REVIEW ARTICLE

Meta-Analysis of the Use of Narrative Exposure Therapy for the Effects of Trauma Among Refugee Populations

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Abstract

Background: Narrative therapies, especially narrative exposure therapy, are used to treat the effects of trauma in refugees and to prevent psychiatric illness. These methods involve helping the person to tell the story of what happened to them until it no longer elicits anxiety.

Methods: We reviewed all quantitative studies related to narrative exposure methods for treating trauma or posttraumatic stress disorder in refugees. We focused on studies with sufficient information to calculate effect sizes and statistical power.

Results: We found 7 quantitative studies for which effect size and power could be calculated. The total average effect size for all interventions was 0.63 (medium). The average effect size for studies in which interventions were administered by physicians, adequately trained graduate students, or both was 0.53. The effect size for studies in which the counselors were themselves refugees was 1.02. The 95% confidence intervals for the effect sizes of narrative exposure therapy did not reach below 0.

Conclusion: Studies demonstrating the effectiveness of narrative methods have adequate effect sizes and statistical power. Empowering lay counselors to treat their fellow refugees in future studies is warranted.

Introduction

More research has been conducted to investigate the effects of trauma and the factors that contribute to posttraumatic stress disorder (PTSD) in soldiers than in refugees, despite the larger numbers of the latter.[1] In 2004, there were a minimum of 42 wars and/or armed conflicts worldwide, with the majority occurring in developing countries.[2] In 2005, the United Nations High Commissioner for Refugees estimated there were 19.2 million displaced people throughout the world.[3] Almost half were children. Though the numbers vary each year, approximately 1% of the world's population is currently uprooted because of war and political violence.[4]

"Refugee" is defined as a person who is outside his or her country of origin, with well-founded fears of persecution, and who is unable to receive protection and consequently unable to return to his or her country of origin.[5]

Young refugees are more vulnerable to developing mental health difficulties, with as many as 40% meeting diagnostic criteria, particularly for anxiety disorders, including PTSD.[6] PTSD prevalence rates in refugee populations range from 15% to 50%.[7,8] Children's reactions to stress seem to parallel their caretakers' responses,[9] although children can be "astonishingly resilient" when facing trauma.[10] Female refugees suffer more from resettlement than male refugees.[11] Typical problems pertain to child rearing and violence. Stressors among refugees can be organized into categories of 1) past losses; 2) traumatic experiences (ie, war and torture); and 3) difficulties that arise in the host country, including financial strain, fear of deportation, delays, and changes in accommodation.[6] Estimates of the incidence and prevalence of PTSD vary considerably, depending upon factors such as the population in question, their unique stressful experiences, and the diagnostic methods employed.[3] The presence of PTSD is associated with war trauma and the stresses related to resettling,[12] declining physical health,[13] and maternal psychiatric difficulties.

Applying diagnoses such as PTSD cross-culturally merits consideration.[14] Some argue that Western diagnostic methods should not be applied to other cultures, in part because of the stigma of labeling and because they hinder our understanding of the losses and suffering experienced. Although the tenth revision of the International Classification of Diseases is an internationally recognized classification system used in non-Western cultures,[3] it is derived from and based on Western classification systems and does not encompass non-Western views of health, illness, and disease.[14] Nevertheless, we can imagine that, from any culture's view of mental health and illness, refugees who have suffered immense trauma would be prone to intense emotional reactions.[15]

Time matters when treating refugees with PTSD. Clinicians and researchers cannot expect that the refugee will remain in one spot for very long. Treatment may not occur until more basic needs, as conceptualized in Maslow's hierarchy,[16] are met. Any treatments for this population should ideally be suitable for harsh conditions in war-affected refugee camps.[2,17-19] Treatment should be in tune with cultural norms, short, and cost effective, and people from the community with little or no mental health care knowledge should be able to administer it. Psychological education is a reputable component of any brief intervention intended for a large number of refugees who have been subjected to trauma.[1]

Research on refugee populations is also difficult. Identifying patients for follow-up and ascertaining reputable information as to their whereabouts can be difficult. Migration is a potential obstacle to any longitudinal study of refugee populations.

The most promising strategies for alleviating health-related issues in developing countries make use of existing resources including natural leaders, caregivers, and established networks for sanitation and food quality and delivery that may already

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exist in the refugee community.[20] Effectiveness is maximized by shifting control of the interventions from external investigators to people who are within the population that is experiencing mental health issues. Because oral traditions are prevalent in many cultures in developing countries, narrative approaches may be especially suited to these settings.[1]

A cardinal assumption of narrative therapies is that we are the stories we tell.[20-22] Humans encode individual narratives as memories in the brain.[5] Psychologically healthy individuals have meaningful, logical, and vibrant self-stories, whereas faulty self-narratives are synonymous with emotional difficulties. Numerous studies indicate that disarranged, unassimilated narratives of traumatic experiences lead to PTSD. Hence, the ability to construct healthy narratives of traumatic experiences corresponds to a healthy recovery process. Stories enable us to change.[23]

Narrative exposure therapy (NET) appeared in the academic literature in 2002, though it is apparently an ancient technique.[24] When it is used with children, it is sometimes abbreviated as "KIDNET."[25] It has origins within the cognitive behavioral framework but is shorter in duration. This approach was adapted to meet the needs of survivors of trauma, including those affected by war and torture. With this approach, patients talk about the worst part of the trauma and consequently re-experience thoughts and emotions paired with it. While exploring the patient's narrative of the traumatic event and ultimately reconstructing it, the therapist asks about emotional, physiologic, cognitive, and behavioral reactions. Researchers such as Pennebaker[26] and Hurley[27] suggest that the disclosure of stressful events has the potential to improve PTSD symptoms.

The Procedure of Narrative Exposure Therapy

NET has been developed for application in regions experiencing crisis, before and after the conflict. Because relatively few professionals are available in these countries to care for a large number of affected people, the treatment must be short and pragmatic. It should be easy to learn and effective even when provided by trained laypersons or paraprofessionals with no or minimal background in medicine or psychology. It should be applicable across cultures and fit into the social and political background of the setting.

Most researchers who are working with refugees or in disaster and war regions are aware that any psychological intervention needs a firm context. Although PTSD may be the most prevailing mental health disorder in most populations affected by war and disaster, a specific treatment module should be integrated into a sustainable and comprehensive psychosocial or mental health program that includes a variety of interventions and a referral structure for medical conditions.

NET can be a key treatment program within such a structure; however, the therapist should be prepared to encounter common conditions, such as ongoing child abuse, substance dependence, grief, and depression. In addition to their training in trauma therapy, therapists should have learned to identify and understand these problems so as to provide assistance or referral to other sources of help.

For NET, the classical form of trauma exposure therapy was adapted to meet the needs of clinically traumatized survivors of

Story of a Refugee

I was born in Mogadisho, [sic] Somalia. I do not know my exact birthyear; I think it is 1986. I grew up with both my parents. I have a sister who is 2 years younger called Halimo and a 4-years younger brother called Mohamed. We lived in a part of town called … .

My mother had fair brown hair and skin. She was young and I loved her a lot. I was her first-born and her favourite. She even told me so. My father was of darker complexion. He was also a young man in those days. He was hard working. He had a shop close by in the market. He would usually leave in the morning and return home in the evening. Sometimes when he came home, he played with us in the evening. We played football together. Those were good times. I do not know how old I was then; I just remember that I was very young … .

When I remember those days I get sad. All these memories come back and I only know what I have lost. The years went by and I used to live like this until the war broke out. I don't remember the year, but I was still young … . One day we fled from home in the late afternoon … . We went with a car to a place called Bal'aad, about 30 km out of town … .

Eventually we went back home to Mogadisho. I must have been about 10 years by then. A few months later, the war reached us again. It was early in the morning. A group of about 10 civilian men came to our house. They were armed with guns … .

I stood very near to my parents. I was so scared. Suddenly I heard the sound of bullets. One of the soldiers had started shooting. The moment I saw that he pulled the trigger and heard the first bullet, I panicked. I started running. I felt such great fear. I ran inside the house and tried to hide myself behind a door in one of the rooms. I was shivering, fearing, thinking, they will also come for me, they will come and kill me. I still have a heart beat now, when I recall that moment.

After some time it went quiet outside. I still stood behind the door, silent, not moving. After a while I slowly moved towards the window and peeped out. What I saw was terrible. My mother and my father had been hit by the bullets. They were both lying on the ground. My mother had fallen on top of my father. They both had blood on their clothes. My mother had blood on her face and her stomach. They were not moving anymore, they had died. Until that day, I had never seen a dead person. I felt horror. I was so afraid of them, shocked by what I saw. I only thought of running away, leaving this place. I escaped through the back of the house and jumped over the fence. This was the last time I have seen my parents and also the last time I had been in our home in Mogadisho … .

While fleeing, I joined strangers in the street. So many people were trying to flee. I simply ran with them. When these people reached their destination, they branched off from the road. It was night time by then. I was alone. I hated my life. I followed the road and finally fell asleep under a bush. I had given up about life by then. I felt like I had died as well. I knew about the danger of wild animals and lions, but I did not care … .

This is how I came to Uganda. When we reached Kampala I saw a group of Somalis and went to greet them. They took me in and I lived with them for a few weeks. They also showed me how to register as a refugee with UNHCR [United Nations High Commission for Refugees]. I remember the day I came to Nakivale Refugee Camp. I was so surprised how people can live in a place like this. I stayed with the Somali family that found me in Kampala for about two years in the camp.

Finally, Red Cross helped me to build my own house in 2000. I was about 14 years then. Since then I live alone. I started going to school when I came to Nakivale. I will graduate from P7 at the end of this year. I have learnt how to live by myself; I can do everything by myself. I never ask for help. No one can help me anyway. I have never heard about my brother and sister again. Whether they are still alive and if so, where I could find them. But now I am ready to look for them. ❖

Reprinted from the Open Access article: Onyut LP, Neuner F, Schauer E, et al. Narrative Exposure Therapy as a treatment for child war survivors with posttraumatic stress disorder: Two case reports and a pilot study in an African refugee settlement. BMC Psychiatry 2005 Feb 3;5:7. Available from: www.biomedcentral.com/1471-244X/5/7. DOI: http://dx.doi.org/10.1186/1471-244X-5-7

war and torture. The different variants of exposure therapy for PTSD usually target the worst traumatic event, assuming that this approach will lead to the best treatment outcome. Most victims of organized violence, war, and torture have experienced several traumatic events, however, and often it is impossible to identify the worst event before treatment. In addition, the fear networks of different traumatic events overlap, and it can be difficult to sort out the origin of different network items. To overcome this challenge, NET uses the chronicity of testimony therapy. Instead of defining a single event as a target for therapy, the patient constructs a narrative of his or her whole life, from birth to the present, while focusing on the detailed report of the traumatic experiences.[11]

In one approach, the therapist records the patient's biography throughout NET.[24] On the final day of treatment, the patient,

Table 1. Effect sizes and statistical power of studies investigating narrative exposure therapy for refugees.

Intervention (n)	Effect Size (95% CI)	Power	Summary
Catani[18]			
KIDNET (16)	post 1.76 (1.33, 2.19)	1.00	Effect sizes and statistical power look promising; however, the sample is small.
	6-month follow-up 1.96 (1.44, 2.48)	1.00	
Meditation-relaxation (15)	post 1.83 (1.10, 2.56)	1.00	
	6-month follow-up 2.20 (1.20, 3.20)	1.00	
Neuner[2]			
NET (111)	pre to post 1.4 (1.09, 1.71)[a]	1.00	Results look promising given the larger sample size. "Pre- to post-" effect sizes are low on Physical Symptom Score but "pre- to follow-up" effect sizes are better. It would be interesting to compare Symptom scores across RCTs.
	pre to post 0.1 (0.04, 0.16)[b]	0.55	
	pre to follow-up 1.4 (0.84, 1.96)[a]	1.00	
	pre to follow-up 0.9 (0.31, 1.49)[b]	1.00	
TC (111)	pre to post 1.5 (0.98, 2.02)[a]	1.00	
	pre to post 0.2 (0.15, 0.25)[b]	0.99	
	pre to follow-up 1.5 (1.00, 2.00)[a]	1.00	
	pre to follow-up 0.5 (0.44, 0.56)[b]	1.00	
MG (55)	pre to follow-up .8 (0.39, 1.21)[a]	1.00	
	pre to follow-up .2 (0.11, 0.29)[b]	0.05	
Neuner[1]			
NET (17)	pre to post 0.6 (0.1, 1.1)[a]	0.99	NET looks the most promising; however, effect sizes and statistical power vary on all intervention measures.
	pre to post 0.6 (0.53, 0.67)[d]	0.99	
	pre to post 0.6 (0.50, 0.70)[e]	0.50	
	pre to 1-year follow-up 1.6 (0.85, 2.35)[a]	1.00	
	pre to 1-year follow-up 1.9 (1.59, 2.21)[c]	1.00	
	pre to 1-year follow-up 1.1 (0.30, 1.90)[d]	1.00	
	pre to 1-year follow-up 1.1 (1.00, 1.20)[e]	0.50	
SC (14)	pre to post 0.2 (0.13, 0.27)[a]	0.28	
	pre to post 0.5 (0.24, 0.76)[d]	0.93	
	pre to post 0.1 (0.0, 0.2)[e]	0.11	
	pre to 1-year follow-up 0.1 (0.05, 0.15)[a]	0.05	
	pre to 1-year follow-up 0.4 (0.18, 0.66)[c]	0.79	
	pre to 1-year follow-up 1.0 (0.48, 1.52)[d]	1.00	
	pre to 1-year follow-up 0.8 (0.51, 1.09)[e]	0.50	
PE (12)	pre to post 0.5 (0.28, 0.72)[a]	0.05	
	pre to post 1.2 (0.79, 1.61)[d]	1.00	
	pre to post -0.7 (0.49, 0.91)[e]		
	pre to 1-year follow-up 0.9 (0.6, 1.2)[a]	0.05	
	pre to 1-year follow-up 0.3 (0.22, 0.38)[c]	0.47	
	pre to 1-year follow-up 1.3 (0.83, 1.77)[d]	1.00	
	Pre to 1-year follow-up -0.8 (0.51, 1.09)[e]		
Onyut[24]			
CIDI pretest (6)	0.89 (0.78, 1.00)	0.09	Sample is too small to have any statistical meaning. Nevertheless, narrative therapy looks promising for this population.
CIDI posttest (4)	0.85 (0.61, 1.09)	0.10	
	9-month follow-up 0.91 (0.71, 1.21)	0.09	

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Ruf[29]			
KIDNET (13)	Overall Sx 1.9 (0.97, 2.83)[f]	all ≈ 0.90	KIDNET looks the most promising. All effect sizes besides Overall Symptoms are for pretreatment to 6-month follow-up.
	1.9 (0.9, 2.9)[g]		
	2.2 (0.1, 4.3)[h]		
	2.1 (1.26, 2.94)[i]		
	1.5 (0.66, 2.34)[j]		
	1.9 (1.05, 2.75)[k]		
	1.0 (0.56, 1.44)[l]		
	1.7 (1.37, 2.03)[m]		
Waiting list (13)	Overall Sx 0.31 (0.20, 0.42)[f]		
	0.3 (0.0, 0.6)[g]		
	0.8 (0.69, 0.91)[h]		
	0.0 (-0.1, 0.1)[i]		
	0.1 (0.0, 0.2)[j]		
	-0.2 (-0.3, -0.1)[k]		
	0.1 (0.07, 0.13)[l]		
	0.7 (0.03, 1.37)[m]		
Schaal[19]			
NET (12)	pre to post 0.39 (0.3, 0.48)[n]	all ≈ 0.90	Overall, NET looks the most promising
	pre to post 0.12 (0.04, 0.20)[o]		
	pre to post 0.75 (0.43, 1.07)[p]		
	pre to post 0.40 (0.31, 0.49)[q]		
	pre to follow-up 0.71 (0.56, 0.86)[n]		
	pre to follow-up 0.52 (0.44, 0.60)[o]		
	pre to follow-up 0.75 (0.45, 1.05)[p]		
	pre to follow-up 0.71 (0.41, 2.01)[q]		
IPT (14)	pre to post 0.23 (-0.09, 0.55)[n]		
	pre to post 0.28 (-0.01, 0.57)[o]		
	pre to post 0.35 (-0.07, 0.77)[p]		
	pre to post 0.02 (0.01, 0.03)[q]		
	pre to follow-up 0 (-.0.64, 0.36)[n]		
	pre to follow-up 0.41 (0.29, 0.53)[o]		
	pre to follow-up 0.43 (0.13, 0.73)[p]		
	pre to follow-up 0.01 (-0.07, 0.09)[q]		
Neuner[30]			
NET (16)	pre to post 1.6 (1.34, 1.86)[a]	all ≈ 0.90	Overall, NET looks the most promising, but the sample is small.
	pre to post 0.8 (0.38, 1.22)[r]		
	pre to post 0.3 (0.27, 0.33)[s]		
TAU (16)	pre to post 0.4 (-0.2, 1.0)[a]		
	pre to post 0.2 (-0.97, 0.46)[r]		
	pre to post 0.7 (0.58, 0.82)[s]		
Total			
N = 443	0.63 (0.29, 1.07)	0.97	Sample size of individual studies limits generalization. A longitudinal RCT would be interesting.
Doctors or graduate students (N = 237)	0.53 (-0.03, 1.09)	0.95	
Refugee counselors (N = 206)	1.02 (0.83, 1.21)	0.99	

[a] PTSD Diagnostic Scale; [b] Physical Symptom Score; [c] International Diagnostic Interview (PTSD part); [d] Self-Reporting Questionnaire; [e] Psychological Health Subscale; [f] University of California Los Angeles PTSD Index for Diagnostic and Statistical Manual of Mental Disorders, 4th edition; [g] PTSD Symptom Severity; [h] Instrusion; [i] Avoidance—All Symptoms; [j] Active Avoidance; [k] Passive Avoidance; [l] Hyperarousal; [m] Functional Impairment; [n] CAPS Severity Score; [o] MINI Depression Score; [p] Hamilton Score; [q] Guilt Score; [r] Hopkins Symptoms Checklist; [s] Composite International Diagnostic Interview.

CAPS = clinician-administered PTSD Scale; CI = confidence interval; CIDI = composite international diagnostic interview; Hamilton = Hamilton Depression Rating Scale; IPT = interpersonal psychotherapy; KIDNET = narrative exposure therapy for children; MG = monitoring group; MINI = Mini-International Neuropsychiatric Interview; NET = narrative exposure therapy; PE = psychoeducation; post = posttest; PTSD = posttraumatic stress disorder; RCT = randomized control trial; pre = pretest; SC = supportive counseling; TAU = treatment as usual; TC = trauma counseling.

interpreter, and therapist review the document and sign it. Often the client chooses to advocate for others by sending a copy of the biography to human rights organizations as evidence of trauma.

NET is not used for a single traumatic event; rather, patients are encouraged to construct a narrative of their life up to and including the present.[3] They are encouraged to elaborate on details surrounding traumatic experiences. A consistent narrative is necessary, because memories and emotional processing are not always accurate, particularly when PTSD symptoms are involved. NET maintains a narrative of the traumatic experience(s) and habituates the patient to the emotional responses associated with the memory.

In KIDNET, the therapist may use role-play or visual aids such as a rope, string, rocks, flowers, and drawings to enable the child to reconstruct the traumatic events. For instance, a rope may signify the child's lifespan, whereas rocks and flowers placed on the rope mark when the traumatic event(s) occurred. Often, children are encouraged to extend the narrative into the future, using flowers used to signify hopes and dreams.

KIDNET has been presented in an eight-session format, ideally for children who have already received a structured psychological assessment that includes diagnosis, construction of a comprehensive list of traumatic events, enumeration of their contextual conditions (family background, current threats, and violence), and any exclusion criteria (sometimes substance addiction or psychosis). The first session consists of psychological education of the child and caretaker, informed consent, and development of a *lifeline,* a visual representation of important events of one's life on a timeline. The second session consists of revisiting the timeline and starting the life narrative at birth. During the third through the seventh sessions, the patient continues to revisit the lifeline, rereads and corrects the narrative from previous sessions, and continues to narrate, focusing on traumatic events. In the eighth session, the lifeline is revisited and symbols are added for future hopes. The whole narration is reviewed, signed, and handed over. Follow-up examination occurs about three months after treatment.[11] An example of a healing narrative is presented in excerpts in the Sidebar: Story of a Refugee.[25]

Methods

We conducted a meta-analysis to explore the effectiveness of short-term NET methods to treat refugees. We were especially interested in the potential to use lay counselors as opposed to professionals. Therefore, we compared effect sizes and statistical power of studies using lay and trained counselors. Surprisingly, we found only seven articles that met our inclusion criteria, providing enough information to calculate effect size and statistical power. All seven studies appeared to be validly designed and executed. We found them by searching the ProQuest, Medline, Google Scholar, and Psychoinfo databases for the keywords narrative, narrative therapy, narrative exposure, narrative exposure therapy, narrative psychology, narrative psychotherapy, PTSD, NET, KIDNET, war, trauma, and refugee. Effect size and statistical power were determined with the GPower 3.0.10 software program. (This free version is available at www.psycho.uni-duesseldorf.de/aap/projects/gpower; Heinrich-Heine-University; 40225 Düsseldorf; Germany) Reference librarians at our institutions assisted us in choosing search terms and searching all relevant databases. Effect size was calculated as Cohen's d. We relied upon the methods and insights of Nobel[28] regarding how to conduct meta-analyses.

Results

Table 1 summarizes the results of our meta-analysis. All 7 NET studies had a 95% confidence interval greater than zero, so it was not necessary to plot the data.

Study Descriptions

Catani et al[18] conducted a randomized study of 2 short-term PTSD interventions in an area of Sri Lanka that was hit by the 2004 tsunami and that has been subjected to years of civil war. In total, 31 children were randomly assigned to either KIDNET or meditation-relaxation treatment. Local female counselors conducted treatment, which consisted of 6 sessions lasting between 60 and 90 minutes. All women counselors were former schoolteachers who had received additional training in therapeutic methods. The outcome measures look promising; however, the sample was small. It is worth noting that the researchers could not control for spontaneous remission. Spontaneous remission is defined as resolution of a clinical problem unrelated to external treatment of any kind.[26] For example, few meaningful differences exist between those in whom spontaneous remission has occurred and persons who either continue misusing substances or go into remission because of prior treatment for drug misuse. Health concerns, pressure from friends and family, and extraordinary events were important factors in quitting substance abuse, whereas social support, friendships with nondrug users, willpower, and identity transformation were pivotal to maintaining change.

Neuner et al's[10] randomized trial examined whether or not lay counselors could be trained to effectively treat PTSD in a refugee camp. The researchers trained lay counselors for six weeks. Challenges included illiteracy and the need for interpreters. Interpreters who are refugees themselves may be psychologically vulnerable. Nevertheless, they state that any added stress is usually short-lived.[27] Results reveal that lay counselors can treat their fellow refugees.[24]

In Neuner et al's[1] randomized, controlled study, doctoral and other graduate school level therapists treated Sudanese refugees with PTSD living in a Ugandan refugee settlement. They employed local research assistants from the refugee community as interpreters. Acceptance rates were high, although the researchers postulated that the opportunity to talk with Westerners might have been a motivating factor for participating. Results from this study indicated that NET had the most promise for treating this population. Well-trained European psychologists and their graduate students conducted the study, which was a possible limitation. To compensate, the authors suggested that future treatment focus on interventions implemented by local individuals with therapeutic training. Another reason for empowering locally trained counselors to treat their peers is to reduce expenses. The authors noted that this study was expensive; consequently, in addition to empowering refugees to treat themselves, training local counselors has the practical advantage of reducing costs.

Onyut et al[24] evaluated the effectiveness of short-term narrative methods in treating six Somali children with PTSD in a refugee camp. Expert clinicians used KIDNET for six sessions to treat the children. After nine months, four of the children no longer met the diagnostic criteria for PTSD. Results were promising and demonstrated that short-term treatment of refugees is possible. The obvious shortcoming was the small size of this pilot study. In addition, the researchers have no way of controlling for spontaneous remission of PTSD symptoms. The researchers advocated future studies focusing on local, nonprofessional counselors, which would include short-term training and supervision.

Ruf et al[29] studied 26 refugee children diagnosed with PTSD. The children, aged 7 to 16 years, were randomly assigned to either KIDNET (n = 13) or a waiting-list control group (n = 13). Both groups were similar in demographic makeup, although an interesting caveat was that participants were from 7 different countries/regions of origin (Turkey, the Balkans, Syria, Chechnya, Russia, Georgia, and Germany). Doctoral-level clinical psychologists, researchers, and PhD students ran the study. The KIDNET group had a clinically significant decrease in PTSD symptoms. The wait-listed control group did not. Interestingly, at a 6-month follow-up, 70% of participants in the waiting-list group presented with PTSD, compared to 17% in the KIDNET group. The researchers noted the small sample size and lack of an active control group as limitations of the study.

Schaal et al[19] treated Rwandan genocide orphans who met criteria for PTSD with NET and interpersonal psychotherapy. Doctoral-level psychologists and their graduate students carried out all procedures. At 6-month follow-up, 75% of NET participants (n = 12) no longer met PTSD criteria, compared to 29% of interpersonal psychotherapy participants (n = 14). The researchers did not report any dropouts. Limitations included a modest sample size, lack of a no-treatment group, and no assessment of inter-rater reliability.

Neuner et al[30] compared NET to "treatment as usual" (TAU) in a sample of asylum-seekers with PTSD diagnoses in Germany. TAU included a focus on psychoactive medication and stabilizing patients. Both the NET and TAU groups included 16 patients, although 2 from the former group discontinued the intervention. Clinical psychologists and their graduate students carried out all procedures. On the basis of past research, they expected an effect size (Cohen's d) of approximately 0.80 and a power level of approximately 0.80. Results revealed a better 6-month outcome, including PTSD and pain symptoms, for patients treated with NET. The researchers observed no difference between NET and TAU in terms of depression symptoms.

Our meta-analysis is small and used statistics from the few other research articles found in the literature. We found a total average effect size of 0.63 (medium) for all interventions. Surprisingly, we found that the average effect size for studies using physicians, adequately trained graduate students, or both was 0.53. Most astonishing was the 1.02 effect size found in articles using refugees as counselors. Also noteworthy is that the studies we reviewed used different scales to measure outcomes. The number of outcome measures varied from study to study. Future researchers could use the results of our study to advocate for funding for locally trained refugee counselors so as to empower them to treat others in their community. We advocate additional research about empowering refugee counselors to treat their fellow refugees.

If planning to collect follow-up measurements, future researchers should be mindful of migration issues and plan accordingly. Furthermore, spontaneous remission of symptoms was difficult to control for in the articles we reviewed. One final word of caution: Schauer et al[17] state that when treating adults for PTSD, "as we already know, inadequate treatment can do more harm than good. Exposing the patient too briefly to traumatic memories, not allowing complete habituation to aroused emotional reactions (ie, learning that these memories are not frightful) and insufficient reconstruction of the major traumatic events will not end the suffering, and may even increase anxiety and lead to even greater disappointment and depression."

Most astonishing, was the [high] effect size found in studies using refugees as counselors.

Conclusion

Given that sufficient university-educated counselors living and working in every refugee camp the world over is unlikely, exploring alternative solutions is warranted. Few studies investigating narrative methods to treat PTSD are found in the literature. Narrative treatment methods have the potential to be effective because they make use of a person's own life story and are short-term and cost efficient. Most importantly, locally trained refugee counselors can learn to facilitate treatment. Our results look promising because they demonstrate that local refugees can, when given the right tools, treat themselves. It is humbling that, at least according to our study, they do this better than university-educated professionals.

NET appears to compare favorably with treatment as usual, interpersonal therapy, and other techniques. NET is especially useful because it requires less professional training than other therapies. It revolves around the ability to listen well to stories, an ability that many people in developing countries possess. The client does the bulk of the work by telling their story over and over, until it no longer induces anxiety. ❖

Disclosure Statement

The author(s) have no conflicts of interest to disclose.

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References

1. Neuner F, Schauer M, Klaschik C, Karunakara U, Elbert T. A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an African refugee settlement. J Consult Clin Psychol 2004 Aug;72(4):579-87. DOI: http://dx.doi.org/10.1037/0022-006X.72.4.579
2. Neuner F, Onyut PL, Ertl V, Odenwald M, Schauer E, Elbert T. Treatment of posttraumatic stress disorder by trained lay counselors in an African refugee settlement: a randomized controlled trial. J Consult Clin Psychol 2008 Aug;76(4):686-94. DOI: http://dx.doi.org/10.1037/0022-006X.76.4.686
3. Ehntholt KA, Yule W. Practitioner review: assessment and treatment of refugee children and adolescents who have experienced war-related trauma. J Child Psychol Psychiatry 2006 Dec;47(12):1197-210. DOI: http://dx.doi.org/10.1111/j.1469-7610.2006.01638.x
4. Robjant K, Fazel M. The emerging evidence for Narrative Exposure Therapy: a review. Clin Psychol Rev 2010 Dec;30(8):1030-9. DOI: http://dx.doi.org/10.1016/j.cpr.2010.07.004

5. Rothe EM. A psychotherapy model for treating refugee children caught in the midst of catastrophic situations. J Am Acad Psychoanal Dyn Psychiatry 2008 Winter;36(4):625-42.
6. Hodes M. Psychologically distressed refugee children in the United Kingdom. Child Psychol Psychiatry Rev 2000 May;5(2):57-68. DOI: http://dx.doi.org/10.1017/S136064170000215X
7. de Jong JT, Komproe IH, Van Ommeren M, et al. Lifetime events and posttraumatic stress disorder in 4 postconflict settings. JAMA 2001 Aug 1;286(5):555-62. DOI: http://dx.doi.org/10.1001/jama.286.5.555
8. Karunakara UK, Neuner F, Schauer M, et al. Traumatic events and symptoms of post-traumatic stress disorder amongst Sudanese nationals, refugees and Ugandans in the West Nile. Afr Health Sci 2004 Aug;4(2):83-93. Erratum in: Afr Health Sci 2004 Dec;4(3):193.
9. Robertson CL, Duckett L. Mothering during war and postwar in Bosnia. J Fam Nurs 2007 Nov;13(4):461-83. DOI: http://dx.doi.org/10.1177/1074840707309350
10. Neuner F, Catani C, Ruf M, Schauer E, Schauer M, Elbert T. Narrative exposure therapy for the treatment of traumatized children and adolescents (KidNET): from neurocognitive theory to field intervention. Child Adolesc Psychiatr Clin N Am 2008 Jul;17(3):641-64. DOI: http://dx.doi.org/10.1016/j.chc.2008.03.001
11. Pavlish C. Action responses of Congolese refugee women. J Nurs Scholarsh 2005;37(1):10-7. DOI: http://dx.doi.org/10.1111/j.1547-5069.2005.00
12. Sack WH, Clarke GN, Seeley J. Multiple forms of stress in Cambodian adolescent refugees. Child Dev 1996 Feb;67(1):107-16. DOI: http://dx.doi.org/10.2307/1131689
13. Smith P, Perrin S, Yule W, Rabe-Hesketh S. War exposure and maternal reactions in the psychological adjustment of children from Bosnia-Hercegovina. J Child Psychol Psychiatry 2001 Mar;42(3):395-404. DOI: http://dx.doi.org/10.1111/1469-7610.00732
14. Watters E. Crazy like us: the globalization of the American psyche. New York: Free Press; 2010.
15. Ebert T, Schauer M. Burnt into memory. Nature 2002 Oct 31;419(6910):833. DOI: http://dx.doi.org/10.1038/419883a
16. Maslow AH. A theory of human motivation. Psychol Rev 1943 Jul;50(4):370-96. DOI: http://dx.doi.org/10.1037/h0054346
17. Schauer E, Neuner F, Elbert T, et al. Narrative exposure therapy in children: a case study. Intervention 2004;2(1):18-34.
18. Catani C, Kohiladevy M, Ruf M, Schauer E, Elbert T, Neuner F. Treating children traumatized by war and tsunami: a comparison between exposure therapy and meditation-relaxation in north-east Sri Lanka. BMC Psychiatry 2009 May 13;9(1):22. DOI: http://dx.doi.org/10.1186/1471-244X-9-22
19. Schaal S, Elbert T, Neuner F. Narrative exposure therapy versus interpersonal psychotherapy. A pilot randomized controlled trial with Rwandan genocide orphans. Psychother Psychosom 2009;78(5):298-306. DOI: http://dx.doi.org/10.1159/000229768
20. Percy I. Awareness and authoring: the idea of self in mindfulness and narrative therapy. Eur J Psychother Couns 2008 Dec 12;10(4):355-67. DOI: http://dx.doi.org/10.1080/13642530802577109
21. Eakin PJ. How our lives become stories: making selves. New York: Cornell University Press; 1999 Sep 2.
22. Mehl-Madrona L. Healing the mind through the power of story: the promise of narrative psychiatry. Rochester, VT: Bear & Company; 2010 Jun 18. p 69.
23. Mehl-Madrona L. Coyote wisdom: the power of story in healing. Rochester, VT: Bear & Company; 2005 Mar 1.
24. Neuner F, Schauer M, Roth WT, Elbert T. A narrative exposure treatment as intervention in a refugee camp: a case report. Behav Cogn Psychother 2002 Apr;30(2):205-9. DOI: http://dx.doi.org/10.1017/S1352465802002072
25. Onyut LP, Neuner F, Schauer E, et al. Narrative exposure therapy as a treatment for child war survivors with posttraumatic stress disorder: two case reports and a pilot study in an African refugee settlement. BMC Psychiatry 2005 Feb 3;5:7. DOI: http://dx.doi.org/10.1186/1471-244X-5-7
26. Pennebaker JW. Writing about emotional experiences as therapeutic process. Psychol Sci 1997 May;8(3):162-6. DOI: http://dx.doi.org/10.1111/j.1467-9280.1997.tb00403.x
27. Hurley D. Internalized other interviewing of children exposed to violence. Journal of Systemic Therapies 2006 Jun;25(2):50-63. DOI: http://dx.doi.org/10.1521/jsyt.2006.25.2.50
26. Walters GD. Spontaneous remission from alcohol, tobacco, and other drug abuse: seeking quantitative answers to qualitative questions. Am J Drug Alcohol Abuse 2000 Aug;26(3):443-60.
27. Miller KE, Martell ZL, Pazdirek L, Caruth M, Lopez D. The role of interpreters in psychotherapy with refugees: an exploratory study. Am J Orthopsychiatry 2005 Jan;75(1):27-39. DOI: http://dx.doi.org/10.1037/0002-9432.75.1.27.34
28. Nobel JH Jr. Meta-analysis: methods, strengths, weaknesses, and political uses. J Lab Clin Med 2006 Jan;147(1):7-20. DOI: http://dx.doi.org/10.1016/j.lab.2005.08.006
29. Ruf M, Schauer M, Neuner F, Catani C, Schauer E, Elbert T. Narrative exposure therapy for 7- to 16-year-olds: a randomized controlled trial with traumatized refugee children. J Traum Stress 2010 Aug;23(4):437-45. DOI: http://dx.doi.org/10.1002/jts.20548
30. Neuner F, Kurreck S, Ruf M, Odenwald M, Elbert T, Schauer M. Can asylum-seekers with posttraumatic stress disorder be successfully treated? A randomized controlled pilot study. Cogn Behav Ther 2010 Jun;39(2):81-91. DOI: http://dx.doi.org/10.1080/16506070903121042

The Period of Greatest Psychological Vulnerability

Combat and rape, the public and private forms of organized social violence, are primarily experiences of adolescent and early adult life. The United States Army enlists young men at 17; the average age of the Vietnam combat soldier was 19. In many other countries boys are conscripted for military service while barely in their teens. Similarly, the period of highest risk for rape is in late adolescence. Half of all victims are aged 20 or younger at the time they are raped; three-quarters are between the ages of 13 and 26. The period of greatest psychological vulnerability is also in reality the period of greatest traumatic exposure, for both young men and young women. Rape and combat might thus be considered complementary social rites of initiation into the coercive violence at the foundation of adult society. They are the paradigmatic forms of trauma for women and men.

— Judith Lewis Herman, b 1942, Professor of Clinical Psychiatry and Director of Training at the Victims of Violence Program at Cambridge Health Alliance