

Mental Health in Complex Emergencies and Natural Disasters

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Trauma Events in War and Violent Conflict

- Persecution
- Flight (internally displaced or refugee)
- Separation from family
- Violence
- Injury and death
- Rape
- Burned homes
- Bombing

Mass Graves in Kosovo, 1999

Mental Illnesses Resulting from War and Displacement

- Anxiety disorders- especially Post Traumatic Stress Disorder (PTSD)
- Mood disorders- especially depression
- Exacerbation of pre-existing mental disorders

Burden of Mental Illness in Populations Affected by War

- ❑ Increased prevalence of mental illness in war affected populations
 - CDC conducted mental health surveys in Kosovo, Afghanistan, Thailand, Cambodia, Sri Lanka

Prevalence of PTSD and Depression Among Refugees and War-affected Populations

	PTSD	DEPRESSION	Source
Cambodian refugees in Thailand	37.2%	67.9%	Mollica et al.
Bosnian refugees in Croatia	26%	39 %	Mollica et al.
Kosovar Albanians in Kosovo	17-25%	N/A	Cardozo et al.
Afghan population	42.1	67.7%	Cardozo et al.
Lifetime US population	7-8%	12-month 3.7% Lifetime 6.4%	Kessler ECA

Karenni refugees Thailand

Prevalence of PTSD and Depression Among Refugee Populations and Civilians in War and Violent Conflict

	PTSD	DEPRESSION	Source
Karenni refugees in Thailand	4.6%	41.8%	Cardozo et al.
Cambodia (Siem Reap)	21.8%	51.1%	Cardozo et al.
Sri Lanka IDPs	7.0%	30.7%	Cardozo et al.
Algeria	37.4%	N/A	de Jong et al.
Gaza	17.8%	N/A	de Jong et al.

Landmine Affected Karenni Refugees in 3 Camps in Mae Hong Son, Thailand

Anxiety 43.1%
Depression 58.6%
PTSD 10.3%

Prevalence Mental Illness among Landmine Injury Survivors in Siem Reap Cambodia

- **Anxiety 62.4%**
- **Depression 74.1%**
- **PTSD 33.7% (using 2.5 as cut-off point)**
- **Landmine injury survivors significantly higher levels of anxiety, depression, and PTSD ($p=0.0329$; $p<.0001$; $p<.0001$) than among the adult population in Siem Reap Province who had not been injured by landmines**

Psychological Issues Following Natural Disasters

- Survivors of natural disasters are at high risk to develop PTSD, emotional distress, anxiety and depression.
- Earthquake in Armenia, volcano eruption in Armero, Colombia, tsunami in South-East Asia, hurricane Katrina in the USA and earthquake in Haiti.

**Tsunami destruction of property on Phuket,
Thailand**

Natural Versus Man-made Disasters

- One study compared severity and course of PTSD, anxiety, depression among earthquake victims and persons exposed to violence and torture in Azerbaijan. Both the natural and man made disaster group were at high risk of developing mental health problems. Depressive symptoms subsided over time, but not PTSD (Goenjian, et al. Am. J Psychiatry 2000).
- A follow-up mental health survey 9-months post-tsunami in Thailand showed a decrease in prevalence rates of symptoms of PTSD, anxiety, and depression among the displaced; significantly decreased from 11.9% to 7%, from 36.9% to 24.8%, and from 30.2% to 16.7%, respectively (van Griensven , et.al. JAMA, 2006)

Cross-cultural Issues

- PTSD, depression may be manifested in a variety of ways in different populations and cultures.
- Cross-cultural diagnoses; more severe psychopathology, more likely applicable across cultures i.e. schizophrenia.
- The key to valid cross-cultural assessment lies in establishing equivalence with regard to language, concepts, scales, and norms using an ethnographic approach.

Cycles of Violence

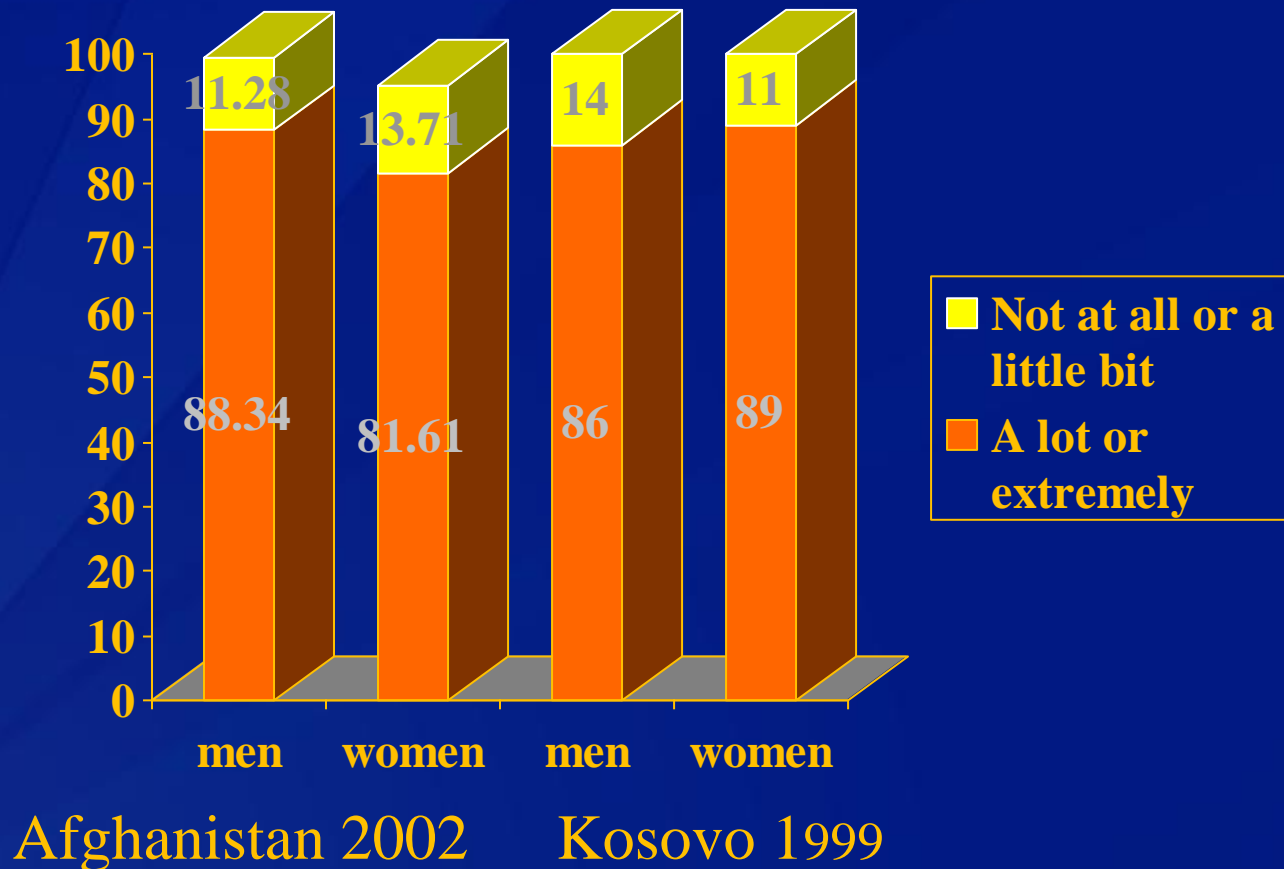
- Psychological wounds of war may persist for many years and have trans-generational effects
- Mental illness may be an obstacle to conflict resolution and a trigger of new conflicts

Boys with their toys in postwar Kosovo

**Bridge dividing Mitrovica, Kosovo guarded
by KFOR troops, 1999**

**Disarmament ceremony Kosovo Liberation
Army**

Feelings of Hatred Nondisabled Afghan Respondents and Kosovar Albanians



**Aid workers carrying remains to mortuary
after Tsunami in Thailand (2005)**

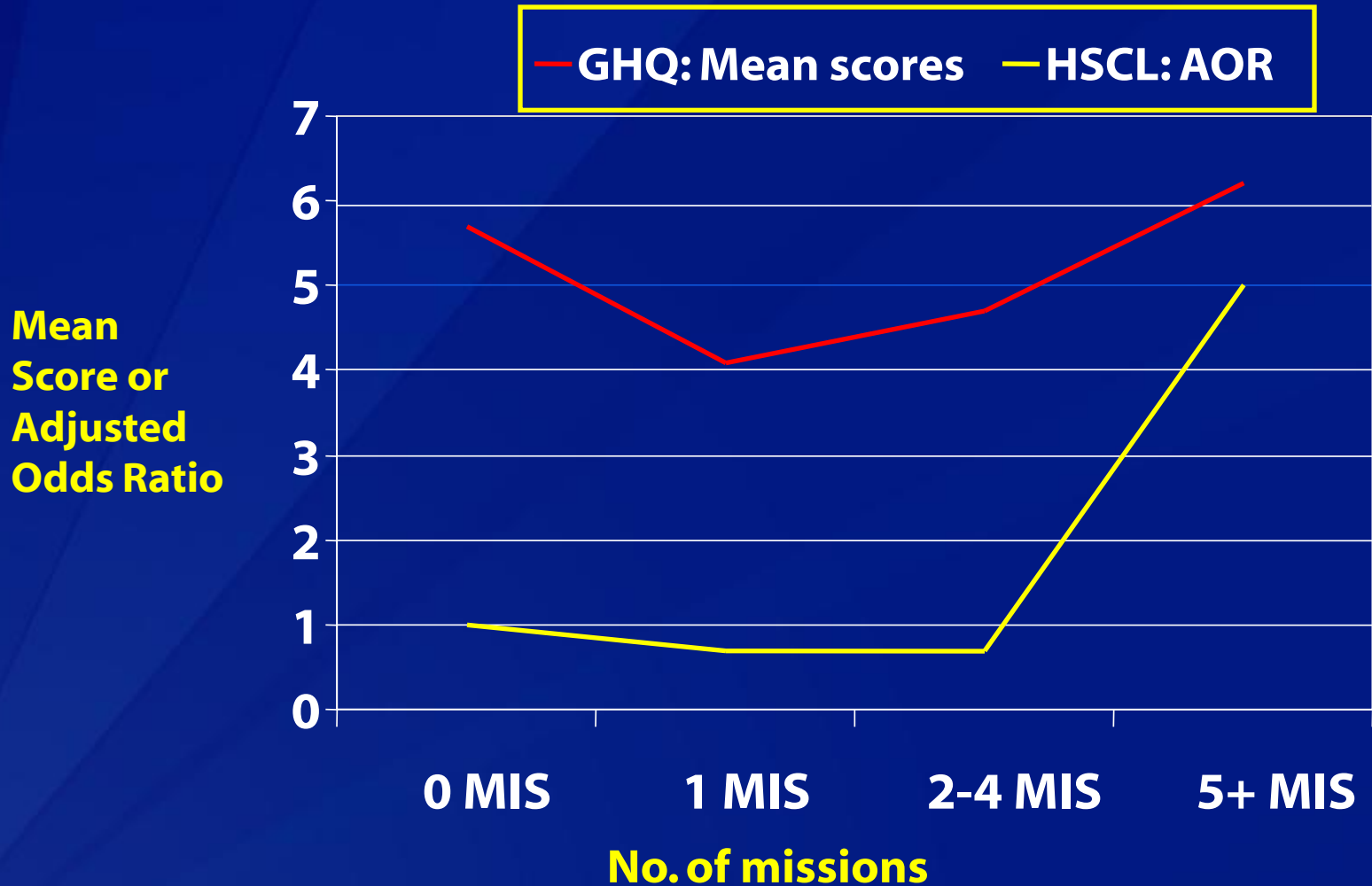
Mental Health and Aid Workers

- Working long hours in precarious security conditions, surrounded by misery, death and destruction and often lacking management and organizational back-up, aid workers risk becoming emotionally and mentally drained.
- High risk to develop mental illness such as depression, anxiety, PTSD.
- Local staff are particularly at risk.

The Toll Of Stress On Aid Workers

- Almost 50% of returned international staff were described as being at moderate or high risk of burnout; 15% showed a clinically significant level of symptoms of depression; and 46% showed a high or moderate level of symptoms of PTSD. (Eriksson, 2002)
- National staff members who had worked in Kosovo showed high levels of depression, anxiety, post-traumatic stress disorder symptoms, and alcohol use. (Lopes Cardozo, 2005)
- Longitudinal study of international aid workers is underway (CDC and Antares research consortium, pending publication 2011)
- Surveys among national staff in Gulu, Uganda, Jordan, and Sri Lanka have been conducted. (CDC and Antares research consortium; pending publication, 2011)

Expatriate Aid workers : Relationship between No. of Missions and Depression and Non-specific Psychiatric Morbidity



Recommendations for Best Practices

- Selection and deployment procedures
- Psychological support
- Briefing /debriefing, critical incidents
- Staff security
- Peer support networks
- Preparation and Training
- Working and living conditions
- Compensation, insurance, R&R, communication
- Clear organizational structures

Interagency Standing Committee Guidelines

- IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings
(<http://www.humanitarianinfo.org/iasc/>)

Psychological Interventions

Emergency Phase

- Establish services through the primary health care system to address urgent psychiatric problems .
- Ensure availability of essential psychotropic medications at health facilities .
- Organize outreach and non-intrusive psychological support, or “psychological first aid” .

Psychological Interventions

Reconsolidation Phase

- Train and supervise PHC workers in basic mental health knowledge and skills
- Educate aid workers and community leaders in basic psychological skills
- Ensure continuation of medication of psychiatric patients
- Collaborate with traditional healers
- Facilitate creation of community based self-help support groups

Social Interventions

- Organize outreach and psycho education (educate the public on normal psychological distress and psychopathology)
- If poverty is an issue encourage income generating projects
- Organize recreational activities and schooling for children

Little Evidence of Effectiveness of Mental Health Interventions

- Impact of most post-disaster interventions unproven
- Impact of most disease-specific interventions unknown in most developing countries
- Urgent need for outcome evaluation of interventions

Literature Effectiveness of Mental Health Interventions

- Group interpersonal psychotherapy for depression in rural Uganda. A randomized controlled trial. (Bolton, JAMA, 2003)
- The efficacy of a mental health program in Bosnia-Herzegovina: impact on coping and general health. (Mooren, J. Clin. Psychology, 2003)
- Treatment of Posttraumatic stress disorder in postwar Kosovar adolescents using mind-body skills groups : a randomized controlled trial. (Gordon, J. Clin. Psychiatry, 2008)
- School-Based mental health intervention for children affected by political violence in Indonesia: a cluster randomized trial. (Tol, JAMA, 2008)

Summary Findings

Populations Affected by War and Natural Disasters

1. High prevalence of trauma events.
2. High prevalence of depression, anxiety, and PTSD.
3. Context, displacement status, traumatic events, demographic variables, and other mitigating factors may affect mental health outcomes.
4. Instruments not always validated for specific culture.
5. There is an urgent need for more research to determine the efficacy of mental health interventions in emergencies and natural disasters.

Thank you for your Attention

For more information please contact Centers for Disease Control and Prevention

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The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

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