981; Allodi et al., 1985).

Despite the long history of torture rehabilitation throughout the world, only a small fraction of torture survivors actually receive treatment. Financial support for services never comes close to meeting the need. It is increasingly important for torture rehabilitation centres to demonstrate that the resources are used most efficiently and effectively to help survivors. Otherwise, even the financial support available may be at risk.

The complexity of rehabilitation: Some of the variables

The effects of torture on the individual have interacting social, political, cultural, economic, medical, psychological, and biological dimensions. Nearly all clients have a major psychiatric disorder. Their course is chronic with exacerbations and remissions. They have multiple social problems: financial, housing, raising children, domestic strife, social isolation, etc. They may have multiple medical problems, some as a direct result of torture and others associated with severe stress, hypertension, and diabetes. The needs of survivors are multiple and, in response, the programmes have usually adopted a multidisciplinary approach. The components of these interventions vary significantly between centres as well as among the regions of the world.

The evidence that torture has psychiatric consequences is overwhelming but beyond the scope and intent of this review.

Three overview studies will be cited here. In a meta-analysis, Steel et al. (2009) undertook a systematic review and meta-regression of the prevalence rates of PTSD and depression in the refugee and post-conflict mental health field. Adjusting for methodological factors, reported torture emerged as the strongest factor associated with PTSD, followed by cumulative exposure to potentially traumatic events (PTEs), time since conflict, and assessed level of political terror. For depression, significant factors were number of PTEs, time since conflict-reported torture, and residency status. Johnson and Thompson (2008) provided a comprehensive and critical summary of the literature about the development and maintenance of post-traumatic stress disorder (PTSD) following civilian war trauma and torture. They found good evidence of a dose-response relationship between cumulative war trauma and torture and development and maintenance of PTSD, as well as some evidence that female gender and older age are risk factors in development of PTSD. They also state that most epidemiologically sound studies found relatively low rates of PTSD. Some refugee variables could exacerbate symptoms of PTSD and contribute to their maintenance, while preparedness for torture, social and family support, and religious beliefs may all be protective against PTSD following war trauma and torture. Modvig and Jaranson (2004, Table 3.5) reviewed the percentage of traumatized persons with posttraumatic stress (PTS) diagnosis or significant symptoms in population-based surveys or case-control studies ($Ns > 100$) and, in contrast to Johnson and Thompson, found rates as high as 43% current and 74% lifetime among 810 Bhutanese torture survivors in a refugee camp in Nepal (Van Ommeren et al., 2001).

In general, positive prognostic factors

include cultural, religious, political convictions, preparedness for torture (Basoglu, 1994) and effective coping strategies. Factors which negatively impact recovery include prior individual or family trauma or persecution and dysfunctional personality traits. It is controversial whether the age at which the torture occurs makes a difference. Children and adolescents are potentially both more vulnerable and more resilient. Considerable work has attempted to identify what types of torture affect prognosis, but with limited success. The severity and protracted nature of torture do seem to negatively correlate with recovery (Mollica et al., 1998; Jaranson et al., 2004). However, after the torture has occurred, positive prognosis is associated with receiving treatment, achieving safety and security, such as a successful asylum claim, having stable life circumstances, and good social support. On the other hand, unstable life circumstances, discrimination, and allowing the perpetrators impunity are associated with negative outcome.

Because of the complexity of the survivors and their circumstances and their individual prognostic factors, controlling for these factors is difficult if not impossible. Particularly in western countries, but also in the rest of the world, rehabilitation centres help survivors from many different countries. To find large enough sample representing a particular ethnic or cultural group is challenging.

The challenges

Studies of the efficacy of different treatment approaches and of the indicators to measure successful outcomes have not been sufficiently or adequately completed. Few outcome studies exist, and all of them have limitations such as the lack of control groups, varying definitions of diagnostic criteria, poor or absent validation of assessment

instruments, small sample size, and other factors (Gurr and Quiroga, 2001).

Consequently, it is understandable that so little outcome research has been conducted, despite the long history of torture rehabilitation. Nonetheless, critics continue to voice their discontent with the status of outcome research in torture rehabilitation. One of the more vocal critics is Dr. Metin Basoglu, a psychiatrist, an experienced researcher in the field of trauma, and a zealous advocate of cognitive-behavioral therapy as the best treatment. His 2006 editorial in the *British Medical Journal*, "Little Outcome Evaluation Has Been Done in Torture Rehabilitation," (Basoglu, 2006) generated dozens of responses from practitioners in the rehabilitation field, the vast majority questioning his conclusion that, after 20 years of research, no progress has been demonstrated scientifically. This statement about the lack of outcome data potentially threatens the already limited funding available for services. Jaranson et al. (2007), for example, responded to Basoglu's editorial by stating:

- 1) Evidence-based treatments exist for symptom clusters but not for complex problems;
- 2) Rehabilitation of torture survivors is not equivalent to treating PTSD or depression;
- 3) Rehabilitation centres for torture survivors offer multi-modal approaches to improve the lives of survivors in many ways; and
- 4) Clinicians avoid brief treatments, recognizing the enormity of clients' experiences and the consequences.

One might ask why, with all of these difficulties, outcome studies should even be attempted. However, funders are increasing their requirements to demonstrate that serv-

ices at centres are effective and cost-efficient. Centres, of course, want to provide the best, most effective, and most efficient services possible.

Does Rehabilitation Work? We don't know. Clinicians think so, but they have an investment in a positive outcome and are potentially biased. Clinicians see that their clients get better, but exactly why is unclear. If rehabilitation does work, what components are responsible? We don't know what treatments are most effective.

Despite the prevalence of torture and its well-documented mental health consequences, until recently there has been relatively little scientific interest in the study of torture and its treatment. Nonetheless, the study of torture survivors may have important implications for human rights, theory, assessment, classification, treatment of traumatic stress responses, and legal issues.

Why has so little priority been given to collecting outcome data? First of all, time and financial resources for research are scarce. Clinicians are often reluctant to prioritize research over direct clinical services, prevention and advocacy, may fear that additional questioning will re-traumatize clients or breach their confidentiality, and have been reluctant to include untreated survivors in controlled trials, feeling a need to protect all survivors from re-traumatization (Basoglu et al., 2001). Other clinical issues for research include the importance of timing, trust, and sensitivity. Research can also affect treatment, whether it is integrated into the clinical programme or separated, and the research process can potentially re-traumatize the researchers themselves.

Studies of specific high risk groups among victims of organized violence, such as women, rape victims, children, orphans, family members, ex-soldiers, and others require rigorous research methodology, often

costly research budgets, adequate sample sizes, academic expertise, and interdisciplinary collaboration.

Most torture rehabilitation programmes have neither the skilled research personnel nor the budget. Most donor organizations give funds only for the direct care of survivors and are not willing to finance necessary infrastructures for scientific research.

Studies conducted in refugee clinics and in other treatment settings rarely include control groups, generally have small samples, and are not designed to address the prevalence of torture survival in communities.

Most of the information published on torture survival is descriptive. Few clinical outcome studies exist (Basoglu, 1998; Gurr and Quiroga, 2001). Estimates of the prevalence of torture have been unreliable and rarely attempted because epidemiologic studies are extremely difficult and often impossible to conduct. The sensitivity of the topic of torture makes it difficult to study, and refugees are challenging groups for research under any circumstances.

Some relatively recent publications help to elucidate and guide research in the field. Hollifield et al. (2002) reviewed the literature measuring trauma and health status in refugees, analyzing 183 publications, concluding that most articles about refugee trauma or health are descriptive or include quantitative data from instruments with limited validity and reliability for refugees. Willis and Gonzalez (1998) reviewed the use of survey questionnaires to assess the health effects of torture. Spring et al. (2003) described an approach to gathering a sample representative of refugee communities which are difficult to access. Sjolund et al. (2009) presented the results of a conference of experts, concluding that effect studies are urgently needed.

Designing outcome studies: study validity

The field of traumatic stress has experienced significant growth in the numbers of psychotherapy treatment studies conducted. The Conference on Innovations in Trauma Research Methods (CITRM), funded by NIMH in the mid-2000s, held a series of conferences to explore advances in the field of psychological trauma research. Several of the presenters published in the JTSS (Sonis et al., 2007; Schurr, 2007) and discussed ways to help both the readers of their work and psychotherapy researchers by reviewing key concepts in trial design that affect the internal validity of the research. The focus was on between-group randomized design and on outcome rather than process.

Outcome research in torture investigates possible cause-effect relationships between one or more groups of torture survivors receiving a treatment compared with control groups not receiving treatment and requires strategies to control factors that influence the validity of inferences drawn from the findings. Torture outcome research has unique problems that create challenges in the design methods but it is still possible to conduct valid research.

Psychotherapy treatment outcome research should include features intended to control threats to internal validity, such as random assignment, fidelity to the manual, numbers of sessions, and well defined outcomes.

If it is not possible to use placebo control groups in outcome research, wait-list design may be used. This method controls for most internal validity threats.

A comparison design can be used where groups are assigned to usual care versus more complex care, usual care versus prolonged exposure to care, or different type of psychotherapies. These designs permit infer-

ences of the additional benefits related to usual care.

Change can also occur for factors other than effectiveness of the treatment, or confounding. Contemporary factors not related to treatment can interfere with the results and several factors may introduce bias to the internal validity of a study. For example, the natural history of disease, e.g., torture is a chronic condition with ups and downs, or the granting of political asylum usually decreases symptoms (Gangsei and Jaranson, 1996), and other life events can confound the results and decrease the validity. Other variables include the length and number of sessions, individual vs. group therapy, or differences between therapists. Contemporary factors not related to treatment can interfere with the results. Assessment and control of confounding is discussed in detail by Kurth and Sonis (2007).

For quality control, use of a manual is useful in psychotherapy research to facilitate consistent treatment delivery and for replication and dissemination (Borkovec, 1993; Schnurr, 2007). Of course, training, supervision, and monitoring are an important part of this process.

Internal and external validity are the most important objectives in the selection of a research design and research instruments. The experimental approach is the most powerful research design because it controls the most important variables in torture outcome research but at the same time is most restrictive, requiring a control group.

Validity is defined by the degree that the instrument measures what it is supposed to measure. Internal validity gives us assurance that the differences observed in the study are due to the intervention or treatment under investigation. External validity gives us assurance that the results of the study are generalizable beyond the subjects in the study. The

instrument must also be reliable, i.e., free of measurement errors.

Torture is a chronic process with exacerbations and remissions of the symptoms through the years. A reactivation increases symptoms, and symptoms decrease during a controlled period.

Over time, the torture survivor may grow wiser, stronger, more experienced and better able to participate in interviews or answer questionnaires. In some studies the instrumentation changes between the pre- and post-test measurements. The group that drops out from the study may be different from the group that remains in the study. Each of these factors or their interactions could influence the results of the study.

The most important bias to the external validity of a study is the process of selection of participants in the research. Therefore, the validity of the study is related to the design method and the representativeness of sample. Some design methods are more valid than others. The ideal design for outcomes study should be the experimental design with a random assignment to experimental and control groups.

Unfortunately, there are factors that make the selection of an experimental design difficult. Even though we do not have a definitive study that shows the effectiveness of the treatment of torture survivors, we do have the clinical impression that treatment helps victims obtain relief of their symptoms and improvement in their functioning. By consensus, most clinicians and researchers believe that a control group is impossible because refusing treatment to torture survivors is unethical.

In addition, the populations of torture survivors treated by the majority of those torture rehabilitation centres receiving refugees and asylum seekers from other countries are neither representative of the

total universe of torture survivors in the country of origin nor in the host country. In addition, the distribution of countries or ethnic groups receiving care in a center or programme varies from one year to the next. The small numbers, e.g., by country, demographically, diagnoses, etc., can influence validity. Other factors include inconsistency of the data or inability to achieve cultural equivalence for questions or items. Finally, the difficulty separating an individual treatment from the overall intervention makes identifying the effect of a particular part of rehabilitation a challenging methodological issue.

Programme definitions and examples

Issues of concern for centres and funders include access to care, quality of care and cost of care.

To improve the quality of care we need to investigate: 1) Treatment efficacy (or clinical impact), which is measured at either individual or group level; 2) Treatment effectiveness (or economic impact) which includes outputs, benefits, and outcomes; 3) Efficiency (or cost/ benefit analysis of the programme), which includes the inputs and can identify waste. Clinicians usually focus on the first, while administrators and funders tend to focus on the latter two.

Example: Clinicians

A task force of senior clinicians from the United States was organized by David Kinzie of the Oregon Health Sciences University and met annually during the years 2004-2006. Funded by the Langeloth Foundation, the purpose was two-fold: 1) to develop quality assurance criteria for torture treatment centres and 2) to develop a research plan to collect treatment outcome data across willing torture treatment centres in the U.S. This task force recommended sev-

eral principles be used by torture rehabilitation centres:

- 1) Measuring outcomes should be an integral part of the care.
- 2) Practically, assessment must be integrated into the daily routine of the programme, not as separate research.
- 3) Outcome measurement should be part of a process which includes analysis and reporting of the data and improving the quality of care through education and training of the providers.

Dr. Kinzie commented on the difficulties of doing outcome of clinical efficacy: "Outcome study of medical and psychological treatments are inherently difficult. This is even more so with traumatized patients as the trauma varies in quality and quantity, resilience and social supports are unique, and unknown genetic factors play a role. For refugees, the difficulties are compounded by low literacy rates, prolonged traumas, loss of country, property, and ongoing stress in the host country. The variables are overwhelming." (unpublished).

Examples: Funding Sources

The European Union (EU) (2008) has defined efficiency, effectiveness, impact and sustainability, concepts used to evaluate selected torture rehabilitation centres which the EU funded. The EU provides a considerable amount of general operating funding for centres in Europe and in the developing world. Definitions follow:

Efficiency – Quality and adequacy of management, suitable indicators or other tools of efficiency, management flexibility.

Effectiveness – Number of victims benefiting directly and indirectly, number of persons

benefiting from prevention activities through training and public awareness. Exchange of experiences, information, and practices among centres, effectiveness of regional projects.

Sustainability – Both financial and outcome sustainability improved. Visible signs of government increasing their active support of torture survivors.

Impact – Effect on legislative and governmental changes, on prevention of torture, using suitable indicators or reporting tools of impact assessment. Any changes in mentality, awareness, or interpretation of torture in the more difficult countries.

Obviously, impact assessment is quite different from monitoring or evaluating the efficiency or effectiveness of a programme, but the following chart provides some comparisons (see Table 1).

The U.S. Office of Refugee Resettlement (ORR), administrator of the domestic funding from the Torture Victims Relief Act, has required funded centres in the U.S. to document 17 data points. The Act was passed in 1998, and current funding has remained at \$10M USD annually for domestic centres, in addition to another \$10M USD for centres in the developing world and \$7M USD for the UN Voluntary Fund for Torture Victims.

Outcomes and indicators

Possible outcomes include symptom reduction, quality of life, level of function, coping and resilience, social support, and client satisfaction. The most frequently measured outcomes include medical and psychological symptoms, level of functioning or disability, quality of life, and client satisfaction.

The mission of torture rehabilitation programmes has generally been to treat every survivor who requests care. For ethical reasons programmes are unwilling to allocate a random control group, in spite of the fact that no one has proven the efficacy of the interventions. Nonetheless, some programmes do have waiting lists, which could potentially be used as controls – although this presents ethical issues, as well.

The problem now faced is how to design acceptable, experimental studies in the absence of a control group. The objective of measuring survivor (consumer) outcomes in torture rehabilitation programmes is to study the efficacy of the intervention compared to the goals of the programme. The information garnered should be used to improve the quality of services and care. Additional gains from measuring consumer outcomes include professional development and empowerment for the survivors of torture.

To improve the quality of care we need to investigate treatment efficacy (clinical impact) and treatment effectiveness (eco-

Table 1. *Impact assessment vs. monitoring & evaluation (Rovhe C, 1999).*

Assessment	Monitoring	Evaluation	Impact
Timing	Frequently	Periodically	Infrequently, usually at the end of a project
Analysis	Descriptive: inputs, outputs, activities	More analytical; Examines processes	Mainly analytical; Concerned with Long Term outcomes
Specificity	Very specific, comparing a plan to its results	Also looks at processes	Less specific and considers external influences and events

conomic impact). Treatment efficacy can be measured at the individual and at the group level. Treatment effectiveness is measured as cost benefit and cost effectiveness of the programme to guide the allocation of resources. This type of evaluation uses a different methodology that is beyond the scope of this paper.

Programmes for the rehabilitation of torture victims vary enormously in the specific types of therapeutic interventions utilized, sizes of the target populations, duration of the rehabilitation process, clarity and specifications of goals, economic resources, professional and staff manpower, data collection capabilities, and communications skills of the staff (Amris and Arenas, 2003).

Consumer outcomes measure the “effect on a patient’s health status attributable to an intervention done by health professionals or health services”. In other words, they measure the anticipated benefits after the implementation of the programme (Andrews, 1994).

Donald et al. (2002) have three basic criteria for the development of outcomes. Outcomes should 1) be congruent with the evidence, 2) be relevant for the level of action and stated clearly and concisely, and 3) have face validity to stakeholders.

Ideally, a separate research staff would develop and monitor outcome evaluation for a given torture rehabilitation centre. However, this is not often practical. In most situations, measuring outcomes should be an integral part of the care. Practically, the assessment must be integrated into the daily routine care of clients in the programme, not as a separate evaluation research component. In addition, the measure of outcomes should be a part of a process that includes an analysis and reporting of the outcome data, as well as incorporating the information in order to improve the quality of the

care through education and training of the providers. This methodology routinely used in health care is called “Continuously Quality Development” and has been adopted as a national policy for the Regional Office for Europe of the World Health Organization (World Health Organization, 1993).

The best approach to evaluating the efficacy of the programme is a multidimensional, multidisciplinary measure of individual outcome. Another important area of evaluation and research is the perception that the participants in a programme have of the outcome of their interventions. Professionals (service providers) often have a different assessment than the survivors (consumers) in relation to parameters such as quality of life, symptoms, and social skills (Stedman et al., 1997; Amris and Arenas, 2003). Some possible outcome domains include symptom reduction, quality of life, level of function, coping and resilience, social support, client satisfaction, and cognitive ability.

In evaluation research, outcome measures may include the application of some known scales and instruments before and after intervention. There are many instruments that can be used in each of these areas of interest (See *Examples of instruments available page 128*). Several authors have defined some of the criteria for selecting a measurement or indicator for consumer outcome (Donald et al., 2002; Ciarlo et al., 1986; Green and Graceli, 1987; Andrews et al., 1994). Donald et al. (2002) have identified ten criteria to guide in the development of outcome indicators, which should be congruent with the evidence, relevant for the level of action, stated clearly and concisely, have face validity to stockholders, and be sensitive to changes over time, measurable, affordable, unique, and comprehensive.

The Consumer Outcome Project Advisory Group of the in Department of Mental Health and Family Services of Australia was created to review existing measures of consumer outcome. The group concluded that disability and quality of life were the most important outcomes to be measured, followed by consumer satisfaction and symptoms. The group recommended the further testing of six instruments as potentially useful for routine outcome measurements (Andrews et al., 1994): Consumer measures included BASIS 32 (Symptoms Identification Scales), MHI (Mental Health Inventory) and the SF-36 (Short Form Survey); Provider measurements included the HoNOS (Health of the Nations Outcomes Study), LSP (Life Skills Profile), and RFS (Role Function Scales). This is an example of how the Commonwealth Department approached this problem.

The choice of measurement instruments should be based on the specific objectives, outcomes, type of intervention implemented, and information needed, all of which will be unique to each programme.

Monzani et al. (2008) used the approach of the Australian Commonwealth Department to evaluate the effectiveness of community mental health departments in the Lombardy region of Italy. Twice a year they surveyed 4,712 patients treated in ten mental health departments using the HoNOS. Overall, the mental health departments were effective in reducing HoNOS scores, and the main predictor of improvement was treatment, although length of care, gender, and diagnosis were weaker predictors.

Many instruments that are both valid and reliable can be used in different circumstances.

There are also several publications that have analyzed the validity and reliability of each instrument and can be used for

reference in the selection of an instrument (Bowling, 1996; Bowling, 1997; Donald, 2002). Obviously, any outcome measure needs to be accepted by the professional staff and clients of the programme.

Instruments selected should be valid, reliable, standardized, translated and back-translated, and culturally equivalent. However, these criteria are rarely met and, as a result, centres find themselves compromising the ideal scientific standards.

After a measure has been selected and implemented for a defined period of time, it should be evaluated to decide if it fulfills the goals of the research evaluation. Some programmes implement outcome measurements but do not systematically analyze the data.

Research strategies

We have chosen to categorize the types of studies according to the classic text by Cook and Campbell (1979), as follows: *Descriptive*, *Experimental*, *Quasi-Experimental Pretest-Posttest* (One Group—including retrospective chart reviews; More than One Group Randomized; More than One Group Non-Randomized); *Qualitative* (Phenomenology; Ethnography; Grounded Theory).

Descriptive Studies

The purpose of a descriptive study is to delineate the facts and characteristics of a cohort of torture survivors. The study collects detailed factual information oriented to identify problems.

Most of the currently published torture literature is descriptive. A typical example is the study of Rasmussen on the medical aspects of torture. He describes, in the Danish Medical Bulletin (Rasmussen, 1990), the torture methods and their relationship to symptoms and lesions in 200 victims of torture.

In outcome descriptive studies the author gives the details of the design of the programme and the indicators that will be used to measure the efficacy of the services given to torture survivors. An example is the Impact Assessment Study by Amris, but only two components of the five-part study were done and published (Amris and Arenas, 2003; Amris and Arenas, 2005a, 2005b; Pedersen, 2005).

Experimental Design

The experimental design is the gold standard model to measure the efficacy of an intervention because the researcher is able to control most of the confounding variables that affect the internal validity of an outcome study. The typical experimental design requires a random assignment of the torture survivors to experimental and control groups. Only the experimental group receives treatment. Treated torture survivors are compared with a control group of torture survivors who have not received treatment.

Random Selection	Pretest	Treatment	Posttest
Experimental	O1	X	O2
Control	O1		O2

Torture rehabilitation programmes have generally concluded that is unethical to stop the treatment of a group of torture survivors to create a control group. Because of this limitation we have not found any papers in torture outcome literature that follow a true experimental design.

Quasi-Experimental Design

Because an experimental design is not possible for ethical reasons, the only alternatives are the quasi-experimental designs. The classical study on quasi-experimental design is the book "Quasi Experimentation" by Thomas Cook and Donald Campbell (1979).

The quasi-experimental designs will always compromise the internal or external validity of the research, and the researcher has to understand these limitations

One Group Pretest-Posttest Design

Most rehabilitation programmes have used a pre-post design in outcome studies of torture survivors. Generally a group of torture survivors without a control group is evaluated with some measurement instruments before (pre-test) and after (post-test) a period of treatment.

Pretest	Treatment	Posttest
O1	X	O2

Some studies have repeated the number of pre-test measurements as a way to use clients as their own control; for example, using two pre- and one post-measures collected at three time points.

Pretest	Treatment	Posttest
O1 O2	X	O3

More than One Group Pretest-Posttest:

Either Randomized or Non-Randomized

Another variation is dividing at random the torture population under study to different types of treatment or to a different intensity of treatment. One group receives a baseline care or usual care and the other (one or more groups) receives additional services. One avoids the ethical problem because all of them are treated. The researcher compares the outcomes among the groups.

Pretest	Treatment	Posttest
O1	X1	O2
O1	X2	O2

*More than One group Pretest-Posttest:
Non-Randomized Control Group*

In this situation you compare two groups that are as similar as possible and you treat only one of them. An example should be to compare a group of survivors treated in a center with a similar ethnic group in the population that has not been treated.

Pretest	Treatment	Posttest
O1	X	O2
O1		O2

Qualitative Studies

Qualitative Research seeks understanding of data that are complex and can be approached only in context. The methods used in qualitative studies are in the areas of Phenomenology, Ethnography and Grounded Theory.

Phenomenology is a descriptive, reflexive, interpretative mode of inquiry on the personal experience lived by a participant. The information is gathered with interviews or in-depth conversations that are audio-taped for further analysis.

Ethnography provides means for exploring cultural or smaller sub-cultural units. The information is gathered through participant observation, field notes, interviews, videotapes or secondary documents, such as records, documents. The focus group is another option.

Grounded Theory develops theories or a theoretical framework grounded in data. Questions are about changing experiences over time. The researcher uses audiotaped interviews, participant and non-participant observations, conversations, and field notes as sources of information.

Literature review

Nickerson et al. (2011) reviewed studies using two approaches to psychological treat-

ment of refugees: trauma-focused therapy (N= 10 with control group, N= 5 without control group) and multimodal interventions (N=4 without control group). Limitations included absence of or use of non-equivalent controls, small sample sizes, absence of post-treatment or long-term follow-up assessment, lack of blind assessment, restrictive inclusion criteria, and lack of clear delineation of treatment components. They concluded that additional rigorous research into the effectiveness of both modalities is needed in order to draw a firm conclusion. Crumlish and O'Rourke (2010) reviewed treatments evaluated with randomized, controlled methodology (N=10, total sample = 528) and found support for using narrative exposure therapy (NET) and cognitive behavioural therapy (CBT), although no treatment has a solid evidence base. Limitations included small sample size, variable trial quality (as rated with the Moncrieff scale,) rare use of power analysis, questionable minimization of bias, and infrequent use of culturally-validated outcome measures. Quiroga and Jaranson (2005), as part of a desk study reviewing the literature on torture rehabilitation from 1998 through 2004, initially reviewed 25 treatment outcome studies and were disappointed with the quality of most research. Dymi (2002), in a study at the University of Copenhagen and the IRCT intended to identify and compare methods of study suitable for analyzing treatment outcomes for rehabilitation of torture survivors, had previously reviewed outcome and related studies and reached a similar conclusion. He recommended that "the assessment of outcomes of rehabilitation treatment of torture survivors ought to make use of a combination of qualitative and quantitative studies designed in accordance with the pattern of actual services offered by the respective centres." (p. iv, abstract). Gurr and Quiroga

(2001), in the first desk study of torture rehabilitation literature until 1998, concluded that the effectiveness of available treatment programmes remained unproven. Measures differed across settings and changes could not be attributed to any single factor, including the intervention. Achievement of goals agreed upon by client and therapist was the best measure. Measurement of outcome was done by the service system, including management, supervisor, as well as individual therapists, and the client, family, and cultural group. Better scoring of severity would be helpful in detecting changes over time.

In this desk study, we have not only included the 25 studies in Quiroga and Jaranon (2005) but added more than 45 additional and more recent studies for a total of more than 70. Other ways of categorizing are important, such as whether the sample is entirely torture survivors or traumatized refugees (which may include survivors), clinical or non-clinical, and U.S. or worldwide. The studies can be longitudinal or cross-sectional and can either demonstrate improvement or no improvement.

The organization of these studies in this desk study is first by torture survivors vs. traumatized refugees (which may also include torture survivors). Secondly, the studies are organized by research design in clinical samples. Within each subsection, the studies are arranged alphabetically by the primary author. Finally, fifteen studies which assess symptomatology in untreated populations are summarized.

Torture survivorst

Descriptive

Alexander et al. (2007) described symptoms of anxiety, depression and PTSD among Bosnian (n=17) and Colombian (n=17) torture survivors served by the Florida Center for Survivors of Torture, a programme of

Gulf Coast Jewish Family Services, Inc. Information from clients enrolled in the programme for six months or more was collected over a 14-month period in order to better prioritize and design services for the two distinct populations. On average, the Bosnians in this sample experienced torture approximately 14 years ago, six years ago for the Colombians. Types of torture experienced by clients were documented using HURIDOCS and the number of family and friends affected by extreme trauma were counted. Employment and education levels were also identified. Findings showed that 100% of Bosnians were symptomatic for depression and over half experienced symptoms of PTSD compared to 35% of Colombians for depression and 18% for PTSD, despite the differences in years since the trauma occurred. High incidences of torture experienced by Bosnian clients and high numbers of family and friends affected support the high rates of symptoms. For the Colombian clients, high rates of employment and years of education, as well as earlier intervention, may contribute to their lower rates of symptoms. The two client groups are distinguished by the unique circumstances experienced by each, including punctuated wartime versus a prolonged insurgency, as well as the refugee versus asylum seeker experience. This exploratory project informs the torture treatment model while recognizing the importance of ethnic, political and cultural perspectives affecting the healing process.

Amris and Arenas (2003): The first phase of the Impact Assessment Study conducted by the International Rehabilitation Council for Torture Victims (IRCT) was an exploratory study of four centres to find the perception of torture and rehabilitation in different cultural settings by health professionals and by clients. The results of the first

phase showed that all programmes used a multidisciplinary approach in the assessment and treatment of the clients, but the clinical practice and priorities varied, reflecting the professional profile and composition of staff across centres. The programmes used a broad spectrum of theories, methods, and treatment approaches. The clients had very concrete expectations of treatment such as pain relief, improved physical function, improved relationships with their families and interpersonal relationships within the community, and the capacity to return to work and provide for the family. Across centres the clients expressed satisfaction with the support, treatment, and rehabilitation they were provided. Only the first of five planned phases of the Impact Assessment Study was completed. Figure 1 on the opposite page shows the overall plan.

The U.S. Office for Refugee Resettlement (ORR) has required the 27 torture treatment programmes that it funds to collect 17 descriptive data points, as follows:

17 Data points collected at intake as required by the U.S. Office for Refugee Resettlement (ORR)

Data Point

1. Client's self-reported age when first subjected to torture
2. Type of torture suffered
3. Primary complaint/presenting problem
4. Client's sex
5. Immigration status at intake
6. Age at intake
7. Employment status at intake
8. Date of arrival in the U.S.
9. Country of origin
10. Ethnicity
11. Religion
12. Housing status at intake
13. Total number of clients
14. Number of clients by service category (medical, mental health, social, legal)

15. Number of community trainings held
16. Number of people trained by profession
17. Number of hours contributed by pro bono service

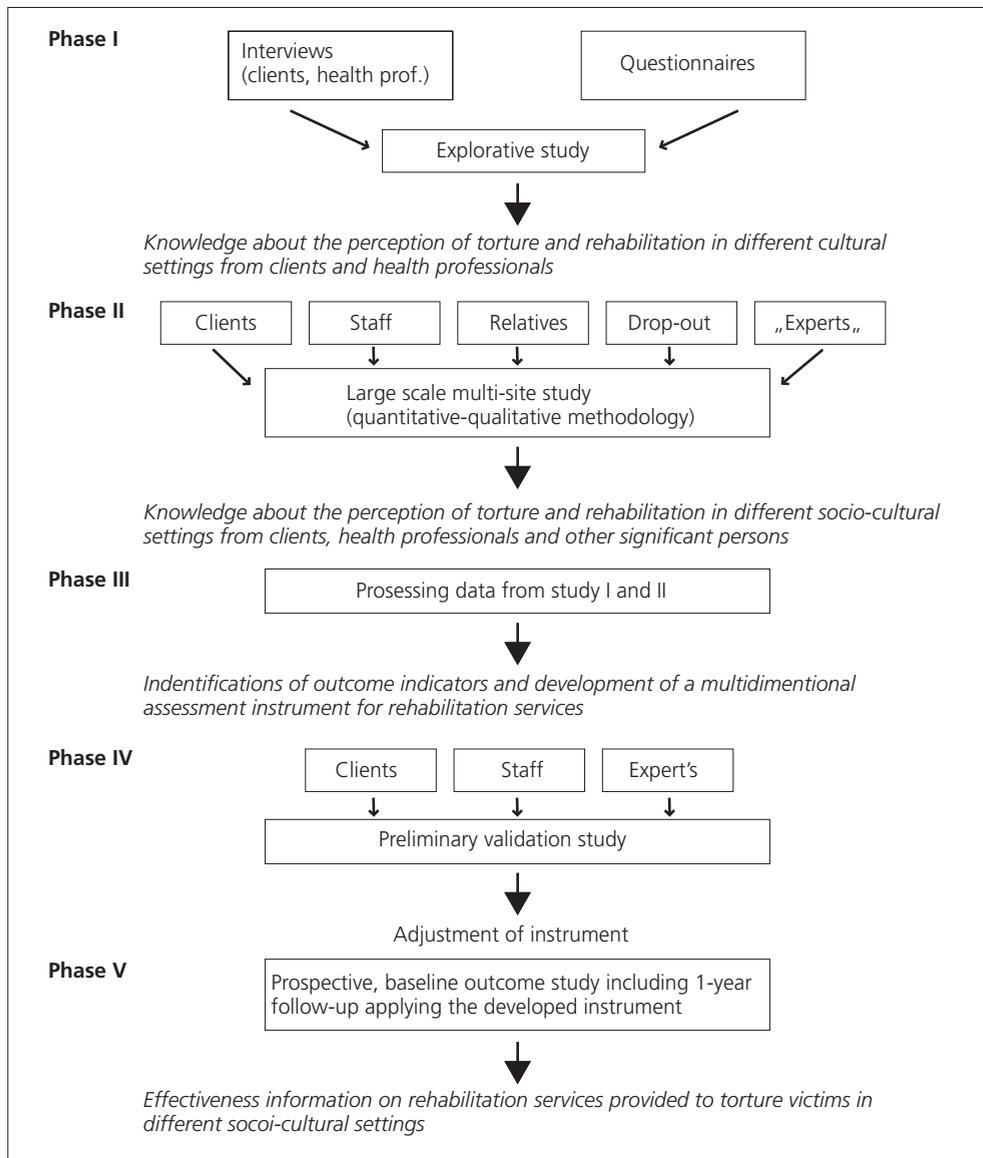
Eventually, ORR hopes to assess outcomes but is using this basic data collection as a first step.

Quasi-experimental:

One group pretest-posttest

Agger et al. (2009) tested the testimonial method, which represents a brief cross-cultural psychosocial approach to trauma, relatively easy to master in developing countries where torture is perpetrated and there are few resources for the provision of therapeutic assistance to the survivors. The method was first described in Chile by Cienfuegos and Monelli (1983) and has since been used in many variations in different cultural contexts. In this project the method was supplemented by culture-specific coping strategies (meditation and a ceremony). A pilot training project was undertaken between Rehabilitation and Research Centre for Torture victims (RCT) in Copenhagen, Denmark, and People's Vigilance Committee for Human Rights (PVCHR) in Varanasi, India, to investigate the usefulness of the testimonial method. The project involved the development of a community-based testimonial method, training of twelve PVCHR community workers, the development of a manual, and a monitoring and evaluation system comparing results of measures before the intervention and two to three months after the intervention. Twenty-three victims gave their testimonies under supervision. In the two first sessions the testimony was written and in the third session survivors participated in a delivery ceremony. Human rights activists and community workers interviewed the survivors about how they

Figure 1. Five Phases of the impact of assessment study.



felt after the intervention. After testimonial therapy, almost all survivors demonstrated significant improvements in overall WHO-five Well-being Index (WHO-5) score. Four out of the five individual items improved by

at least 40%. Items from the International Classification of Functioning, Disability and Health (ICF) showed less significant change, possibly because the questionnaire had not been well understood by the community

workers, or due to poor wording, formulation and/or validation of the questions. All survivors expressed satisfaction with the process, especially the public delivery ceremony, which apparently became a turning point in the healing process. Seemingly, the ceremonial element represented the necessary social recognition, re-connected the survivors with their community, and ensured that their private truth became part of social memory. Although this small pilot study without control groups or prior validation of the questionnaire did not provide high-ranking quantitative evidence or statistically significant results for the effectiveness of this version of the testimonial method, we did find it likely that it helps improve well-being in survivors of torture in this particular context. A more extensive study is needed to verify these results, and better measures of ICF activities and participation functions should be used. Interviews with human rights activists revealed that it is easier for survivors who have gone through testimonial therapy to give coherent legal testimony.

Birck (2001) used standardized instruments and interviews to assess symptom change after two years of psychotherapy with 30 former patients at the Treatment Centre for Torture Victims (BZFO) in Berlin, Germany. Although intrusive PTSD symptoms had decreased, former patients were still highly symptomatic. Birck attributes this high symptom level to the phasic course of PTSD, which can be exacerbated by post-treatment stressful events.

Boehnlein et al. (1985) characterized the symptoms of PTSD one year after the first clinic visit, when the diagnosis was made for Cambodian concentration camp survivors at the Indochinese Refugee Clinic (now the Intercultural Psychiatric Clinic) in Portland, Oregon. Patients received pharmacologic and supportive therapy. At one year, two of

the 12 patients dropped out of treatment. Using the DIS, five of the 12 no longer met criteria for PTSD and three had improved symptoms (including one dropout), three were unchanged, and one had become worse (the other dropout). Improvement was especially noted in the intrusive symptoms of PTSD.

Carlsson (2005) studied changes in symptoms of PTSD, depression, anxiety and quality of life over time and identified factors associated with mental health and health-related quality of life (QOL) of survivors treated at Rehabilitation and Research Centre (RCT) in Copenhagen, Denmark. (Carlsson JM, et al., 2006a; Carlsson JM, et al., 2005; Carlsson J, et al., 2006b). A concurrent cohort study interviewed 86 refugees attending a pre-treatment assessment at RCT in 2001-02, and 68 of them at 9 month follow-up (t9). The historical cohort study in 2002-03 included 151 of the 232 refugees attending a pre-treatment assessment at RCT in 1991-94. In both studies, mental health sequelae and poor QOL persisted even many years after exposure to torture. High emotional distress was associated with low QOL. No changes were found between the initial and the 9 month follow-up for the concurrent cohort, although the historical cohort (10 year follow-up) showed a slight decrease in psychiatric symptoms. High emotional distress was associated with low quality of life. Factors associated with emotional distress and low QOL were a large number of torture methods, lack of current occupation, and minimal social contacts. The concurrent cohort was also followed up at 23 months (t23) (Carlsson, 2008). There was an improvement in mental symptoms from t9-t23 (except for HSCL-depression). Still high levels of mental health problems persisted and no improvement in quality of life from t9-t23 was demonstrated.

No consistent findings of predictors of changes in psychiatric symptoms and quality of life were found.

Cienfuegos and Monelli (1983), in perhaps the earliest attempt to study outcome of torture survivors, studied 39 tortured Chilean ex-prisoners and others from Chile who suffered trauma but not torture. The best results were found in those who were tortured (12 of 15 improved).

Curling (2005) explored the effectiveness of the use of an empowerment workshop, called Free to Grow1 (FTG), in the treatment of a group of torture survivors who had shown great reluctance to enter into psychotherapeutic interventions. Research into the effectiveness of the method was assessed using a series of tests measuring changes in empowerment, depression, anxiety and multiple operational definitions of health. Participants were also asked for feedback using an unstructured self-report upon completion of the workshop. In addition, an exit interview was conducted after follow-up, five months after the first workshop session. Certain trends were detected despite the small numbers of participants (N=11) and incomplete questionnaires. According to most of the measures used, the intervention proved to have a positive sustained impact. At the exit interview all of the participants acknowledged experiencing increased levels of introspection and self-awareness, as well as a degree of growth and positive change. As a result, many participants were able to enter more mainstream psychotherapeutic interventions to deal with their remaining psychological and interpersonal problems.

Elsass (1998) interviewed 20 torture survivors from the Middle East and their therapists from the Rehabilitation and Research Centre for Torture Victims (RCT) in Copenhagen, Denmark. Although this study was much more complicated than reported here,

quantitative and qualitative outcome three months after the end of treatment found that 17 of 20 survivors evaluated treatment results as extremely positive.

Gangsei, Jaranson, et al. (1996, unpublished) at Survivors of Torture-International, San Diego, interviewed 26 asylum-seekers (12 women, 14 men) newly-admitted to San Diego center under a project funded by the California Endowment to improve access to medical services for torture survivors. Average age was 32 years with a range of 18 to 68. Participants received an average of 16 different services. Clients identified the number and severity of psychological and physical health problems and the difficulties these caused in work, daily activities, outside activities, and relationships with others. After receiving services, clients again rated themselves on the same scales. Significant improvement in psychological and physical function and reduction in level of disability was found. Overall satisfaction was extremely high (3.8 of 4.0). Half of the sample was granted asylum and showed far greater post-test improvement, despite starting with more problems.

Halvorsen and Stenmark (2010) presented data on 16 torture survivors receiving 10 sessions of narrative exposure therapy (NET). Symptoms of PTSD and depression, assessed by Clinician-Administered PTSD Scale (CAPS) and Hamilton Rating Scale for Depression (HRSD), decreased significantly from pre-treatment to 6-month follow-up, with Cohen's *d* effect sizes of 1.16 and 0.84, respectively. Although treatment gains were moderate, further research on evidence-based treatments for PTSD and depression in refugee torture survivors is warranted.

Jaranson et al. (1995, unpublished) reviewed the charts of 220 clients at the Center for Victims of Torture (CVT) in

Minneapolis, Minnesota. Using independent clinician evaluators, overall 64% showed improved function, 35% were unchanged, and 3% declined. Of those who completed treatment, 86% showed improvement, while only 39% of those who left treatment prematurely showed improvement within the five-year study period (1991-95).

McCull et al. (2010) have presented the results of the IRCT's (International Rehabilitation Council for Torture Victims) Global Health Project. This project partnered five IRCT network rehabilitation centres (in Gaza, Egypt, Mexico, Honduras, and South Africa) working in very different contexts. The project provided local and regional training, facilitated knowledge exchange between centres, implemented psychotherapeutic treatment, and collected data to evaluate the interventions. In 2008, data from 306 patients and/or their records was collected, but 48% dropped out before the three month assessment and an additional 20% before the six month assessment, leaving 97 (32%) torture survivors to complete all three assessments. A high level of traumatic events was experienced (e.g. 64% with head trauma, 24% with ongoing torture injury problems), resulting in high prevalence of anxiety, depressive, PTSD, and somatic symptoms. Results indicated a modest drop in symptoms over the six months of the study.

Musisi et al. (2000) conducted a three-year (1996-99) retrospective study of 310 patients attending the Centre for Treatment and Rehabilitation of Torture Victims (ACTV) in Kampala. Treatment included psychotherapy, physiotherapy, and minimal pharmacotherapy. There was a significant reduction in symptoms with treatment in most cases, but minimal improvement in some.

Reeler and Mbape (1998) found in a pilot study at Amani Foundation in Zim-

babwe that 12 adults torture survivors who completed brief psychotherapy showed improvement, using the Clinician Administered PTSD Scale (CAPS).

Samsøe et al. (2007) monitored an extended, personally designed, multidisciplinary treatment of 21 torture victims, earlier exposed to both physical and psychological torture, over nine months with assessment of outcome. The physiotherapy comprised elements such as massage, exercise on land, balance training and stimulation of proprioception, all aiming at regaining body awareness. The effect of treatment was measured using the fibrositis index. Non-parametric statistics using the Wilcoxon test was applied. Prior to treatment the median score of the fibrositis index was 15 points (range 2-34). After nine months of multidisciplinary treatment the median score of the fibrositis index was 2 points (range 0-15). This decrease in experienced muscle pain was statistically significant ($p < .0001$). Following nine months of treatment, only one torture victim in the study could be classified as suffering from fibromyalgia when applying the fibrositis index.

Quasi-experimental: More than one group pretest-posttest non-randomized

Neuner et al. (2010) evaluated whether stressors caused by the asylum procedure and psychological consequences of torture contribute to the maintenance of PTSD symptoms and interfere with treatment. In a pilot randomized controlled trial, the authors examined the efficacy of trauma-focused treatment in 32 asylum-seekers with PTSD resulting from state-sponsored violence and other traumatic events. Narrative exposure therapy (NET) was compared with treatment as usual (TAU), with a focus on stabilization and psychoactive medication. Six months after treatment, a significant

reduction of posttraumatic stress symptoms was found in the NET participants but not in the TAU group. Although treatment gains were moderate, these results indicate that NET is a promising approach for the treatment of PTSD in asylum-seekers living in unstable conditions.

Tol et al. (2009) examined the effectiveness of brief multi-disciplinary treatment for low-income torture survivors in Nepal using a naturalistic comparative design with help-seeking torture survivors and internally displaced persons assigned to a treatment and a comparison group respectively (N = 192; treatment group N = 111, comparison group N = 81). Baseline measurements on psychiatric symptomatology, disability, and functioning and a five-month follow-up (N = 107; treatment group N = 62; comparison group N = 45), were employed. Intervention consisted of brief psychosocial services, minimal medical services and/or legal assistance. Study groups were generally comparable and non-completers did not significantly differ from completers. The treatment group improved more than the comparison group on somatic symptoms, subjective well-being, disability and functioning, with mostly moderate effect sizes. Treatment was therefore moderately effective, reducing the nonspecific mental health consequences of torture, but disability scores remained high. For clients presenting with more severe mental health problems, other treatments in the resource-poor Nepali context need to be sought.

Qualitative

Moio (2008) conducted a qualitative approach to examine the consequences of state sponsored torture as experienced and made meaningful by women refugee survivors. In-depth interviews explored how women felt about life after torture: the meaning of the

experience over time, the personal, psychological, and social effects, what was helpful to healing, and their outlook on the future. Findings indicated that the overwhelming majority of participants demonstrated resiliency in response to external forces that challenged their internal coherence, systems of belief, and their re-adjustment in the aftermath of torture and forced migration experiences. Results also showed that women were capable of resiliency by using pro-active problem solving, making decisions, and carrying out plans while still suffering distress. None of the women initially conceptualized their suffering as illness. Approximately half of the participants embraced their diagnoses of PTSD and depression after exposure to therapy. The other half remained skeptical of medicalizing their distress and took an instrumental approach for the purposes of managing symptoms. Most women found the therapeutic relationship helpful to healing because it provided a trustworthy, skilled individual who encouraged and believed in their testimony and taught them practical skills. Participants overwhelmingly preferred working exclusively with women, whether in individual or group settings. Those participating in women's group therapy reconstituted the clinical environment into a social space promoting community for sharing gender-specific knowledge and mutual support. Implications for social work with survivors are discussed; contributions to the controversy over the validity and efficacy of PTSD for survivors of state sponsored torture are also discussed (<http://gradworks.umi.com/33/46/3346914.html> Retrieved 8/28/2010).

Traumatized refugees

Descriptive

Grodin et al. (2008) seek to explore the potential value of Qigong and T'ai Chi practice

as a therapeutic intervention to aid in the treatment of survivors of torture and refugee trauma. The common effects of torture and refugee trauma are surveyed with a focus on post-traumatic stress disorder. An alternative theoretical framework for conceptualizing and healing trauma is presented. Evidence is reviewed from the scientific literature that describes how Qigong and T'ai Chi have been used in studies of the general population to alleviate symptoms that are also expressed in torture survivors. Observations are presented from a combined, simplified Qigong and T'ai Chi intervention with a convenience sample of four refugee survivors of torture. Preliminary observations from four cases and a review of the literature support the potential efficacy of incorporating Qigong and T'ai Chi into the treatment of survivors of torture and refugee trauma.

Mueller et al. (2010) studied the mental health of failed asylum seekers (N = 40) and a matched sample of asylum seekers (N = 40). Asylum seekers and refugees often suffer from severe psychopathology in the form of post-traumatic stress disorder (PTSD). Since PTSD impacts memory functions, and because asylum applications rely on personal accounts, asylum seekers with PTSD are at greater risk of rejection than refugees. Participants were administered structured interviews on sociodemographics, flight, and exile as well as standardized questionnaires on PTSD, anxiety, depression and pain. Both samples were severely affected: >80% exhibited at least one clinically significant condition. Given the great vulnerability of these individuals, the long and unsettling asylum processes as practised in western host countries appears problematic, as does the withdrawal of health and social welfare benefits. Finally, high rates of psychopathology amongst failed asylum seekers indicates that refugee and humanitarian decision-

making procedures may be failing to identify those most in need of protection.

Pantic (1998) discussed integrative gestalt group therapy for Bosnian children and their families, helping them to overcome their problems, avoid long-term sequelae, and reach acceptance of their experiences in a search for meaning and identity.

Schwail and Rasras (2002) of Palestine conducted a cognitive behavior group primarily of survivors of torture in Israeli prisons or otherwise traumatized by Israelis. A psychotherapist and co-therapist conducted the group. The authors comment that their patients were more likely to accept education or counseling than to focus on the trauma, but many members disclosed their traumatic histories. Of the twelve group members, eight reported benefit and four were partially improved.

Quasi-experimental:

one group pretest-posttest

Abdalla and Elklit (2001) of the Danish Red Cross developed a psycho-educational project for 490 Kosovar refugee children. Intrusive memories and hypervigilance decreased, while self-satisfaction increased significantly.

Boehnlein et al. (2004) assessed treatment outcome by chart review in 23 Cambodian refugee patients with PTSD, all of whom had been treated continuously for at least ten years at the Intercultural Psychiatric Program in Portland, Oregon. Using symptom, disability, and quality of life instruments, thirteen were improved, but the remaining ten were still impaired.

Brune et al. (2002) reviewed 141 charts of consecutively treated refugees in Hamburg, Germany, finding that a firm belief system was an important predictor for better therapy outcome. Psychotherapy ranged from 3 months to 6 years with a mean of 2 years.

Eklblad and Roth (1997) tested the assessment of PTSD and associated symptoms for immigrants and refugees at a psychiatric outpatient clinic in Sweden. Thirty-three were assessed at baseline, 22 at follow-up in one year using the SCID, HTQ, and HSCL-25. No changes were found in PTSD or depression.

Farrag et al. (2007) aimed to evaluate the effectiveness of the psychosocial rehabilitation approach in helping clients with their mental health problems. The study compared the scores on tests for anxiety, depression and post-traumatic stress disorder obtained by a sample of 38 torture survivors before and after receiving services.

Folkes (2002) evaluated 31 refugee and immigrant clients' retreatment, then again after 30 days. A significant decrease in all symptom subgroupings of PTSD was found.

Goodkind (2002) studied the effect of building upon Hmong refugee strengths, experiences, and interests, finding that this was effective in increasing quality of life and English proficiency, while decreasing distress levels.

Goodkind (2005) assessed the effectiveness of a community-based advocacy and learning intervention for Hmong refugees using a comprehensive, multi-method strategy, which included a within-group longitudinal design with four data collection points and in-depth qualitative recruitment and post-intervention interviews. The intervention's impact on five aspects of refugee well-being was examined: participants' psychological well-being, quality of life, access to resources, English proficiency, and knowledge for the U.S. citizenship exam. Twenty eight Hmong adults and 27 undergraduate students participated together in the intervention, which had two major components: (1) Learning Circles, which involved cultural exchange and one-on-one learning

opportunities for Hmong adults, and (2) an advocacy component that involved undergraduates advocating for and transferring advocacy skills to Hmong families to increase their access to resources in their communities. Undergraduate paraprofessionals and Hmong participants worked together for six to eight hours per week for six months. Growth trajectory analysis revealed promising quantitative findings. Participants' quality of life, satisfaction with resources, English proficiency, and knowledge for the U.S. citizenship test increased and their levels of distress decreased over the course of the intervention. Mediating analyses suggested that participants' increased quality of life could be explained by their improved satisfaction with resources. Qualitative data helped to support and explain the quantitative data, as well as providing insight into other outcomes and processes of the intervention. Policy, practice, and research implications are discussed.

Goodkind (2006) studied refugees who resettle in a new country and face numerous struggles, including overcoming past traumas and coping with post-migration stressors, such as lack of meaningful social roles, poverty, discrimination, lack of environmental mastery, and social isolation. Thus, in addition to needing to learn concrete language skills and gain access to resources and employment, it is important for refugees to become a part of settings where their experiences, knowledge, and identity are valued and validated. The Refugee Well-Being Project (RWBP) was developed to promote the well-being of Hmong refugees by creating settings for mutual learning to occur between Hmong adults and undergraduate students. The RWBP had two major components: (1) Learning Circles, which involved cultural exchange and one-on-one learning opportunities, and (2) an advocacy compo-

ment, which involved undergraduates advocating for and transferring advocacy skills to Hmong families to increase their access to resources in their communities. The project was evaluated using a mixed quantitative and qualitative approach. This article discusses data from qualitative interviews with participants, during which the importance of reciprocal helping relationships and mutual learning emerged as significant themes.

Halcón et al. (1995; 2010, in press) found that groups of Somali and Oromo (Ethiopian) women responded positively to the health realization model of intervention. The health realization model is a community-oriented, psycho-educational intervention that shows promising results in a variety of settings and populations including high risk and traumatized individuals and groups. Based on a resiliency framework, this intervention assists people to put intrusive thoughts into a manageable perspective and improve their daily functioning through learning a process of thought recognition. (Related publication: Halcón et al., 1997).

Hermansson et al. (1996; 2002) investigated mental health over time in exile and explored variables related to mental health in war-wounded male refugees admitted for somatic care in Sweden for greater than four weeks. Measures included a well-being scale, HSCL-25, and PTSS-10. At baseline $N=61$ and follow-up $N=54$ and $N=44$, no improvement was found in well-being, but prevalence of PTSD was estimated at 50%.

Hinton et al. (2006) described for Vietnamese refugees (a) how headache- and orthostasis-focused panic attacks are generated, (b) a culturally sensitive treatment for PTSD with comorbid headache- and orthostasis-focused panic attacks, and (c) the outcome of a treatment series. In a multiple-baseline, across-subjects design ($N = 3$), all patients demonstrated treatment-related

improvement of headache- and orthostasis-associated panic attacks and in the repeated-measures, within-subjects design, all patients greatly improved across treatment on measures of psychopathology.

Jorgensen et al. (2010) used the International Classification of Functioning, Disability and Health (ICF) to develop an interdisciplinary instrument consisting of a Core Set, a number of codes selected from ICF, to describe the overall health condition of traumatized refugees. The authors intended to test 1) whether this tool could prove suitable for an overall description of the functional abilities of traumatized refugees before, during, and after the intervention, and 2) whether the Core Set could be used to trace a significant change in the functional abilities of the traumatized refugees by comparing measurements before and after the intervention. In 2007, eight rehabilitation centres for traumatized refugees in Denmark agreed on a joint project to develop a tool for interdisciplinary documentation and monitoring, including physical, mental and social aspects of the person's health condition. Seven centers completed the project. The project selected a Comprehensive Core Set of 106 codes among 1,464 possible codes used by an interdisciplinary group of international and national experts in rehabilitation of traumatized refugees. The Comprehensive Core Set was furthermore reduced to a Brief Core Set of 32 codes. Six clients who fulfilled the inclusion criteria were randomly selected from each center. All were scored within a four week period after the start, before any intervention was initiated, and up to a month after the first scoring. The results from this project led to the conclusion that it is possible to develop an instrument based on the ICF classification. The instrument is useful for a general description of the total health conditions

(physical and mental functional ability as well environmental impact) of traumatized refugees. The tool helps to describe changes in the functional abilities used in connection with the preparation of the plan of action. The ICF Core Set for traumatized refugees has not yet been validated.

Kivling-Boden and Sundbom (2001, 2002) investigated the self-rated post-traumatic symptom levels compared with baseline and the subjects' life situations, emphasizing the relationship between the labor market, social contacts, and knowledge of Swedish. Subjects were traumatized refugees from the former Yugoslavia seen as outpatients at a psychiatric unit in Sweden for a minimum of a month. Twenty-seven of the initial 52 were followed-up at three years and completed the HTQ at baseline and follow-up, and a clinical interview for PTSD at baseline. No difference in PTSD symptom scores or diagnosis of PTSD were found, but unemployment, social isolation, and dependence upon social welfare were associated with PTSD symptoms at follow-up. On follow-up, social welfare dependence was high and unemployment at 32% was six fold the mainstream Swedish labor force. Positive factors were housing and a reasonable knowledge of the Swedish language.

Mollica et al. (1990) evaluated changes in symptoms and perceived distress of 21 Cambodian, 13 Hmong/Laotian, and 18 Vietnamese patients in Boston before and after a 6-month treatment period. Most patients improved significantly, with Cambodians having the greatest and Hmong/Laotians the least reductions in depressive symptoms. Although psychological symptoms improved, many somatic symptoms worsened.

Onyut et al. (2005) created and evaluated the efficacy of KIDNET, a child-friendly version of Narrative Exposure Therapy (NET), as a short-term treatment for

children. Six Somali children suffering from PTSD aged 12–17 years resident in a refugee settlement in Uganda were treated with four to six individual sessions of KIDNET by expert clinicians. Symptoms of PTSD and depression were assessed pre-treatment, post-treatment and at nine months follow-up using the CIDI Sections K and E. Important symptom reduction was evident immediately after treatment and treatment outcomes were sustained at the 9-month follow-up. All patients completed therapy, reported functioning gains and were helped to reconstruct their traumatic experiences into a narrative with the use of illustrative material. NET may be safe and effective to treat children with war related PTSD in the setting of refugee settlement in developing countries.

Stepakoff et al. (2006) described, for Liberian and Sierra Leonean survivors of torture and war living in the refugee camps of Guinea, a psychosocial programme (1999–2005) with three main goals: (a) to provide mental health care, (b) to train local refugee counselors, and (c) to raise community awareness about war trauma and mental health. Utilizing paraprofessional counselors under the close, on-site supervision of expatriate clinicians, the treatment model blended elements of western and indigenous healing. The core component consisted of relationship-based supportive group counseling. Clinical interventions were guided by a three stage model of trauma recovery (safety, mourning, reconnection), which was adapted to the realities of the refugee camp setting. Over 4,000 clients were provided with counseling and an additional 15,000 were provided with other supportive services. Results from follow-up assessments indicated significant reductions in trauma symptoms and increases in measures of daily functioning and social support during and after participation in groups.

Weine et al. (1998) studied 20 Bosnian refugees in Chicago before and after receiving testimony psychotherapy, and at two and six months. The authors found significant decreases in PTSD diagnosis and symptom severity, depressive symptoms, and increased Global Assessment of Function (GAF) scores at post-treatment, with additional effect on follow-ups. This is the first known study to use standardized instruments to evaluate the efficacy of a psychological treatment for a group of refugees with PTSD.

Quasi experimental:

more than one group pretest-posttest randomized Bolton et al. (2007) assessed, from May-December, 2005, the effect of locally feasible interventions on depression, anxiety, and conduct problems among 314 adolescents, ages 14-17, who had survived war and displacement. In two camps for internally displaced persons in northern Uganda, locally developed screening tools assessed the effectiveness of interventions in reducing symptoms of depression and anxiety, ameliorating conduct problems, and improving function among those who met study criteria and were randomly allocated (N = 105, psychotherapy-based intervention [group interpersonal psychotherapy]; N = 105, activity-based intervention [creative play]; N = 104 wait-control group [individuals wait-listed to receive treatment at the study's end]). Intervention groups met weekly for 16 weeks. Participants and controls were reassessed at the end of study. Primary outcome measure was a decrease in score (denoting improvement) on a depression symptom scale. Secondary measures were improvements in scores on anxiety, conduct problem symptoms, and function scales. Depression, anxiety, and conduct problems were assessed using the Acholi Psychosocial Assessment Instrument with a minimum score of 32

as the lower limit for clinically significant symptoms (maximum scale score, 105). Differences in change of the adjusted mean score for depression symptoms between group interpersonal psychotherapy and control groups was 9.79 points (95% confidence interval [CI], 1.66-17.93). Girls receiving group interpersonal psychotherapy showed substantial and significant improvement in depression symptoms compared with controls (12.61 points; 95% CI, 2.09-23.14). Improvement among boys was not statistically significant (5.72 points; 95% CI, -1.86 to 13.30). Creative play showed no effect on depression severity (-2.51 points; 95% CI, -11.42 to 6.39). There were no statistically different improvements in anxiety in either intervention group. Neither intervention improved conduct problems or function scores.

Dybdahl (2001) studied 42 mother-child dyads internally displaced in Bosnia-Herzegovina randomly assigned to psychosocial support with basic medical care compared with 45 dyads receiving only medical care. The treatment group showed positive effects on mothers' mental health, children's weight gain, and measures of children's psychosocial functioning and mental health.

Drozdek (1997) studied a sample of 120 male concentration camp survivors from Bosnia-Herzegovina in Dutch asylum centres given early outpatient treatment for PTSD for six months. Three treatment groups (group therapy, medications, combination group therapy and medications) and two control groups (refused treatment, did not meet PTSD diagnosis). Fifty randomly chosen subjects from the initial 120 were retested at the end of treatment and at three years. No differences were found among the treatment groups. The author concluded that treatment was effective in the short-term, less so in the long-term.

Neuner et al. (2004) studied the use of

narrative exposure therapy (NET), a short-term approach based on cognitive-behavioral and testimony therapy, and evaluated the efficacy of NET in a randomized controlled trial. Sudanese refugees living in a Ugandan refugee settlement (N = 43) and diagnosed as suffering from posttraumatic stress disorder (PTSD) received either four sessions of NET, four sessions of supportive counseling (SC), or psychoeducation (PE) completed in one session. One year after treatment, only 29 percent of the NET participants but 79 percent of the SC group and 80 percent of the PE group still fulfilled PTSD criteria. These results indicate that NET is a promising approach for the treatment of PTSD for refugees living in unsafe conditions.

Neuner et al. (2008) examined whether trained lay counselors could carry out effective treatment of posttraumatic stress disorder (PTSD) in refugee settlement. In a randomized controlled dissemination trial in Uganda with 277 Rwandan and Somali refugees diagnosed with PTSD, the authors investigated the effectiveness of psychotherapy administered by lay counselors. Strictly manualized narrative exposure therapy (NET) was compared with more flexible trauma counseling (TC) and a no-treatment monitoring group (MG). Fewer participants (4%) dropped out of NET treatment than TC (21%). Both active treatment groups were statistically and clinically superior to MG on PTSD symptoms and physical health but did not differ from each other. At follow-up, a PTSD diagnosis could not be established anymore in 70% of NET and 65% TC participants, whereas only 37% in MG no longer met PTSD criteria. Short-term psychotherapy carried out by lay counselors with limited training can be effective to treat war-related PTSD in refugee settlement.

Paunovic and Ost (2001) conducted the

first known randomized psychological treatment outcome study with a refugee sample. Six out of 20 were torture survivors. Both treatments showed large improvements on measures of PTSD, anxiety, depression, quality of life and cognitive schemas before and after treatment, and at six month follow-up. No difference between CBT and exposure therapy was found.

Quasi experimental:

more than one group pretest-posttest non-randomized

Arcel et al. (2003) studied two groups of internally displaced Bosnia torture survivors at the Centre for Torture Victims, Sarajevo. The first group (N = 65) was assessed from 1997-99, or two to four years after the end of the war in December 1995. The second group (N = 26) was assessed in 2000-01 or five to six years after the end of the war. Group 1 (N = 65), (three months pre to post assessment) was assessed two to four years after the war and Group 2 (N = 26), five to six years after the war. Both groups received intensive short-term treatment, Group 1 for three months, Group 2 for six months. Group 1 showed post-test improvement on almost all psychological symptoms, but Group 2, with longer treatment, had even more improvement except for depressive symptoms. Improvement in adaptive coping mechanisms occurred even with the shorter treatment.

Fox et al. (1998) evaluated home visits conducted with follow-up at 10, 20, and 33 weeks by school nurses and bilingual teachers to Southeast Asian refugee women in the U.S. For comparison, women who did not receive the home visits were twice evaluated for mental health status ten weeks apart. Home visits reduced depression for subjects compared with controls.

Hinton et al. (2004) examined the feasi-

bility, acceptability, and therapeutic efficacy of a culturally adapted cognitive-behavior therapy (CBT) for twelve Vietnamese refugees with treatment-resistant PTSD and panic attacks. These patients were treated in two separate cohorts of six with staggered onset of treatment. Repeated measures, Group X Time ANOVAs and between-group comparisons, indicated significant improvements with large effect sizes (Cohen's *d*) for all outcome measures: Harvard Trauma Questionnaire (HTQ; *d* = 2.5); Anxiety Sensitivity Index (ASI; *d* = 4.3); Hopkins Symptom Checklist-25 (HSCL-25), anxiety subscale (*d* = 2.2); and Hopkins Symptom Checklist-25, depression subscale (*d* = 2.0) scores. The severity of culturally related headache-and orthostasis-cued panic attacks improved significantly across treatment.

Hinton et al. (2005) examined the therapeutic efficacy of a culturally adapted cognitive-behavior therapy for Cambodian refugees with treatment-resistant posttraumatic stress disorder (PTSD) and comorbid panic attacks using a cross-over design, with 20 patients in the initial treatment (IT) condition and 20 in delayed treatment (DT). Repeated measures indicated significantly greater improvement in the IT condition, with large effect sizes (Cohen's *d*) for all outcome measures: Anxiety Sensitivity Index (*d* = 3.78), Clinician-Administered PTSD Scale (*d* = 2.17), and Symptom Checklist 90-R subscales (*d* = 2.77). Likewise, the severity of culturally-related neck-focused and orthostasis-cued panic attacks, including flashbacks associated with these subtypes, improved across treatment.

Igreja et al. (2004) examined the effectiveness and feasibility of a testimony method to ameliorate post-traumatic stress symptoms. Participants (*n*=206) belonged to former war zones in Mozambique. They were divided into a case (*n*=137) and a

non-case group (*n*=69). The case group was randomly divided into an intervention (*n*=66) and a control group (*n*=71). Symptoms were measured during baseline assessment, post-intervention and at an 11-month follow-up. Post-intervention measurements demonstrated significant symptom reduction in both the intervention and the control group. No significant differences were found between the intervention and the control group. Follow-up measurements showed sustained lower levels of symptoms in both groups, and some indications of a positive intervention effect in women. A remarkable drop in symptoms could not be linked directly to the intervention. Feasibility of the intervention was good, but controlling the intervention in a small rural community appeared to be a difficult task.

Kinzie and Leung (1989) described the results of clonidine-imipramine therapy for PTSD in 12 Cambodian refugees diagnosed with PTSD at the Indochinese Psychiatric Clinic (now the Intercultural Psychiatric Program) in Portland, Oregon. Imipramine was prescribed initially and, if symptoms persisted after one to two months, clonidine was added. Nine patients were followed-up using HDRS, PTSD, and a depression checklist adapted from the DSM-III-R. The majority no longer met criteria for depression with decreases in Hamilton scores, while PTSD global symptoms improved in six patients, but only in two to the extent that DSM-III-R diagnoses were not met.

Knezevic and Opacic (2004) studied changes in PTSD and co-morbid symptomatology in 123 clients from CRTV IAN Belgrade after three months of psychotherapy. The quality and intensity of symptomatology was measured in two time points, before treatment and after 12 psychotherapeutic sessions (three months) using self-report by clients as well as a structured clinical inter-

view by independent evaluators who did not take part in the psychotherapeutic process. The authors found a statistically significant reduction both in the intensity of PTSD symptomatology and the co-morbid symptomatology. These results were compared with the results of follow-up of the changes in identical symptomatology of internally displaced persons over a two-year period. The results from this quasi-control group reduced the possibility of attributing the reduction in psychopathological indicators of the treated group to spontaneous recovery or to the effect of other beneficial influences outside of treatment.

Smajkic et al. (2001) studied 32 Bosnian refugees at a mental health clinic receiving open trials of Sertraline (N=15), Paroxetine (N=12), or Venlafaxine (N=5). Sertraline and Paroxetine showed significant improvement at six weeks in PTSD symptom severity, depression, and Global Assessment of Function (GAF), while Venlafaxine did not improve depression and had high side effect rates. All 32 still had PTSD diagnoses at six weeks.

Salo et al. (2008) examined the role of individual and group treatment and self and other representations in predicting post-traumatic symptoms and growth among 115 former Palestinian political prisoners. Twenty participated in individual therapy and 19 in group therapy; 76 belonged to the control group. The results showed that post-traumatic symptoms decreased only in the individual therapy, whereas no decrease was found in group therapy or control groups across 1 year. Somatic symptoms decreased generally, whereas no general or treatment-related change was found in posttraumatic growth. As hypothesized, representations characterized by positive contents (benevolent, ambitious, and not punitive) predicted decrease in symptoms and increase in post-

traumatic growth. Furthermore, positive content and mature, differentiated, and not ambivalent structure of representations predicted decrease in posttraumatic symptoms and increase in posttraumatic growth in group therapy, but not in individual therapy. The role of cognitive-emotional reworking of interpersonal representations in trauma therapies is discussed.

Westermeyer (1988) studied a community sample of matched pairs of Hmong refugees who had major depression, 15 treated and 15 without treatment. The patient group had higher symptom levels prior to treatment and at follow-up reported fewer depressive symptoms than controls.

Symptom prevalence without intervention measured at >1 time

The importance of the following studies is to emphasize the long-term implications of failure to provide treatment for torture survivors and traumatized refugees. These include assessing depression and other mental health symptoms as well as general health in community samples, PTSD, depression, disability in refugees living in camps, psychological and social needs for asylum seekers and refugees, and PTSD in war refugees living in reception centres. These 15 studies measured symptom prevalence at more than one time period when no intervention was provided. These studies provide a view of the natural history of selected populations which did not receive treatment.

Beiser et al. (1993) and Beiser and Hou (2001) examined the risk-reducing effect of unemployment and the protective effect of language facility in a community sample of Southeast Asian refugees recently arrived in Canada. Three time frames (1993 study: two to four years; 2001 study: 10 years) were used. At the time of the first follow-up, comparing 319 Canadians at the first fol-

low-up with the sample, 608 of whom completed all three measurements (sample sizes 1,346, 1,169, and 647). Using the Canadian Refugee Resettlement Project symptoms inventory, prevalence of depression declined from 6.48% to 2.27%, unemployment rates declined, and English language proficiency increased over ten years.

Ekblad et al. (2000, 2002) charted psychological and social needs and constructed a model for care and support of newly-arrived asylum seekers and refugees. The authors studied 218 refugees from Kosovo in the Humanitarian Evacuation Programme a few months after their arrival in Sweden. At three months, 131 were assessed and 91 at six months using the HTQ, HSCL-25, GHQ, SOC-12, and AQ-RSV. Estimated levels of PTSD were similar at baseline and follow-up in this untreated population. Depression, anxiety and aggression (PTSD) were common in these post-migratory Kosovars.

Hauff and Vaglum (1995) studied the prevalence and course of mental disorders among Vietnamese refugees using a model including variables from different research traditions. A consecutive community cohort of 145 Vietnamese boat refugees aged 15 and older were personally interviewed upon their arrival in Norway and three years later. Unexpectedly, no decline in self-rated psychological distress (SCL-90-R) was found and almost 25% suffered from psychiatric disorder and 17.7% from depression (Present State Examination). Female gender, extreme traumatic stress in Vietnam, negative life events in Norway, lack of a close confidant, and chronic family separation were identified as predictors of psychopathology. The effects of war and persecution were long-lasting and compounded by adversity factors in exile. A uniform course of improvement in mental health after resettlement

cannot be expected in all contexts. The affected refugees need systematic rehabilitation. (See also Vaage et al., 2010)

Hinton et al. (1997) examined the impact of pre-migratory traumatic experiences and socio-demographic characteristics on future depression and compared the social patterning of depression in two ethnic groups. They used a stratified consecutive sample of Vietnamese and Chinese refugees from Vietnam (N=196) and followed up 114 between 12 and 18 months using the depression subscale of the HSCL-25. No change in depression scores was found, but older Vietnamese, single status, and pre-migratory veteran status at follow-up, and less proficiency in English at baseline were associated with depression.

Lie (2002) studied the changes in psychological symptoms and general health over three years as well as the impact of risk factors such as torture, trauma, and demographic status on distress and social function in 462 newly settled refugees, mainly Bosnians, in Norway. Using the HSCL-25, HTQ, PTSS-16, and GAF, 240 refugees showed unchanged symptoms of emotional distress, anxiety, depression, and psychological function, but an increase in PTSD. Pre-migratory life-threatening trauma and post-migratory unemployment, unresolved family reunion, and reduced social contact increased risk for elevated mental symptoms and lower levels of psychological function at follow-up. Analyses for predictors of changes in mental health over time were only significant for traumatic events in Norway.

Mollica et al. (2001) studied 1) associations between PTSD, depression, disability, baseline risk factors, and status at follow-up; 2) chronicity of psychiatric disorders and disability, and 3) the association between psychiatric disorders, disability, mortality, and emigration. Of a baseline sample of

534 Bosnian refugees initially interviewed in Croatian camps, the 376 followed-up at three years were administered the HTQ, HSCL-25, SF-20, and the WHO functional disability scale. The prevalence of PTSD, depression, and disability was still high, with 43% meeting DSM-IV criteria for depression, alone or co-morbid with PTSD, and 16% who were asymptomatic at baseline were symptomatic for psychiatric disorder on follow-up. Mortality was associated with male gender, older age, and social isolation.

Nygaard et al. (1995) studied the prevalence and course of PTSD among 150 Bosnian war refugees living in Norwegian reception centres. Of the 150 administered a PTSD checklist at baseline, 134 completed follow up at six months and one year. The number of participants with PTSD increased from baseline for first follow-up and then stayed high.

Sondergaard et al. (2001) investigated the perception of life events/conditions in relationship to the health of 86 Iraqi refugees recently resettled in Sweden. Questionnaires of life events and on-going difficulties, the SCID, CAPS, GHQ-28, HTQ, and IES were administered to 74 at baseline, 67 at three months, 57 at six months, and 53 at nine months. Positive mental health (GHQ-28) was associated with positive events outside Sweden, while negative health (GHQ-28) was associated with negative events within Sweden. Family reunion had a significant positive effect on self-rated health for those with PTSD.

Vaage et al. (2010) found that there is no long-term prospective study (>20 years) of the mental health of any refugee group. To investigate the long-term course and predictors of psychological distress among Vietnamese refugees in Norway, eighty Vietnamese, 57% of an original cohort interviewed in 1982 (T1) and 1985 (T2), com-

pleted a self-report questionnaire prior to a semi-structured interview. Mental health was measured using the Symptom Checklist-90-Revised (SCL-90-R). The SCL-90-R mean Global Severity Index (GSI) decreased significantly from T1 to T3 (2005–6), but there was no significant change in the percentage reaching threshold scores (GSI = 1.00). Trauma-related mental disorder on arrival and the trajectory of symptoms over the first three years of resettlement predicted mental health after 23 years. Although the self-reported psychological distress decreased significantly over time, a substantially higher proportion of the refugee group still reached threshold scores after 23 years of resettlement compared with the Norwegian population. The data suggest that refugees reaching threshold scores on measures such as the SCL-90-R soon after arrival warrant comprehensive clinical assessment. (See also Hauff and Vaglum, 1995).

Westermeyer et al. (1984, 1989, 1990, 1997) studied 97 of 102 Hmong refugees in Minnesota older than 16 years in 1977 and approximately 89 on follow-up at two and five to seven years using the Zung Depression Scale and the SCL-90. Zung depression scores decreased a first follow-up, then increased. SCL-90 scores increased in those with normal or borderline scores at baseline, but decreased for those with elevated scores at baseline. The largest change occurred at first follow-up, no change at second follow-up, but overall trend in SCL-90 subscale scores was improvement.

These studies evaluated: multidisciplinary and short-term multidisciplinary treatment; psychotherapy; psychiatric treatment – outpatient, pharmacology; psychotherapy versus medication; selective serotonergic re-uptake inhibitor (SSRI) treatment; outpatient psychopharmacology treatment for refugees; outpatient PTSD treatment;

Table 2. Number of outcome studies by research design

	Torture Survivors	Traumatized Refugees
Descriptive	2	4
Experimental	0	0
Quasi-Experimental Pretest-Posttest		
1 Group	16	21
> 1 Group Randomized	0	6
> 1 Group Non-Randomized	2	10
Qualitative		
Ethnography	1	0

culturally sensitive treatment for PTSD; cognitive-emotional reworking of interpersonal representations; psycho-educational treatment; testimony; method/therapy/psychotherapy; brief psychotherapy; narrative exposure therapy; integrative gestalt treatment; Qigong and T'ai Chi practice; Cognitive Behavioral Therapy (CBT) and CBT groups; culturally adapted CBT; belief systems model; psychosocial rehabilitation/treatment; thought field treatment; community intervention; health realization; somatic care; physiotherapy; home visit interventions; and empowerment workshops.

Examples Of Instruments Available

The selection of instruments to use is complicated. Dymi (2002) identified 88 potential instruments in domains of outcome (Appendix 7, pp. 49-50) selected from the text by McDowell and Newell (1996).

Fabiansen (2001), in research done at IRCT to identify instruments for use in a quantitative impact assessment, recommended the Harvard Trauma Questionnaire (HTQ) to measure PTSD in combination

with the Short Form-36 Health Survey (SF-36) to measure quality of life.

Unfortunately, cross-cultural validation is rare. Scales and questionnaires are sometimes translated and back-translated into additional languages but there is no current compendium of the change in status. Since most can be accessed by typing the name of the questionnaire or scale using a search engine for the worldwide web, this may be the best way to get the latest information.

The following are examples of instruments which have been selected for use in research.

Symptom Checklists

- Hopkins SCL-25 (anxiety and depression)—translated into more than 30 languages with good psychometric properties
- SCL-90
- SCL-110
- Health Symptom Checklist (HSC)
- Symptoms Identification Scales (BASIS 32)

NOTE: Self-rating scales are problematic because of high illiteracy rates and lack of data from clinical observation.

PTSD Structured

- 1) Clinician-Administered PTSD Scale (CAPS) is the most frequently used by mental health professionals to evaluate development of PTSD and complex PTSD symptoms even after repeated events.
- 2) Watson PTSD Interview

NOTE: Clinician-administered scales are labor intensive and difficult to do in busy clinics.

PTSD Rating scales

- 1) Harvard Trauma Questionnaire (HTQ) includes exposure to events, brain trauma, general posttraumatic symptoms, and associated symptoms (complex PTSD) and has cut-off score for DSM criteria, translated into more than 30 languages with good psychometric properties.
- 2) Impact of Events Scale (IES)
- 3) Mississippi Combat Scale
- 4) Posttraumatic Stress Checklist-Civilian Version (PCL-C) is a self-report Likert scale with 17 items and has shown high internal consistency and reliability as well as a strong correlation with PTSD diagnosis using the CAPS
- 5) Many Others

NOTE potential problems: Cut-off scores vary by ethnic and patient group; Scoring for DSM-IV criteria (X symptoms from symptom group Y must be present – this might result in a negative or distorted finding, e.g., if avoidance is predominant, intrusion criteria might only be fulfilled later when the survivor is confronted with triggers; cultural and linguistic factors make a difference).

Anxiety Rating Scales

- 1) Hopkins Symptom Checklist, Anxiety Scale (HSCL-25) is short, well-validated, and translated into many languages.
- 2) Spielberger's State-trait Anxiety Inventory
- 3) Hospital Anxiety and Depression Scale (HADS)
- 4) Anxiety disorder module of the Structured Clinical Interview for DSM-IV (SCID)

Screening Scales For Use In Primary Care Settings

- 1) Index of Psychological Distress of Santé Québec (IDPESQ)

- 2) Prime-MD

- 3) Self-Report Questionnaire (SRQ-20)

Depression Rating Scales

- 1) Hopkins Symptom Checklist, Depression Scale (HSCL-25) is short, well-validated, translated into many languages, and is the best documented in torture survivors
- 2) Zung Self-Rating Depression Scale
- 3) Hamilton Depression Scale (HDS)
- 4) Beck Depression Inventory (BDI)
- 5) Hospital Anxiety and Depression Scale (HADS)

NOTE: For the above scales, a distortion of results by items based on somatic symptoms is possible and could reflect physical injury sequelae (e.g., BDI), but less prominent in the HADS. Overlap is high with brain trauma and posttraumatic stress symptoms.

- 6) Mood disorder module of the SCID

Depression Screening Scales

- 1) Index of Psychological Distress of Santé Québec (IDPESQ) is useful screening
- 2) Prime-MD did not adequately distinguish affective disorders when compared with the gold standard of clinician diagnosis.
- 3) Vietnamese Depression Scale (VDS) – Kinzie et al.

Cognitive Testing

- Mini Mental Status Exam (MMSE) is a very western ethnocentric 30-point scale. Attempts have been made to develop a shorter scale that is more culture-free. Westermeyer, Jaranson et al. developed a 13-point scale that is relatively culture-free but is neither validated nor translated into languages other than English.

Quality of Life

- 1) World Health Organization Quality of Life (WHOQOL-Bref, 26-Item Measure)

- 2) Quality of Life Inventory (QOLI-B) Occupation/work (level of function)

Coping/resilience

- Minnesota International Coping Scale (MICS)—Developed by Johnson et al., Refugee Population Study, University of Minnesota

Social Support

- Duke-UNC Social Support

Client Satisfaction

- 1) Client Satisfaction Questionnaire (CSQ-8)
- 2) Sheehan Treatment Experiences and Expectancies (2-Item Measure)
- 3) Client Access to Services Questionnaire (CAS-Q)

Family Function

- 1) Sheehan
- 2) “Families in Transition” questionnaire developed by Robertson et al. of the Refugee Population Study at the University of Minnesota

Diagnosis

Structured and Semi-Structured Clinical Interviews offer a reproducible standard with good test-retest reliability. The following have been validated in many languages and are seen as “gold standards” for diagnosis, including PTSD.

- 1) Structured Clinical Interview for DSM-IV (SCID), for use by experienced raters.
- 2) Composite International Diagnostic Interview (CIDI) uses ICD-10 and DSM-IV classification systems—administered by non-professional raters.
- 3) Schedules for Clinical Assessment in Neuropsychiatry (SCAN), based on the Present State Exam (PSE) using ICD-10

and DSM-IV classification systems—administered only by trained clinicians.

NOTE: There are still problems with diagnostic assessment tools, as has been shown in minor changes leading to major variations in prevalence shown by epidemiological surveys. This has important implications for assessing services needs.

Trauma History

- 1) Harvard Trauma Questionnaire (HTQ)
- 2) Trauma Symptom Inventory (TSI)

Occupation/work (Level Of Function)

- 1) Short Form (SF-36, SF-12)
- 2) Functional Impairment Scale – Medical (FIS-M), to assess the extent to which major medical conditions interfere with functioning
- 3) Functional Impairment Scale – Psychiatric (FIS-P), to assess the extent to which PTSD symptoms interfere with functioning

NOTE: The FIS scales were developed by Johnson et al. of the Refugee Population Study at the University of Minnesota

- 4) Life Skills Profile (LSP)
- 5) Role Function Scales (RFS)
- 6) Global Assessment of Function (GAF)
- 7) Sheehan Disability Scale
- 8) International Classification of Functioning, Disability and Health (ICF), (complementary with the ICD diagnostic system). This important instrument is discussed in some detail below:

The ICF is a classification, developed by WHO, which describes health and associated conditions in terms of functioning instead of symptoms or diagnosis. Therefore, the ICF can be applied to either healthy or disabled persons.

The application of the ICF at the individual level can help assess a person's level of function, plan interventions to maximize his/her functioning, evaluate the outcomes of an intervention, and self-evaluate capacity for mobility or communication. At the institutional level, the ICF can help in education and training, for resource planning and development, for quality improvement, and for management and outcome evaluation. At the social level, the ICF can help document eligibility criteria for state or social benefits, affect social policy development such as legislation, regulations, guidelines, or needs assessments, or, in environmental assessment, changes in social policy, economic analysis, and research.

The ICF uses a bio-psycho-social model where the bodily functions, activities and participation of an individual are related to his/her health conditions, personal, and environmental factors.

Of the multiple body functions described in ICF, the most important for the study of torture victims are the mental functions.

ICF defines activity as the execution of a task by an individual and participation as the involvement in a life situation. Both activity and participation have limitations. Activity limitations are the difficulties an individual may have in executing activities and participant restrictions are the problems that an individual may experience in his/her involvement in life situations.

The activities and participation are measured in a qualifiers scale of five grades: In Grade 1 the person is normal without any limitations, in Grade 2 the person has mild, Grade 3 moderate, Grade 4 severe limitations, and Grade 5 complete limitation or disability (World Health Organization, 2001).

Instruments Used By Centres

Although now dated, Dymi (2002, p. 51) catalogued the instruments used by IRCT

centres in Table 3 next page (minor copypredits by JMJ):

To assess anxiety and depression we recommend the Hopkins Symptom Checklist 25 (HSCL-25), which has been translated into more than thirty languages, has good psychometric properties, and is relatively simple to administer. Very few instruments can claim this widespread use, and consequently the results can be compared with other studies. The Harvard Trauma Scale (HTQ) has similar claims for the assessment of PTSD. Another useful PTSD rating scale is the Posttraumatic Stress Checklist-Civilian Version (PCL-C), which has 17 items based upon the DSM criteria for PTSD, and has shown high internal consistency and reliability. These instruments can be used for the client to self-report, but are sometimes administered by clinicians for survivors who are illiterate or when the scales are not translated into their languages.

For scales that must be used by the clinician rather than self-administered, we recommend the Clinician-Administered PTSD Scale (CAPS), which is highly correlated with the self-administered PCL-C.

For cognitive testing, the Mini Mental Status Exam (MMSE) is about the only instrument available, but it has severe limitations when used cross-culturally.

For quality of life, the short version of the World Health Organization Quality of Life (WHOQOL-Bref) inventory has 26 items and has been used in many countries.

For programmes that do not wish to develop their own client satisfaction surveys, we recommend an 8-item instrument, the Client Satisfaction Questionnaire (CSQ-8).

For trauma history, the HTQ is recommended.

To assess level of function, we recommend the Short Form 12-item (SF-12) or the SF-36, the Global Assessment of Function (GAF), or the more complicated

Table 3. *Health Measuring Instruments and databases actually being used by various Centres for Rehabilitation of Torture Victims (incomplete data from a workshop in CPH 26 October 2001)*

Names of Instrument	Acronym	What it is used for	Centre/Country
1. The Self-Reporting Questionnaire	SRQ-20	Measure physical, psychological and psychiatric status/symptoms and depression	Calabar, West Africa
2. The PTSD Questionnaire for Adults (Watson 1991) (ref. From Libby T. Arcel's book)	DSM-III-R	Measure of PTSD	Eastern Europe
3. Harvard trauma questionnaire (version both in Chinese and in English), developed by the Indochinese Psychiatry Clinic, Brighton Marine Public Health Center and the Harvard Program in Refugee Trauma and Management, Lotus Foundation c 1991 Richard F Mollica MD	HTQ	Measure of PTSD	Chinese speaking refugee groups
4. (Simple data tables ... Instrument used?)			RESTART Center Tripoli Lebanon
5. Medical Assessment Sheet Used for refugees by UNHCR?		Measure physical, psychological and psychiatric status/symptoms and depression	Amman?
6. P.A.T. Client Registration/Referral Form		Measure physical, psychological and psychiatric status/symptoms and depression	Kampuchea
7. Rehabilitation (Types of torture documented in CVICT in 2000) Data on torture survivors provided services, in Nepal		Measure physical, psychological and psychiatric status/symptoms and depression	CVICT Nepal
8. Confidential Card for Client monitoring programme at CVICT in Nepal		Measure physical, psychological and psychiatric status/symptoms and depression	CVICT Nepal
9. The Self-Reporting Questionnaire (developed by WHO) Available in Arabic, French, Hindi, Portuguese, Somali and Spanish.	SRQ	Measure general psychological Distress	?
10. The Self-Reporting Questionnaire English and Ndebele version	SRQ-8		?
11. Hamilton Depression Scale (Hamilton 1960)	DSM-III	Measure depression	?
12. Impact of Events Scale 8 Item Child/adolescent Scale (IES-8)	IES	Measure of PTSD Measure of stress response syndromes, PTSD	?
13. Impact of Events Scale (15 questions – Michael O'Sullivan)	IES	Measure progress with private clients	?
14. The Social Adjustment Scale – Self-Report	SAS-SR		

International Classification of Functioning, Disability and Health (ICF).

Recommendations For The Future

Nickerson et al. (2011) emphasize the necessity of developing an evidence base using a multi-stage evaluation process which establishes the efficacy of an intervention, then its impact, and finally develops implementation models. These authors warn that failing to systematically evaluate programs will result in “the stagnation of knowledge and entrenchment of practices, some of which may be without demonstrated efficacy.”

Outcome research in torture is challenging, but it is still possible to conduct valid research. When torture treatment centres conclude that is not possible to use random control groups, then the only option is to use quasi-experimental designs.

The few published studies have most frequently used a pre-post evaluation with one or more groups to measure the efficacy of the therapeutic intervention. For those studies with comparison groups, few are randomly selected, most are non-random. These latter designs permit inferences of the benefits of the study groups.

Several studies have shown that there is significant variation among centers located in the countries where torture is practiced compared with host country centres that receive refugees and asylum seekers. In the host countries, the treated population is usually much more heterogeneous than in those countries where torture occurs. The chosen therapeutic intervention can threaten the internal validity of a research design. It is very important in the design of a pre-post outcome study to include features intended to control threats to internal validity. In host countries, those of final resettlement, the effect of receiving asylum is perhaps the most important confounding factor.

Before selecting the best instrument and research design, each center should analyze the population receiving care in their programme, the types of treatment delivered, and the outcomes they want to measure.

Perhaps most importantly, centres must start collecting data. Even if only descriptive or demographic data is available, this data should be collected. Eventually programme evaluation can develop into outcome of treatment efficacy and, finally, the impact of the programme.

How can we possibly do research that is scientifically excellent? When developing an outcome study, it is important to remember a caveat by Voltaire: “The best is the enemy of the good.” Even if you can’t do an evaluation that meets all of the scientific criteria for perfection, please start doing something.

Acronyms

NCTTP National Consortium of Torture Treatment Programs
NPCT National Partnership for Community Training
NCB National Capacity Building Project
IRCT International Rehabilitation Council for Torture Victims
ISHHR International Society for Health and Human Rights
ORR Office of Refugee Resettlement
EU European Union
WHO World Health Organization
ICD International Classification of Diseases (by WHO)
DSM Diagnostic and Statistical Manual (by the American Psychiatric Association)

Website resources

National Capacity Building Project (NCB), Center for Victims of Torture (CVT)
www.cvt.org, a technical resource funded by ORR conducts trainings on development, use, and interpretation of outcome

performance measurements and indicators and has developed a Performance Measurement Evaluation toolkit (<http://www.healtorture.org>). On this website there are four archived webinars on technical aspects of performance measurement and other related resources for programmes for torture survivors. The NCB has created and reorganized the Organizational Self-Assessment Matrix with 28 capacity-building dimensions in seven major categories. Completing this matrix is required, along with a technical assistance plan, for the sub-grants offered to support the capacity-building activities of programmes. Training institutes are also provided each year and educational webinars are offered monthly. Other activities and resources can be found on the websites.

The National Partnership for Community Training (NPCT)

www.acf.hhs.gov, funded by ORR, is operated by Gulf Coast Jewish Family Services and its partners, the Majorie Kovler Center for the Treatment of Survivors of Torture, and the Harvard Program in Refugee Trauma. They surveyed federally-funded treatment programmes and member programmes of the NCTTP to document the best, promising, and emerging practices and evaluation methods. Nineteen respondents started the online survey and 12 completed it, providing contact information for follow-up interviews. The partnership identified the following types of studies to assess torture rehabilitation services:

Anecdotal – An assessment using observations and accounts from program staff, survivors and providers;

Pre-Service Assessment – A means of assessing existing conditions before or during engagement in programme activities;

Pre/Post-Service Assessment – A means of assessing conditions prior to and immediately following engaging in programme activities;

Qualitative Documentation – A standard assessment using standardized methodology through narratives, quotes, statements etc.;

Quantitative Documentation – A standard assessment using numbers and quantities;

Randomized Control Trial – A study design in which patients/clients with similar demographic characteristics are randomly assigned to either a treatment group or a control group. Both groups receive the same baseline services, but the patients/clients in the treatment group receive an additional service and the control group does not receive this additional service. This additional service is being studied.

Key themes in the narratives included multidisciplinary approaches, culturally appropriate and competent services, holistic, integrated services, and strength-based services. Respondents reported providing 38 services or practices each with 66% evaluated. Pre-post service assessments were the most common and case management and community training were the frequently evaluated. No RCTs were conducted.

The project has finished a compilation of the evidence-based literature about best, promising and merging practices in the torture treatment field with the goal of increasing the capacity for centres to provide effective treatment to survivors of torture. This document, entitled “Best, promising, and emerging practices: a compendium for providers working with survivors of torture”, has been published as a thematic issue of the Torture Journal.

The National Consortium for Torture Treatment Programs (NCTTP)

www.ncttp.org has collected five or six demographic data points since 2004. Recently, this group has increased its efforts to make it possible for all 34 centres members of the NCTTP to contribute to this effort and has expanded the scope to collect approximately 20 data points. At this stage, the effort is descriptive but the goal is to move towards multi-center outcome research.

Amnesty International (Health@amnesty.org) publishes an online Bulletin Report, Amnesty International News for Health Professionals, sent gratis to those who request it. This Report includes Amnesty reports, statements and news articles not only on Torture but also on Children, the Death Penalty, Health Workers, Mental Health, Prisons and Detention Centres, Sexual Violence, Transmissible Diseases, and Water and Sanitation. Relevant conferences/courses and publications are cited. Send an email to health@amnesty.org in order to be provided with contact details.

The International Society for Health and Human Rights (www.ishhr.com) is an association for health workers who help those affected by human rights violations that aims to gather knowledge about the effects of human rights violations, exchange experiences and information about treatment methods, and contribute to the development of psychosocial interventions on the individual and community levels. Members live in almost 50 countries. The website is a valuable resource for papers, video presentations, training materials for health workers, as well as materials aimed at assisting victims of human rights violations and dealing with community reconstruction and disaster relief.

The International Rehabilitation Council (IRCT) (www.irct.org), an umbrella for more than 140 independent torture treat-

ment organizations in over 70 countries, has an on-line newsletter, links to other organizations with similar interests, and other relevant information. Issues of the Torture Journal, published by the IRCT, are available for review or articles can be downloaded.

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