

# Psychological interventions in disasters - reflections from professional experience

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There is no justification for mental health responses to be delayed until weeks after a disaster happens. We hope that better systems for knowledge gathering will improve both the short and long-term responses to disasters.

This article describes some of the challenges involved in early and long-term intervention to reduce distress and prevent chronic mental health problems. Psychological theory and practice are put to use in disaster intervention to a larger degree than before. Many of these disasters are cross-national and cross-cultural and pose complexities seldom met in more circumscribed national disasters. Over the last decade we have observed a steep increase in both UN (United Nations) and NGO (Non Governmental Organisations) interest and willingness to provide psychological and social, often termed psychosocial, support to affected groups. Not only is psychological theory and intervention used for direct victims, but for indirect victims and helpers. So universal has this response become, and so eager are all the organisations to show their presence following disasters, that this causes logistical problems. In some recent disasters the influx of counsellors, therapists and other psychosocial helpers and the lack of coordination of the psychosocial resources has taxed the organisational response and resources instigated to help affected groups.

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Only a few days before the 2004 Tsunami Mollica and coworkers (2004), who have vast experience from disasters, published an article calling on all countries throughout the world to prepare themselves to deal with «Mental Health in Complex Emergencies». They stressed the need for each country to develop a plan to screen for adverse reactions after a disaster and then provide effective treatment. While they acknowledged the mental health consequences for survivors and bereaved, they were not calling for armies of counsellors or therapists to rush into a disaster zone. Disasters must be met with resources that match the need of those affected, not the need for organisations to be seen or helpers' need to help.

Major disasters affect large groups of people, and they can compromise the social infrastructure. Help from the outside may be warranted as whatever mental health services existed prior to the disaster may be insufficient to meet the needs. In some of the countries where we have worked, especially in Africa, the mental health infrastructure was underdeveloped before the disaster and partly destroyed during the disaster (e.g., Rwanda). With large numbers of bereaved and survivors the relevant authorities will have to use outside mental health resources while at the same time they find ways to work to improve mental health through existing structures such as schools. Ways have been found to deliver interventions to large numbers of people, but often they may need to be helped in groups by helpers who are not highly trained mental health specialists.

If normal mental health services are likely to be overwhelmed, how then are large numbers of survivors to be screened in order to deliver treatment to the most severely affected? Mollica et al. (2004) recognised the need for each country to develop appropriate screening measures. They also recommended that each country develop appropriate, evidence-based interventions that could be delivered on a large scale. For children the Children and War Foundation, a Foundation we helped to set up, has made available both manuals and instruments that can be used to evaluate intervention efforts (see [www.childrenandwar.org](http://www.childrenandwar.org)). Only by dedicated work to make sure that our interventions are able to provide reliable results are the affected groups helped in a real way.

We examine part of the theory surrounding the mental health needs after a major disaster, when and how to intervene, and the need for training for both mental health professionals and staff of NGOs and other first responders. But first we would like to provide an example of proactive planning in this area.

## The Bam earthquake

On 26 December 2003 a large earthquake hit the city of Bam in Southern Iran, destroying 85 % of the city, including the mud and wattle fortress that had stood for centuries. An estimated 26,000 people were killed and a further 30,000 were injured. Within a few hours, teams of trained mental health workers were on site arranging one of the largest mental health interventions in history. This did not happen by chance. A few years earlier, Dr M T Yasamy had been appointed as Director of the Department of Mental Health in the Ministry of Health in Iran. In the 1990s, the UN had declared this decade to be an «international decade of disaster reduction», and this was ratified into law by Iran in 1991. Knowing that Iran experienced earthquakes regularly, he decided that his department should be better prepared to respond to them. The Ministry of Health set up a sub-committee to prepare a proposal on «Mental health service delivery to survivors of natural disasters». A series of needs assessments were undertaken and the results of five projects published in 1997. Based on this they drafted a national programme. This included executive, educational and research strategies and was followed by the preparation of a series of manuals aimed at the general public, relief workers and relevant professionals, followed by human resource development.

From around 2000, Dr Yasamy and colleagues undertook a series of «training of trainers» workshops for Red Crescent Trainers who in turn began training relief workers in basic skills of psychosocial support. Further training with the help of UNICEF through the Center for Crisis Psychology in Bergen, Norway was also undertaken.

The first two studies used standard scales and revealed high levels of mental health needs concluding that 77 % of surviving adults and 47 % of children had posttraumatic stress disorder (PTSD). They used a direct needs assessment asking 57 questions about exposure, personal loss, need for information and counselling, and type of social support received. Most survivors said they needed more accurate information, especially about relatives. Some of the «help» they received had been inappropriate: 64 % had been told they must not cry; 43 % of children had not been playing since the disaster. But 97 % had restarted school within 3 months. 93 % wanted emotional support, but only 22 % got any from relief workers.

This information was used to pilot the national plan when an earthquake struck Avaj and Abgarm in Qazvin in 2002. A regional psychosocial team was established on the second day, and the Children and War Recovery Manual (Smith et al., 1999: [www.childrenandwar.org](http://www.childrenandwar.org)) formed the basis for trauma

counselling over four sessions with around 960 children and 742 adults. Using the standard measures before and after interventions, they showed clinically significant reduction in distress on all measures.

Thus, when the earthquake struck Bam, the Ministry was able quickly to build on the training undertaken in the previous years and soon trained more than 2000 mental health professionals and (mainly) teachers to deliver the adapted 4 sessions from the Children and War Recovery Manual. Self-completed questionnaires and clinicians' judgements indicated that 85 % of the child survivors benefited from these brief group interventions that were based on Cognitive Behavioural Exercises. Although not developed for adults, the manual was also adapted for adult groups, and nearly 80 % of them were reported to benefit from the groups. In the first seven months after the earthquake, some 42,000 adults as well as children received the intervention. Around twice that number of people were eventually reached over the first year after the disaster.

## Relevance to the psychosocial disaster field

This illustrates that there is a great deal of careful planning, preparation and training required to meet the mental health needs after a major and complex emergency. It also shows how adequate planning and training leads to desirable results when the unthinkable happens. The interventions and support started as soon as practicable after the earthquake. The general wishes of survivors had been previously ascertained, and the most seriously distressed were identified by screening after a careful mapping of where the survivors were located, so that none were missed. This was made possible, in part, by having suitable instruments already translated, developed and standardised.

We are well aware of the debate that has taken place in professional circles describing active early intervention as insensitive to local cultural needs. Fearful of acting as new colonial oppressors, they argue that many mental health problems are socially constructed and should not be imposed on other cultures. Unfortunately this critique has become widespread knowledge among many UN and NGO organisations, leading to less adequate follow-up of the posttraumatic reactions than many, but by no means all, survivors and bereaved of disasters experience. We have previously taken issue with this, often ungrounded, critique (Dyregrov, Gupta, Gjestad & Raundalen, 2002), but must admit that all mental health problems have both social and cultural dimensions and, as knowledge accumulates, the way we classify disorders changes over time. Hopefully we will continue to improve on the way we respond to disasters in the coming decades - but to do that, we need evidence on which to base our decisions, not outmoded theories.

At one point, it became fashionable in some NGOs and UN organisations to deny the reality of post-traumatic stress reactions and claim that this was an almost imperialistic use of western concepts and the export of individualized therapy to cultures where it did not belong. It was claimed that such few self-completed screening tools as were available were culturally inappropriate for use in other than western communities. But the critics never advanced any empirical data to support the view that stress reactions were substantially differently expressed in other cultures. Worse still, they never suggested what else should be done, thus laying the way open for emergency responders to ignore suffering or delay intervention.

Although they argued against western «talking therapy» they only presented vague exhortations to use «local healers» without defining who they were or what they did, or even whether there was any evidence that alternative therapies were effective, as guidance to what to do to reduce mental distress.

The Bam intervention shows that measures developed in western mental health settings proved appropriate, relevant and helpful in identifying people in greatest need. Brief but active interventions

that had their origins in evidence-based cognitive behaviour therapy translated well into effective tools to help not only children but also adults within a very different Islamic culture. Other methods, even individually based interventions for trauma, such as Narrative Exposure Therapy (Neuner et al., 2008) has also proven effective under different cultural settings, challenging the claims made by the «anti trauma and PTSD» proponents.

Unfortunately, some of these beliefs about cultural imperatives continue to influence practice and policy even within the World Health Organization (WHO) and other United Nations (UN) agencies.

## Collaborating with local professionals

Professional groups working in the trauma field from many universities, institutions and foundations or charities in Europe and the US have set up regular collaboration with professionals in many countries in what is often called the developing world or in global hot spots. VIVO, an Italian organisation under which NET was developed has worked in several countries in Africa and in Sri Lanka, fostering local initiatives. The Children and War Foundation has worked with colleagues in the Middle East, Sri Lanka and China, providing training in manual intervention and access to free screening instruments. In similar ways professionals are linking up with local resources to use, develop and adapt culturally appropriate helpful intervention methods that have at their base modern evidence-based procedures. It is imperative that we are able to provide the most updated, scientifically based resources and adapt these to the local situations in the developing world.

One of us (W.Y.) belongs to the UK Sri Lanka group, a charity or NGO set up to provide training, help and advice to people in Sri Lanka affected by the civil war. It consists of mental health and trauma experts, most of whom have Sri Lankan connections, and has been operating for nine years to raise awareness of the mental health consequences of the civil war and to train mental health professionals and community volunteers to deliver help to the affected. The UK-SL Trauma Group has been working with the government and NGOs to increase the local capacity to meet the mental health needs in a sustainable way. They have worked with officials to support new courses in psychology and most recently have collaborated with King's College London, the Sri Lankan Forum for Research and Development, CAFOD and the Northern Ireland Centre for Trauma and Reconciliation to establish four mental health resource centres in different parts of Sri Lanka where relevant personnel can access up-to-date information as well as have on-going supervision in relevant skills.

Like in Bam, where proper planning and training could be put to use when the earthquake hit, this group could rapidly respond to the Tsunami when it struck. In the first few days the main advice was to help people be aware of normal bereavement reactions and to get things back to as normal a way as possible and as soon as possible. In particular, adults were advised to listen carefully to the children's accounts of what happened and of their reactions, normalise these, and help children get back into a normal rhythm of life, including an early opening of schools, even if they were held in make-shift settings.

Various members of this group visited Sri Lanka by invitation towards the middle of January 2005. They were asked to participate formally and informally in planning the mental health responses. Knowing that there were likely to be many international visitors who would want to undertake evaluations and research, a conference was held on the ethics of research in post disaster situations. From this came a recommendation, subsequently acted on, that professionals should get ethical approval for any studies being undertaken. Besides this, the group participated in the training of trainee psychiatrists, paediatricians and primary care workers (cf. Nikapota, 2006). They also visited

the worst affected areas to give workshops to local volunteers who were already providing support to survivors. The approach was to listen carefully to the problems they had encountered and described and then give such advice as was relevant. By such form of collaboration local initiatives and expertise can be developed.

## Bureaucratic problems

There are often governmental and non-governmental barriers to help, such as the belief that trauma does not exist, and work following disasters can be a training in patience and parliamentary skills to get things done. In Sri Lanka, following the Tsunami, for months no decision could be made about the depth of the exclusion zone, and the result has been a great delay in providing even temporary housing. The temporary tents that aid agencies quickly established (with their logos prominently displayed) could still be seen a year later. Many people took refuge in temples and schools, indeed in any building that was standing. This, of course, interfered with the normal usage of that building, but at least people were in groups with others they knew. But it was decreed that it would be better (for the distributors rather than the survivors) to build large sets of temporary dwellings - little more than huts with corrugated tin roofs - so that aid could be more efficiently distributed.

A PLAN report estimated that 500 - 600 institutional actors were involved with relief by the end of January after the Tsunami in 2004, excluding individuals and informal groups. They write: «It led to a situation where there were too few affected villages to accommodate all the players. Inappropriate aid was often deposited at the first available relief camp or community, whether it was wanted or not, while others were ignored. Well-motivated attempts to coordinate relief activities led to a proliferation of INGO-NGO coordinating fora that added to the confusion. Instead of providing a common voice, a unified purpose and combined action, the problems of duplication and competition persisted.» (Children and the Tsunami, PLAN, 2005, p. 19.)

It is not only the overwhelming influx of organisations and helpers that pose a problem, it is also that political factors may compromise the professional quality of interventions. When UN and NGOs need to be seen doing something (and showing their logo) they can start implementing psychosocial support that may have little empirical documentation. It is our impression both following the Tsunami, and in other war and disaster situations where we have been involved, that far too many NGOs provide opportunities to play with no focus on how to address more specific posttraumatic reactions.

After the Tsunami money was donated in such amounts as to overwhelm the aid agencies. Press reports have stated that for example the Norwegian Red Cross still has much money left over from the donations (<http://www.nrk.no/nyheter/okonomi/1.4382075>). Many NGOs were unable to expand their activities to meet the needs. Many stated that they were involved in «psychosocial» work, including trauma counselling. It has proved difficult to obtain any sense of what this involved, what skills their workers had, and how effective their programmes were, from reading their reports on their web-sites. Evidence-based practice has yet to enter the vocabulary of most NGOs.

We have over and over again experienced the altruism among helpers in disaster situations. As we both are well known in professional circles for our involvement in disaster situations, we get offers from many colleagues with relevant language skills who immediately want to go to help whenever there is a new disaster. They are so eager to help, but do not know how to go about it. Unfortunately following the Tsunami it was not unheard of for parties to arrive in a country for two weeks intending to «do therapy». All this without any knowledge of local circumstances or the ways in which mental health and other services were organised. The result was chaos - some places receiving offers of «help»

from multiple agencies, some being ignored. One of us got contacted by an influential leader of a large professional association who wanted to send a hospital ship of counsellors along the South East Asian coast to conduct therapy!

Far too many NGOs and concerned individuals flocked to Tsunami-affected areas and offered to provide «training». Whether those offering had any track record in providing appropriate training was rarely questioned (at least before the training), but very few such trainers provided any on-going supervision, trouble-shooting and follow-up. These aspects are costly but very necessary if new skills are to be properly learned, applied and sustained. High motivation is no guarantee for an appropriate response, and we do well to be careful in selection and deployment.

Mollica et al. (2004) concluded that «A mental health system of primary care providers, traditional healers and relief workers, if properly trained and supported, can provide cost-effective, good mental health care». The plan which they proposed «...emphasises the need for standardized approaches to the assessment, monitoring and outcome of all related activities».

There needs to be agreement on how NGOs and other governmental and international organisations should cooperate so that scarce resources are used well. Sadly, competition between agencies is not a rare phenomenon. Sometimes called the «hostile donor society», it reflects how the disaster ground has become an area of showing off, getting press attention and secure future funding. Helpers need to be screened for suitability; there must be a balance of people, i.e. multicultural background, with proper training and interagency coordination by designated coordinators. The Inter-Agency Standing Committee's (IASC, 2007) Guidelines on Mental Health and Psychosocial Support in Emergency Settings offer important advice that will help to facilitate an integrated and effective mental health response in emergency situations.

## Mental health needs in disasters

Norris (2005) in a review of 220 samples from natural and man-made disasters found that the overall impairment was very severe for 20.9 % and severe in 38.2 % of the samples. Disasters have serious consequences for both mental and physical health. From Norris' study it is evident that the sheer number of affected people demands a public health or collective approach. There is a need to provide support and services at all levels within a community and adopt a public health perspective and provide large-scale but brief interventions that can reduce distress sufficiently so that survivors can benefit from whatever other supports are available in their community.

If large scale, group interventions are to be implemented, as Bam showed they can be, then this means that the issues involved in developing group screening instruments have to be addressed. WHO (2005) rightly says that it is unethical to provide screening if that will identify a need that cannot be met. However, it is surely ethical to ascertain the extent and nature of any unmet needs.

## Recommendations

Disasters not only challenge our resources but also demand that we stretch our abilities to the utmost. Our theoretical and clinical knowledge has to be built into practical interventions that can reach a large number of people. Although most evident following western disasters, people around the world are expecting more and more psychological support following trauma and disasters. This challenges us to foster people's own resources and stimulate social support. We can also reduce the number of people needing therapeutic interventions by teaching them coping skills that will reduce mental

health problems and stimulate growth. Psychology is more and more integrated in disaster plans, and psychologists have, and will increasingly play, an important role in early and long-term intervention after disasters.

Recently we, as part of the EFPA Standing Committee on Disaster, Crisis and Trauma Psychology, advised the European Commission on what every European country should have in place in this regard. This is an excerpt of what we advised the council to send to their member states:

Adequate psychosocial intervention following disasters can reduce ill health and foster resilience if handled appropriately. The Council of Europe wants the citizens of Europe to have access to comparable services regardless of where they live. By a more systematic focus on psychosocial support within each member state's emergency planning, by proper training of volunteers and professionals, and by describing a minimum level of care for those who experience disasters, this aim can be reached. The following recommendations to member states will ensure that a similar level of care will be accessible for those who become victims of a disaster throughout Europe:

Following disasters, survivors, bereaved and rescue personnel have the right to access appropriate help and services free of charge. To guarantee this, psychosocial support has to be integrated in national laws and regulations, and be part of all emergency plans. Action plans should be available on national, regional and local level and include the following elements: a) coordination of psychosocial resources and activation plans from federal to local level, b) mapping the trauma risks within a country with its possible psychosocial consequences, c) mapping resources available for psychosocial support, d) designate parties responsible for organising and delivering psychosocial support, e) include psychosocial resources in emergency drills and exercises, f) description of the services that survivors and bereaved have the right to access, including community support, and the duration of services.

To ensure that professionals and volunteers who work with the victims of disaster have adequate and sufficient training for the work, training programmes have to be instigated at all levels, following recommendations to be developed by the Council of Europe.

Psychosocial support and services should include the following important elements:

- 1 Psychological first aid should be available for all survivors and bereaved immediately after disaster. Adequate information systems that secure early identification of those involved, embedded in a caring environment, reduce the mental strain of individuals and families, and should be prioritized in the early help efforts
- 2 Outreach early interventions should be actively offered to bereaved families and survivors
- 3 Screening should be undertaken (1–3 months after the disaster) to ensure that effective treatment is available for people at risk
- 4 Culturally sensitive long term followup for individuals, families and communities that experience significant mental distress over time as a result of the disaster
- 5 Special efforts should be taken to ensure that children get appropriate services and assistance
- 6 Specific concern and approach for vulnerable or highly exposed groups.
- 7 Modern disasters often cross borders, and the Council of Europe will coordinate country plans to ensure that responses that require cross border cooperation can be undertaken in a smooth manner.

## Referanser

References

- Dyregrov, A., Gupta, L., Gjestad, R., & Raundalen, M. (2002). Is the culture always right? *Traumatology*, 8, 3 - 10.
- Inter-Agency Standing Committee (IASC) (2007). *IASC Guidelines on mental health and psychosocial support in emergency settings*. Geneva: IASC.
- Mollica, R. F., Lopes Cardoza, B., Osofsky, H. J., Raphael, B., Ager, A., & Salama, P. (2004) Mental health in complex emergencies. *Lancet*, 364, 2058 - 2067.
- Neuner, F. Onyut, P. L., Ertl, M., Odenwald, M., Schauer, E., & Elbert, T. (2008). Treatment of posttraumatic stress disorder by trained lay counsellors in an African refugee settlement: a randomized controlled trial. *Journal of Consulting and Clinical Psychology*, 76, 686 - 694.
- Nikapota, A. (2006). After the tsunami: A story from Sri Lanka. *International Review of Psychiatry*, 18, 275 - 279.
- Norris, F. H. (2005). Range, Magnitude, and Duration of the Effects of Disasters on Mental Health: Review Update 2005. Review posted to [www.redmh.org](http://www.redmh.org) March 2005.
- Plan International (2005) Children and the Tsunami: Engaging with children in disaster response, recovery and risk reduction: Learning from children's participation in the tsunami response. Bangkok: Plan International Asia Regional Office.
- Smith, P., Dyregrov, A., Yule, W., Perrin, S., Gupta, L., & Gjestad, R. (1999). *A manual for Teaching Survival Techniques to child survivors of wars and major disasters*. Bergen, Norway: Foundation for Children and War (see [www.childrenandwar.org](http://www.childrenandwar.org)).
- WHO (2005). Helping children and adolescents in distress: a manual for community workers in emergency settings. (Draft downloaded on 30 December 2005) Geneva: WHO.