Integrating Mental Health Services into Humanitarian Relief Responses to Social Emergencies, Disasters, and Conflicts: A Case Study

Robert Henley, PhD
Randall Marshall, MD
Stefan Vetter, MD

Abstract

Utilizing lessons learned from development and implementation of "Project Liberty" in New York City, created in response to the attacks of September 11, 2001, this paper explores the importance of integrating structured mental health services with community-based social service programs offered in large-scale humanitarian relief responses. Relevant international research studies illustrating similar integrated programs are also reviewed. The primary approach is community-based and resilience-enhancement focused, offering structure, stability, support, and community cohesion, with an added integrated screening component to identify persons with severe treatable mental health conditions. Because there is thus far little evidence that resilience-enhancing programs are effective for severe mental health conditions, a secondary program initiated in parallel would be staffed with more specialized providers offering services for those referred from the primary program. The key implication supports the establishment of more effective links between programs and professionals from different disciplines, who then can more effectively implement integrated program responses to large-scale disasters.

Community-Based Interventions after Humanitarian Emergencies

In both U.S. and international relief settings, a primary emphasis in response to such humanitarian crises as disasters, conflicts, or social emergencies is placed on addressing the immediate potential dangers to community cohesion and resource loss,[1] also referred to as

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Address correspondence to Robert Henley, PhD, Centre for Disaster and Military Psychiatry, University of Zurich, Birchstrasse 3, 8057, Zurich, Switzerland. Phone: +41-43-2339540; E-mail: bob.henley@access.uzh.ch.

Stefan Vetter, MD, Centre for Disaster and Military Psychiatry, University of Zurich, Zurich, Switzerland. Phone: +41-43-2339540; E-mail: stefan.vetter@access.uzh.ch

Randall Marshall, MD, Clinical Research, Sepracor Inc, 84 Waterford Drive, Marlborough, MA, USA. Phone: +1-508-7874267; E-mail: Randall.marshall@sepracor.com

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collective recovery.[2,3] Threats to the community from these events include fragmentation, persistence of the acute response to disaster, violence, and economic collapse (if the community is not able to return to some semblance of collective functioning).

In acute post-emergency settings, particularly in developing countries, there is an understandable reliance on establishing community-based psychosocial programs rooted in the resilience-enhancement of individual and collective competencies to cope with severe stressors. A strength of these programs is that they can utilize a broad range of local professionals, para-professionals, and community services providers (e.g., school teachers, coaches and ministers) who can be taught basic intervention skills focused on encouraging healthy relationships, teaching problem-solving skills and coping strategies, and encouraging engagement and cohesion within a community.[4–8]

One specific example of this is the "Peer Support" approach, which involves training individuals who have mental illness to become peer counselors, who then help others who are mentally ill to learn to cope and adjust during emergencies. This has been used in a number of large-scale disasters and has a well-developed curriculum and support base in the United States (http://gainscenter.samhsa.gov/atc). Mentally ill peer counselors utilize approaches that do not focus on psychiatric issues but instead on empathically listening to and understanding the experience of others who also suffer from mental illness and then offering practical guidance to develop adaptation strategies. This has resulted in diverting people from unnecessarily utilizing psychiatric services that are often already overburdened after a disaster.[9] This and other such strength-based approaches may be the de facto response in developing countries simply because highly trained mental health professionals are rarely, if ever, available to a local community to help with post-emergency and social crisis recovery efforts.[10–14]

Nonetheless, there is yet little empirical evidence to suggest that psychosocial programs are effective for treating the actual symptoms of the more serious and relatively common post-disaster mental health disorders such as depression, complicated grief, PTSD, and psychoses. Adapting basic mental health treatment principles to post-disaster settings is currently a major focus in emergency and post-emergency services research, but for numerous reasons (not the least being funding), humanitarian organizations and governmental agencies have often been unable to integrate the newest mental health developments into their programmatic responses during and after emergencies. This is especially true in international settings,[15,16] and as Belfer notes in his assessment of the current status of international mental health, relatively little is being done to provide mental health services internationally under normal circumstances.[17] Nonetheless, a wide range of evidence-based models are available, based on disparate theoretical approaches such as biomedical, cognitive-behavioral, interpersonal, meditation-based, or psychodynamic, and relief agencies and humanitarian organizations should attempt to find a "best fit" with local culture, available resources, and the abilities of local healthcare providers.[11,13,18,19]

It is well established that there are multiple vulnerabilities to developing PTSD after exposure to a "criterion A event" (i.e., when "a person experiences, witnesses, or is confronted with an event or events that involved actual or threatened death or serious injury to the physical integrity of self or others, and the person's response involves intense fear, helplessness, or horror").[20] This includes level of social support,[21] ethnicity,[21] psychiatric history,[22] prior trauma or stress,[21,23] gender,[24–28] a number of demographic variables (e.g., living alone, divorce, educational status), and prior history of PTSD. Risk factors can be used to identify high-risk groups, particularly if resources are limited, for participation in both peer support programs and screening/treatment programs.

An Integrated Care Response to a Large-scale Emergency: New York City 9-11-01

At this point in time, there are still few examples of programs in which community-based resilience-enhancing relief principles were successfully integrated with mental health screening and

treatment and fewer still that have been systematically evaluated for their efficacy and presented in enough detail so that the larger humanitarian community could learn from them. One of the best documented can be found in the overall response to the September 11, 2001 attacks in the U.S.[29–35]

Following the attacks of September 11, 2001 on New York City in the U.S., there was an unprecedented effort to develop programs across both private and public institutions. These programs aimed to meet a wide range of perceived need and encompassed a wide range of interventions, both community-oriented resilience-enhancing programs and mental health service programs.

A large-scale, government-funded effort in New York City, called "Project Liberty," offered primarily psychosocial public education and crisis counseling programs to over 1.2 million people in a 2.5-year period.[30,31] It was based on the same core principles that inform international relief work: that most persons were experiencing normal reactions to abnormal circumstances and that programs fostering social support and healthy coping could assist most persons in dealing effectively with the disaster and return them to productive and functional lives.[32] It made use of outreach models that placed laypersons as well as professionals in the field. Counselors used simple screening tools that served the multiple functions of providing mental health assessment, evaluating the quality of services, and evaluating the program's overall success in achieving multiple objectives. These screening tools were kept simple, so persons with different training levels could easily assess whether an individual needed more intensive treatment or not. It did not delve into specific psychiatric factors too deeply or specifically other than to identify whether there was an immediate need for further referral.

In addition, and for the first time in US history, New York State Office of Mental Health expanded the Federal Emergency Management Administration program to integrate with services for persons with severe mental health problems. "Project Liberty" was funded by the federal government but administered by State and local city government, had considerable inter-governmental cooperation, and also received the support and involvement of many local not-for-profit service organizations.[31,33] A centralized triage center was created that could refer individuals to both Project Liberty as well as to mental disorder treatment practitioners or treatment centers. The triage center was accessible by a widely publicized free telephone number (1.800. LIFENET).[33] Further, there was a monitoring and evaluation component built into the process from the beginning, which enabled the collection of data about effectiveness and demographics, helping to advance the field through refinement of screening tools that might be used in future disasters.[30,32,34–36]

Project Liberty findings on the whole are a validation of the international relief model in that the majority of persons affected by the 9/11 attacks eventually adjusted and returned to pre-event levels of functioning.[10,30,37,38] However, studies in the first 8 weeks after the attacks also found that a substantial minority of persons—10% in the first 5–8 weeks, or approximately one million adults—had developed acute PTSD, major depressive disorders, or both as a direct result. At 1 year, approximately 200,000 persons were estimated to have chronic PTSD.[21,30,32,34,39,40–45] These surveys evoked alarm within the mental health community, as it was known that such a sudden surge in new-onset psychopathology was beyond the capacity of the existing mental health system to manage. Epidemiological studies suggest that not all people were reached who could have benefited from services, despite all the efforts made.[40,44,46]

From the beginning, New York State committed to a program that involved integrating these two disaster-relief approaches and to supporting evidence-based programs wherever possible. Since there was no evidence that brief supportive counseling or community programs could help persons with PTSD—in fact, evidence suggested that nonspecific psychosocial treatment is not as effective as trauma-focused treatments—the two-track effort was eventually adopted. Treatment programs were created so that persons who screened in for treatable disorders or who appeared to need immediate professional help could be referred from community social services programs to mental

health care. In addition, there were multiple outreach efforts developed to meet the needs of specialized groups (e.g., fire, police, and emergency personnel), as well as the general population. In support of this, training programs were initiated that eventually trained approximately 1,500 licensed clinicians in techniques for treating PTSD and complicated grief, funded largely through philanthropic foundations.[47] The intensive, decision-science-based training programs increased therapists' knowledge of the basic principles of trauma treatment and enhanced their motivation to apply them in practice.[48]

In the future, integrated services programs like Project Liberty could help promote increased collaboration between international mental health and disaster relief communities too, raising awareness that serious consequences of psychological trauma must also be addressed in post-disaster intervention planning.[12,19,30,49] The most effective way to help traumatized populations overcome their predicament—indeed, whether there is a superior approach, or are multiple, equally efficacious approaches, or whether there are predictors of "best fit" between person, culture, and treatment—remains open to further research.

Community-oriented resilience enhancement-based programs are increasingly being suggested as the new approach to treating large non-Western international populations experiencing traumatic conditions in post-emergency settings,[50] even though there have only been a few empirical field-based research studies showing conclusive results to document effectiveness.[51–55] Moreover, although the majority of persons affected by large-scale trauma do not develop long-term serious mental health problems, when the scale of the trauma is large enough, the minority may still represent a substantial number of persons (even if a small percentage)[47,56] and may place the community at further risk for economic and social turmoil. The presence of substantial numbers of persons suffering with incapacitating mental disorders may also complicate and obstruct relief organization efforts, though a key issue in these circumstances is access to and utilization of resources.

International Adaptations in Mental Health Treatment in Cultures with Limited Resources

In recent years, a handful of international researchers in disaster and conflict settings have begun trying to address the numerous serious psychological issues related to disaster, war, and torture (and also by displacement from these and other emergencies). Although the New York programs were exceptional with regard to availability of resources, other programs have been studied, and successfully integrating mental health with community-based resilience enhancement practices in response to emergency or severely adverse situations has been documented.

A West African psychosocial program served Liberian and Sierra Leonean survivors of torture and war living in the refugee camps of Guinea.[57] This program had 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 using para-professional counselors under the close, on-site supervision of expatriate clinicians, with a treatment model blending elements of Western and indigenous healing. The core treatment component consisted of relationship-based supportive group counseling, which was adapted to the realities of the refugee camp setting. Results from follow-up assessments indicated significant reductions in trauma symptoms, with increases in measures of daily functioning and social support during and after participation in groups.

In another study, the use of narrative exposure therapy (NET) was compared to the use of psycho-education with aging survivors of political detention and torture in Africa. In narrative exposure therapy, the patient is requested to repeatedly talk about the worst traumatic event in detail, which stimulates re-experiencing emotions associated with the event. In the process, the majority of patients undergo habituation of the emotional response to the traumatic memory. In

addition to the reconstruction of the traumatic memory, this habituation consequently leads to a remission of PTSD symptoms.[58] Results of this study found that use of NET had significantly better results in helping reduce PTSD symptoms than did psycho-education practices alone.[59]

As little is known about the usefulness of psychotherapeutic approaches for traumatized refugees who continue to live in dangerous conditions, research was done with Sudanese refugees living in a Ugandan refugee settlement, this time comparing the use of NET, supportive counseling, or psycho-education to treat PTSD. The study concluded that NET was a promising approach for the treatment of PTSD, even for refugees living in unsafe conditions.[15] It was also suggested that treatment of PTSD could increase the resilience competencies of refugees in coping with the hardship of refugee camps.

In a similar vein, there were numerous studies done on a variety of innovative mental health and psychosocial services offered during and after the Balkans conflict of the 1990s. In one study, a group provided professional mental health support and trainings to a wide variety of professional and para-professional service providers who were working both with severely traumatized internally displaced refugees in Serbia and with traumatized children displaced from their families in a hospital in Montenegro.[60] Because the training and support teams were small two person teams, it was difficult to collect empirical data on the true efficacy of the services they provided. Nonetheless, these researchers described evidence that offering skills—building trainings to care providers and providing opportunities for caretakers of highly traumatized refugees and children to talk about their own stresses—was a crucial service to offer in support of the ongoing important care-giving work these people performed during war. In another project involving 20 survivors of genocide from Bosnia–Herzegovina, psychiatrists offered "Testimony Therapy"[61] as a means of resolving extreme trauma experienced during the ethnic cleansing. Testimony therapy, usually conducted with survivors of human rights violations, involves the writing and public presentation of autobiographical accounts of their experiences, as both a means of dealing with their psychological trauma and giving historical account of the human rights atrocities that occurred. In before and after assessments of the effectiveness of "testimony therapy," results showed a significant decrease in PTSD and depression symptoms and an improvement in overall functioning.[61] Another study presented a case study of two Kosovar refugees living in a Macedonian refugee camp who received a combined NET and Testimony therapy treatment. The researchers concluded that this approach both relieved PTSD symptoms and allowed witnesses to discuss human rights violations in a safe and respectful setting.[62] In post-war Bosnia–Herzegovina,[63] the mental health system is being reformed from one based solely on hospital delivered services to a community mental health based system with many different professionals working together to offer services through both government and non-governmental agencies. The new system has a wider focus on health promotion, prevention, treatment, and rehabilitation, and much has been accomplished in these areas since the war. Unfortunately, the country still struggles from a lack of resources, and this prevents full implementation of services needed to help heal the survivors of war-related trauma.

Finally, several studies by one research team evaluated the natural course of posttraumatic stress and depressive reactions in post-earthquake affected Armenia, as well as controlled trials of treatment interventions. An adaptation of cognitive-behavioral therapy, called brief trauma/grief-focused psychotherapy, was found to be effective in reducing PTSD symptoms and halting the progression of depression. The authors encouraged the implementation of mental health intervention programs in schools after disasters in order to reduce trauma-related psychopathology in high-risk young people.[64–67]

Each of the above studies provides us with important anecdotal and empirical information about how to improve psychosocial services offered to those in need of mental health services after or even during humanitarian emergencies. Unfortunately, there are formidable barriers to introducing research to identify what is effective in services-based programs in most international settings,

especially during emergencies. Research typically is not a high priority for money and manpower when there are so many pressing service needs. The advantages of collecting program data—including the ability to make rational, incremental improvements in the quality and efficiency of programs—may be appreciated and even desired, but less often implemented. In some cases, research may even be perceived as an outright threat in that it could raise uncomfortable questions about whether programs indeed are accomplishing what they purport to accomplish (and for which they are being funded). These difficulties are compounded by the challenges of cross-cultural program development and execution, as well as the problem of stigmatization of mental disorder that varies considerably across cultures. Finally, there are often problems at the most basic level of research, such as the lack of translated and culturally validated assessment tools and lack of trained clinicians and researchers from the local culture to implement research (when there is funding).

One comprehensive report attempts to address these issues in practical detail,[11] outlining simple ways to implement research to assess the effectiveness of programs in the field. The authors suggest implementation of more "small action research pilot studies" using simple quasi-experimental research designs in order to gather data before and after these programs have been started, so best practices can start to be identified.

Of note, there has also been a recent increase in research evaluating the effectiveness of resilience-enhancing programs for children and youth in severely adverse and/or traumatic situations. For example, one study assessed the effectiveness of a classroom-based intervention to support the enhancement of resilience processes in children from the Palestinian territories and found it quite helpful to the children. Another study with Palestinian refugee camp children looked at the importance that daily structured activities have in enhancing children's resilience competencies, protecting them in ongoing dangerous, stressful, and uncertain circumstances.[54,55] There has also been an international study that examined whether there were differences in resilience culturally and whether or not resilience practices could be integrated in program development and implementation (in both cases affirmative). In each of these studies, it was found that resilience interventions were associated with an improvement in children's mental health, as seen in improved function in their coping skills, problem-solving strategies, feelings of hope and future thinking, as well as in improved family, school, and play relationships.[53–55]

In summarizing, international research to date is providing evidence that combining community-based resilience-enhancement and mental health practices is possible, can facilitate the delivery of effective services to many people who may not normally have access to them, and in fact offers relief to mental suffering in diverse adverse situations in culturally sensitive ways. Much of this can be accomplished through providing resources and training to local non-governmental agencies.

Discussion and Recommendations

What can be learned from the "Project Liberty" case study and from the other international research studies of treatment after large-scale emergencies? First is that a simple systematic effort to evaluate the effectiveness of all types of programs is essential because it will inform us of what works best when trying to help large numbers of people after a humanitarian emergency. In some cases, it may be possible to include small, brief, quasi-experimental research studies (e.g., comparing two credible but unstudied kinds of interventions) that can themselves inform evolving programs of several years' duration after a large-scale disaster. Monitoring and evaluating community-based resilience-enhancing programs do not have to be burdensome and certainly do not have to involve randomized research trials, although this remains the gold standard test for comparing interventions. During Project Liberty, services programs were evaluated for purposes of accountability, for purposes of refining and improving the program, and for eliminating aspects of the program that were not effective or might have even be harmful to participants.[11,13,30] However,

monitoring and evaluation are not simply a measure of consumer satisfaction. They should promote more in-depth understanding of the post-disaster environment and be able to evaluate and possibly improve the interventions being evaluated.

A second issue worth emphasizing is that large-scale emergencies of all kinds expose a high proportion of a population to life-threatening experiences, especially including various categories of helpers.[68,69] Such experiences are very common, no matter what culture, and typically do not result in the development of long-term serious psychopathology. However, where there is a strong concurrent negative emotional reaction to the traumatic experience, such as the experience of feelings of intense horror, fear, helplessness, anger, or shame, there is an increased risk for the development of psychopathology. So while the experience of trauma is not in itself a psychiatric illness, a traumatic experience can generate a wide range of normative emotional reactions: short-term mental disorders involving disorientation, agitation, or panic that pass relative quickly or more severe long-term disorders such as depression and/or posttraumatic stress disorder.[20]

To mitigate the abovementioned effects of a large-scale emergency, it is important to keep in mind two overarching programmatic needs in post-emergency situations. First is to quickly establish community-based collective recovery approaches using a variety of means, including offering community-oriented resilience-based practices that create structure, provide stability, and encourage community interaction and cohesion (such as sports, play, arts, wellness promotion, educational, cultural, and religious practices).[70,71] Ideally, these programs will include brief screening services to identify persons with more severe functional impairment and in need of more intensive help. Second is to establish simple evidence-based treatments, whether group or individual focused, adapted to the local culture and setting, that can benefit members of the local population experiencing more serious mental health problems. In some settings, relevant applicable treatments are already available; in others, expert input can assist in developing "evidence-informed" programs that use basic principles of effective treatment, teaching locals who may have basic skills how to use these methods. Multiple mechanisms for bidirectional cooperation and referral should be built into a program's structure, so that persons participating in resilience-promoting interventions who are in need of treatment can be identified and offered more intensive treatment. After treatment, these persons may become re-involved in supportive and wellness-promoting programs in order to maintain their recovery, as well as to participate in supporting others who may be in need (i.e., a form of the peer model program).

Implications for Behavioral Health

A key challenge in offering a full continuum of post-emergency services has been in establishing effective links between different disciplines of professionals. Multidisciplinary cooperation is going to require both ideological and educational adaptations from the different "camps." Project Liberty illustrated the interdisciplinary effort that is required to integrate low-profile screening, assessment, and follow-up across a portfolio of programs. In developing countries, the emphasis must be for skilled professionals to train local people who have the capability to be a helper, so these services are locally sustained.

Another challenge is overcoming existing stigmas and cultural barriers to the use of mental health services. This can be achieved through a process of continuous dialog, advocacy, and learning between mental health experts and local community-based caregivers. Only through such dialog and advocacy will behavioral health service providers and researchers be able to provide the most effective "best" practices that are culturally responsive and acceptable.[11,13,18,19] The overarching goal in any kind of programmatic or treatment outreach in culturally different contexts is always to intervene in ways that will do good and avoid doing harm, and this is not always a straightforward objective. For example, in greater New York, it was widely observed that nonevidence-based treatments, such as single session debriefings or poorly implemented therapies,

were suddenly being provided in ways that might have caused harm. In international post-emergency situations, there have been anecdotal reports of the negative impacts of the swift implementation and then precipitous withdrawal of new mental health services or programs, which can be experienced as yet another traumatic loss; or of the prescribing of medications when there can be little or no medical follow-up (and in many countries there already is little access to affordable medicines).[72] Thus, it is critical to appreciate from the outset that, in most post-emergency interventions, support for the development of sustainable services will take months and even years to fully implement, and that a long-term view should be held.

Conflicts of Interest Statement

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References

1. Hobfoll S. Conservation of resources: a new attempt at conceptualizing stress. *American Psychologist.* 1989;44(3):513–524.
2. Fullilove M, Hernandez-Cordero L. What is collective recovery? In: Yuval N, Gross R, Marshall R, eds. *Mental Health in the Wake of Terrorist Attacks*. New York: Cambridge University Press; 2006:157–163.
3. Fullilove M, Hernandez-Cordero L, Madoff J, et al. Promoting collective recovery through organizational mobilization. *Journal of Biosocial Science.* 2004;36:479–489.
4. Ungar M. *Handbook for Working With Children and Youth—Pathways to resilience across cultures and contexts*. first ed. Thousand Oaks: Sage Publications; 2005.
5. Henley R, Schweizer I, Vetter S et al. How psychosocial sport & play programs help youth manage adversity: a review of what we know & what we should research. *International Journal of Psychosocial Rehabilitation.* 2007;12(1):51–58.
6. Luthar SS, Cicchette D, Becker B. The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work. *Child Development.* 2000;71(3):543–562.
7. Luthar SS, Cicchetti D. The construct of resilience: Implications for interventions and social policies. *Development and Psychopathology.* 2000;12:857–885.
8. Wolkow KE, Ferguson HB. Community factors in the development of resiliency: considerations and future directions. *Community Mental Health Journal.* Dec 2001;37(6):489–498.
9. Fisher D, Rote K, Miller L, et al. *From Relief to Recovery: Peer Support by Consumers Relieves the Traumas of Disasters and Recovery from Mental Illness.* Bethesda, Maryland: The National GAINS Center for Systemic Change for Justice-Involved Persons and the Center for Women, Violence and Trauma (CWVT) through the Center for Mental Health Services, SAMHSA.; April 24–25, 2006 2006.
10. de Jong K, Mulhern M, Ford N, et al. Psychological trauma of the civil war in Sri Lanka. *Lancet*. 2002;359(9316):1517–1518.
11. Duncan J, Amtson L. Children in Crisis: Good Practices in Evaluating Psychosocial Programming. Working paper http://www.savethechildren.org/publications/Good_Practices_in_Evaluating_Psychosocial_Programming.pdf. Accessed August 15, 2006.
12. Ehrenreich J. Coping With Disasters: A Guidebook to Psychosocial Interventions. http://www.mhwwb.org/CopingWithDisaster.pdf. Accessed August 15, 2006.
13. Eisenbruch M, de Jung,J., & van de Put,W. Bringing Order Out of chaos: A Culturally Competent Approach to Managing the Problems of Refugees and Victims of Organized Violence. *Journal of Traumatic Stress.* 2004;17(2):123–131.
14. Moscardino U, Axia G, Scrimin S, et al. Narratives from caregivers of children surviving the terrorist attack in Beslan: Issues of health, culture, and resilience. *Social Science and Medicine*. 2007;64(8):1776–1787.
15. Neuner F, Schauer M, Klaschik C, et al. A comparison of narrative exposure therapy, supportive counseling, and psychoeducation for treating posttraumatic stress disorder in an african refugee settlement. *Journal of Consulting Clinical Psychology.* 2004;72(4):579–587.
16. IASC. *Inter-Agency Standing Committee (IASC) Guidelines on Mental Health and Psychosocial Support in Emergency Settings.* Geneva, Switzerland: IASC; 2007.
17. Belfer M. Child and adolescent mental disorders: the magnitude of the problem across the globe. *Journal of Child Psychology and Psychiatry.* 2008;49(3):226–236.
18. Dougherty G. Cross-Cultural Counseling in Disaster Settings. . *The Australian Journal of Disaster and Trauma Studies.* 1999;1999(2).
19. Gilbert J. International responses to the psychological aftermath of the tsunami disaster: a plea for thoughtfulness and care. http://www.odihpn.org/report.asp?ID=2696. Accessed August 15, 2006.
20. APA. *Desk Reference to the diagnostic criteria from DSM-IV*: American Psychiatric Association; 1996.
21. Galea S, Ahern J, Resnick H, et al. Psychological sequelae of the September 11 terrorist attacks in New York City. *New England Journal of Medicine.* 2002;346(13):982–087.
22. North CS, & Pfefferbaum B. Research on the mental health effects of terrorism. *Journal of the American Medical Association.* 2002;288:633–636.
23. Resnick H, Kilpatrick D, Dansky B, et al. Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. *Journal of Consulting and Clinical Psychology.* December 1993;61(6):984–991.
24. WHO. Gender and Health in Disasters. www.who.int/gender/gwhgendernd2.pdf. Accessed May 23rd, 2007.

25. Wiest R, Mocellin J, Motsisi D. *The Needs of Women In Diasters and Emergencies.* Winnipeg, Manitoba, Canada: Prepared for the Disaster Management Training Programme, for the United Nations Development Programme & the Office of the United nations Disaster Relief Coordinator; June 20, 1994, 1994.
26. UN/ISDR. Women, disaster reduction and sustainable development. Paper presented at: Meeting on environmental management and the mitigation of natural disasters: a gender perspective; March 6, 2002, 2002; Ankara, Turkey.
27. Domeisen N. Women in Emergencies. http://www.reliefweb.int/OCHA_OL/pub/dhanews/issue22/communit.html. Accessed May 23, 2007.
28. Domeisen N. The Role of Women in Protecting Communities for Disasters. Paper presented at: International Women's Day, 1997; Geneva, Switzerland.
29. Neria Y, Gross R, Marshall R, et al. *9/11: Mental Health in the Wake of Terrorist Attacks*. Cambridge: Cambridge University Press; 2006.
30. Donahue S, Lanzara C, Felton C, et al. Project Liberty: New York's crisis counseling program created in the aftermath of September 11, 2001. *Psychiatric Services*. 2006;57(9):1253–1258.
31. Felton C, Donahue S, Lanzara C, et al. Project Liberty: responding to mental health needs after the World Trade Center attacks. In: Neria Y, Gross R, Marshall R, Susser E, eds. *9/11: Mental Health in the Wake of Terrorist Attacks*. Cambridge: Cambridge University Press; 2006:264–281.
32. Donahue S, Jackson C, Shear K, et al. Outcomes of enhanced counseling services provided to adults through Project Liberty. *Psychiatric Services*. 2006;57(9):1298–1303.
33. Draper J, McCleery G, Schaedle R. Mental health services support in response to September 11: the central role of the Mental Health Association of New York City. In: Neria Y, Gross R, Marshall R, Susser E, eds. *9/11: Mental Health in the wake of terrorist attacks (1st edition)*. Cambridge: Cambridge University Press; 2006:282–310.
34. Covell N, Donahue S, Allen G, et al. Use of Project Liberty counseling services over time by individuals in various risk categories. *Psychiatric Services*. 2006;57(9):1268–1270.
35. Covell N, Essock S, Felton C, et al. Characteristics of Project Liberty clients that predicted referrals to intensive mental health services. *Psychiatric Services*. 2006;57(9):1313–1315.
36. Norris. Community and ecological approaches to understanding and alleviating postdisaster distress. In: Neria Y, Gross R, Marshall R, Susser E, eds. *9/11: Mental Health in the Wake of Terrorist Attacks*. Cambridge: Cambridge University Press; 2007:141–156.
37. Jackson C, Covell N, Shear K, et al. The road back: predictors of regaining preattack functioning among Project Liberty clients. *Psychiatric Services*. 2006;57(9):1283–1290.
38. Kleber RJ, Brom D. *Coping with trauma: Theory, prevention and treatment*. Lisse: Swets & Zeitlinger; 1992.
39. Jackson C, Allen G, Essock S, et al. Client's satisfaction with Project Liberty counseling services. *Psychiatric Services*. 2006;57(9):1316–1319.
40. Galea S, & Resnick H. Posttraumatic stress disorder in the general population after mass terrorist incidents: considerations about the nature of exposure. *Central Nervous System (CNS) Spectrums.* 2005;10:107–115.
41. Neria Y, Gross R, Olfson M, et al. Posttraumatic stress disorder in primary care one year after the 9/11 attacks. *General Hospital Psychiatry.* 2006;28:213–222.
42. Schlenger WE, Caddell JM, Ebert L, et al. Psychological reactions to terrorist attacks: Findings from the national study of Americans' reactions to September 11. *Journal of the American Medical Association.* 2002;288:581–588.
43. Schuster MA, Stein BD, Jaycox LH, et al. A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New England Journal of Medicine.* 2001;345:1507–1512.
44. Silver RC, Holman EA, McIntosh DM, et al. Nationwide longitudinal study of psychological responses to September 11. Journal of the American Medical Association. 2002;288:1235–1244.
45. Torabi MR, & Seo DC. National study of behavioral and life changes since September 11.. *Health, Education, Behavior.* 2004;31:179–192.
46. Susser E, Susser M. The Aftermath of September 11: what's an epidemiologist to do? *International Journal of Epidemiology.* 2002;31:719–721.
47. Marshall, Neria Y, Suh E, et al. The New York consortium for effective trauma treatment. In: Neria, Gross R, Marshall R, Susser E, eds. *9/11: Mental Health in the wake of terrorist attacks*. Cambridge: Cambridge University Press; 2007:311–332.
48. Marshall RD, Amsel L, Neria Y, et al. Strategies for dissemination of evidence-based treatments: training clinicians after large-scale disasters. In: Fran Norris, Matthew Friedman, Galea S, Patricia Watson, eds. *Methods for Disaster Mental Health Research*. New York: Guilford Publications; 2006.
49. Fitzgerald MA. The hidden legacy of war. *International Herald Tribune.* February 5th, 2006, 2006.
50. van Ommeren M, Saxena, S., & Saraceno, B. Mental and social health during and after acute emergencies: emerging consensus? *Bulletin of the World Health Organization* 2005;83(1):71–76.
51. Agaibi CE, Wilson JP. Trauma, PTSD, and resilience: a review of the literature. *Trauma Violence Abuse.* 2005;6(3):195–216.
52. Almedom A, Glandon D. Resilience is not the absence of PTSD any more than health is the absence of disease. *Journal of Loss and Trauma.* 2007;12:127–143.
53. Grotberg E. Resilience programs for children in disaster. *Ambulatory Child Health.* 2001;7:75–83.
54. Loughry M, Ager A, Flouri E, et al. The impact of structured activities among Palestinian children in a time of conflict. *Journal of Child Psychology and Psychiatry.* 2006;47(12):1211–1218.
55. Save the Children. Classroom Based Intervention—Impact Evaluation. http://www.savethechildren.org/publications/CBI_Impact_Evaluation.pdf. Accessed August 15, 2006.
56. Marshall R, Bryant R, Amsel L, et al. The psychology of ongoing threat—relative risk appraisel, the September 11 attacks, and terrorism-related fears. *American Psychologist*. 2007;62(4):304–316.
57. Stepakoff S, Hubbard J, Katoh M, et al. Trauma healing in refugee camps in Guinea: a psychosocial program for Liberian and Sierra Leonean survivors of torture and war. *American Psychologist*. 2006;61(8):921–932.
58. Onyut L, Neuner F, Schauer E, et al. Narrative Exposure Therapy as a treatment for child war survivors with posttraumatic stress disorder: tow case reports and a pilot study in an African refugee settlement. *BMC Psychiatry.* 2005;5(7).

59. Bichescu D, Neuner F, Schauer M, et al. Narrative exposure therapy for political imprisonment-related chronic post-traumatic stress disorder and depression. *Behavioral Research & Therapy*. 2007;45(9):2212–2220.
60. Cohn N, Piachaud J. Psychosocial support in the shadow of war. *Psychiatric Bulletin*. 1997;21:714–715.
61. Weine S, Kulenovic A, Pavkovic I, et al. Testimony psychotherapy in Bosnian refugees: a pilot study. *American Journal of Psychiatry.* 1998;155(12):1720–1726.
62. Neuner F, Schauer M, Elbert T. A narrative exposure treatment as intervention in a refugee camp: two case reports. *Behavioral and Cognitive Psychotherapy.* 2002;30(2):205–209.
63. Kucukalic A, Dzubur-Kulenovic A, Ceric I, et al. Regional collaboration in reconstruction of mental health services in Bosnia–Herzegovina. *Psychiatric Services*. 2005;56:1455–1457.
64. Goenjian A. A mental health relief programme in Armenia after the 1988 earthquake. Implementation and clinical observations. *British Journal of Psychiatry.* 1993;163:230–239.
65. Goenjian A, Najarian L, Pynoos R, et al. Postraumatic stress disorder in elderly and younger adults after the 1988 earthquake in Armenia. *American Journal of Psychiatry.* 1994;151(6):895–901.
66. Goenjian A, Steinberg A, Najarian L, et al. Prospective study of postraumatic stress, anxiety, and depressive reactions after earthquake and political violence. *American Journal of Psychiatry*. 2000;157(6):911–916.
67. Goenjian A, Walling D, Steinberg A, et al. A prospective study of posttraumatic stress and depressive reactions among treated and untreated adolescents 5 years after a catastrophic disaster. *American Journal of Psychiatry*. 2005;162(12):2302–2308.
68. Ager A, Loughry M. Psychology and humanitarian assistance. *The Journal of Humanitarian Assistance.* 2004.
69. Perrin M, DiGrande L, Wheeler K, et al. Differences in PTSD prevalence and associated risk factors among World Trade Center Rescue and Recovery Workers. *American Journal of Psychiatry*. 2007;164:1385–1394.
70. Orner, Schnyder. *Reconstructing Early Intervention After Trauma*; 2003.
71. Petevi M, Revel J-P, Jacobs G. Rapid Assessment of Mental Health Needs of Refugees, Displaced and Other Populations Affected by Conflict and Post-Conflict Situations. A community-oriented assessment. http://www.who.int/hac/techguidance/pht/7405.pdf. Accessed August 15, 2006.
72. Obrist B, Iteba N, Lengeler C, et al. Access to health care in contexts of Livelihood insecurity: a framework for analysis and action. *Public Library of Science (PLoS) Medicine*. 2007;4(10):1584–1588.