

Early mental health intervention after disasters

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Abstract Disasters are complex events that challenge the coping abilities of individuals and communities. This article reviews the likely impact of such events and factors that compromise the ability of survivors to cope with that impact. The principles of early intervention are also considered, particularly with regard to the role of a mental health adviser. This role is an important and demanding one, and its aims and principles of professional conduct should be carefully scrutinised.

'Disasters, whether natural or manmade, affect lives and property, devastating communities through a chain of catastrophic sequences affecting social and economic developments.' (Cohen, 2002)

There are different definitions and different typologies of disaster (e.g. Gibson, 1998: p. 11), but Cohen's description above underscores the scale and complexity of such an event. Disasters have the potential to overwhelm the normal coping methods of individuals and communities. It is because of their inherent power that disasters have played a major role in shaping humankind's social, economic and cultural development. They are not uncommon events. Cater *et al* (1993) estimated that between 1967 and 1991 disasters accounted for 7 million deaths throughout the world. Despite their frequency, however, it is only relatively recently that there have been systematic attempts to research their effects and the methods that might ameliorate them. As Alexander (1996) has emphasised, research after major trauma is hindered by three particular factors. First, such events are largely unpredictable and uncontrollable. Thus, there is no time to devise sophisticated research strategies. Second, because of their widespread and intense emotional impact, there are very legitimate ethical constraints on the type and timing of data collection. Finally, because investigators often use different diagnostic and assessment procedures, different sample frames, as well as different follow-up periods, it is difficult to compare the findings of one study with those of another.

None the less, the sheer volume of research does allow us to advance some important general principles. On the basis of that research, in the first

part of this article I discuss disasters in terms of what can be done immediately after they occur, how individuals and communities react to them, who might be the victims and who might be at risk of adverse psychological reactions.

In the second part I explain the role of a mental health adviser following a major catastrophe. This section largely reflects my own experience of involvement in a number of major incidents in the UK and abroad, including the Nairobi terrorist bombing (Alexander, 2001). There is a growing enthusiasm for appointing mental health advisers, but as yet there has been no systematic analysis of this role, its traps and challenges.

In the aftermath of disaster

What are appropriate methods of early mental health intervention?

In 1989, the Department of Health funded a study by the Allen Disaster Working Party, and its published report (Allen, 1991) provided helpful advice regarding the provision of protocols for psychosocial support, the distribution of information and liaison with the media. However, a subsequent follow-up study conducted by Adshead *et al* (1993) revealed that very few local authorities had made any effort to implement the Allen recommendations. This is perhaps not surprising since the history of trauma confirms a striking and consistent tendency among communities to deny the reality of suffering (e.g. Alexander, 1996), and therefore ambivalence has often been displayed towards early psychiatric intervention after disasters.

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However, the value of early mental health intervention has been confirmed in several sources (e.g. Raphael, 1986; Everly, 1999). There is nothing new about providing early psychological care for victims of trauma. There are well-documented attempts to provide psychological help for the 'shell-shocked' combatants of the First World War, through the principles of 'PIE': proximity (deal with the individual near the front line); immediacy (deal with the individual promptly) and expectancy (expect that the individual will be able to resume combat duties). The commitment to 'forward psychiatry' continued during and after the Second World War. In the civilian domain, Lindemann (1944) conducted a seminal follow-up study of the survivors and families of Boston's Coconut Grove nightclub fire in 1942 (in which about 500 people died). His results suggested that the provision of early psychological help had significant and durable effects.

A pioneer of what is now described as crisis intervention was Caplan (1964). His therapeutic and preventive principles have resurfaced in a number of guises and have subserved the development of other modes of intervention, including critical incident stress management (CISM; Everly & Mitchell, 1997). However, the concepts of this and of critical incident stress debriefing (CISD; Mitchell, 1988) have been subjected to much critical comment and evaluation (e.g. Wessely *et al*, 1998; Raphael & Wilson, 2000; Everly, 2001). More recently, there has been a revived interest in 'psychological first aid' (Box 1) as first described by Raphael (1986) for use in the civilian domain.

The epidemiological evidence confirming the scale of the psychiatric toll exacted by major trauma is now persuasive (e.g. de Almeida, 2002; Alexander & Klein, 2003a). Also, a recent rigorous 10-year follow-up of the survivors of a major offshore disaster confirmed how durable could be the effects of such an event (Hull *et al*, 2002). Although such data neither contravene the basic optimistic view that recovery from major trauma is the norm nor undermine the

belief in people's emotional resilience in the face of great adversity, they do testify to the need to address post-disaster mental health problems. To that end, Blythe (2002) has produced an excellent set of descriptions and checklists for use by those who are responsible for civilian agencies and organisations that might be the victims of a major incident. In the current climate, guidelines on how to respond to a major terrorist incident are particularly welcome (Alexander & Klein, 2003b).

What are the characteristic individual and community reactions?

First, it should be noted that very few people display frank or gross psychopathology in the immediate aftermath of a disaster. It is important therefore not to pathologise normal reactions such as those listed in Fig. 1.

It is useful to think of reactions to trauma in terms of a number of stages, and one of the most frequently cited descriptions is the three-phase model of Tyhurst (1951), which proposes the impact, recoil and recovery phases.

The impact phase

During this phase individuals are commonly shocked, horror-struck or numbed. Television coverage of the terrorist attacks on the World Trade Center in New York in 2001 graphically captured these reactions. At this stage, individuals may be at further risk because of their inability to protect themselves. Some carry out altruistic acts, and a small but significant number retain their capacity to think rationally and act purposefully. Panic is not common: it is observed in about 10% and is more likely when individuals are trapped and helpless (Durodie & Wessely, 2002).

Mental health professionals will have little to offer in terms of active treatment during this phase because the priorities are for rescue and the provision of food, warmth and safety. Nevertheless, mental health services should be launching their response, including the setting up of walk-in clinics and helplines, an outreach programme and the distribution of leaflets.

It was noted that after the Kobe earthquake of 1995 in Japan, survivors spurned the psychiatric clinics that had been set up (Shinfuku, 1999), but readers are advised to consult the review on acute stress disorder by Bryant & Harvey (2000).

The recoil phase

At this stage survivors begin to build up a picture of what has happened, and seek to reunite with family and friends. Ironically, the chivalrous principle of

Box 1 The principal components of psychological first aid

- Comfort and consolation
- Protection from further threat and distress
- Immediate physical care
- Goal-oriented and purposeful behaviour
- Helping reunion with loved ones
- Sharing the experience (but not forced)
- Linking survivors with sources of support
- Facilitating a sense of being in control
- Identifying those who need further help (triage)

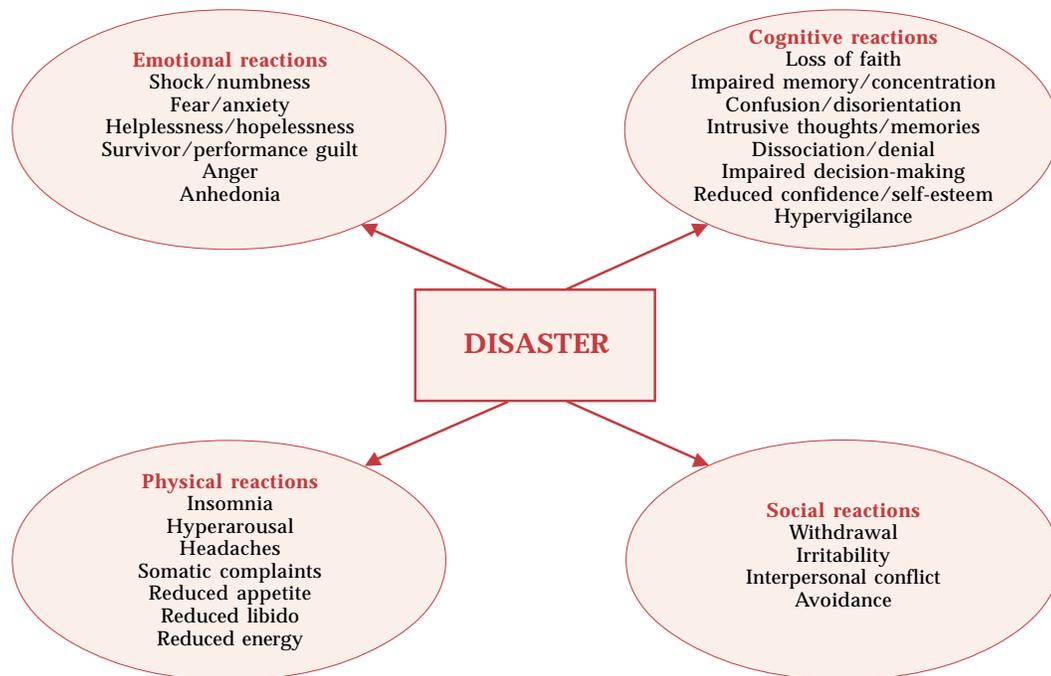


Fig. 1 Normal reactions to disaster.

evacuating 'women and children first' may not be sound in psychological terms. Disruption of family ties, particularly for young children, may be damaging at this time.

The ad hoc groups that develop during this phase represent important elements in how communities rally in a concerted fashion in the wake of a major disaster (Raphael & Newman, 2000). How survivors are dealt with by rescuers and the authorities may influence their longer-term psychiatric adjustment.

Recovery phase

For many this will be an extended period characterised by alternating phases of adjustment and relapse. Raphael (1986) helpfully identified the 'honeymoon' period that follows a disaster, during which survivors benefit from a wave of compassion, goodwill and care. However, this level of promise and response cannot be sustained, and there often follows an emotional trough during which disillusionment sets in as the survivors wrestle with what they regard as bureaucratic and legal barriers. These difficulties may be sufficiently severe as to constitute a 'second disaster'.

It must be remembered that post-traumatic growth (Tedeschi *et al.*, 1998) is possible for individuals and for communities. This may be seen in terms of improved relationships, the identification of new

methods of coping, revised life values and a greater appreciation of what life already offers.

Who are the victims?

Because of the ripple effect of major incidents, many individuals may legitimately be classified as victims even though they were not at the epicentre of the disaster. Taylor & Frazer's (1982) scheme for classifying victims of disasters is shown in Box 2.

Some survivors experience an 'illusion of centrality', i.e. the feeling that only they have been adversely affected by the incident.

Box 2 A classification of victims

Primary victims: those at the epicentre of the disaster

Secondary victims: e.g. family and friends of primary victims

Third-level victims: e.g. emergency and rescue personnel

Fourth-level victims: e.g. members of the community who offer help

Fifth-level victims: e.g. those disturbed through indirect involvement

Sixth-level victims: e.g. those who, but for chance, might have been directly involved

Box 3 Risk and vulnerability factors

Pre-traumatic factors

- Childhood sexual abuse
- Previous unresolved losses and traumas
- Substance misuse
- Previous psychiatric history
- Disadvantage (social, educational or economic)
- Concurrent life stressors
- Female gender
- Age (young children and elderly people)

Peri-traumatic factors

- Suddenness and unexpectedness
- Perceived or genuine threat to life (self or others)
- Exposure to grotesque scenes and sensory experiences
- Proximity (there is generally a dose–response relationship)
- Extensive personal loss
- Man-made (as opposed to natural) disaster
- Extended exposure (e.g. trapped)

Post-traumatic factors

- Severe acute psychological reactions
- Lack of social/family supports
- Adverse reactions from others (e.g. blame or rejection of suffering)
- Survivor or performance guilt

Who is at particular risk of adverse psychological reactions?

No particular event is guaranteed to result in post-traumatic psychopathology. However, certain factors put individuals at risk and increase their vulnerability to adverse reactions. Some of these are displayed in Box 3 (see also Yehuda, 1999).

The mental health adviser

This is a highly responsible role, and it behoves the nominated individual to examine carefully a number of factors relating to it (Box 4).

Motivation and personal suitability

It is flattering to be invited to fulfil the role of mental health adviser, but this alone will not sustain anyone through the demanding period of disaster response. Advisers must feel a genuine emotional commitment to the exercise. They must be sure that they have the appropriate level of knowledge, skills and experience. Also, they must be ‘emotionally’ competent: if

they are dealing with too many concurrent personal life stressors, their emotional resilience may be seriously compromised. Mental health professionals have no immunity from the risk and vulnerability factors described above, and there is no merit in an adviser becoming another casualty of the disaster.

The aims of the adviser

There must be an explicit agreement about what the adviser is there to do. The aims must be realistic; an adviser suffering from a *furor therapeuticus* is a hazard, and unrealistic aims will lead to disappointment and disillusionment.

The adviser is there to advise, not to take over the mental health disaster response. The disaster belongs to the local community and nothing should be done to usurp or compromise the local response (lay and professional) and its healing potential. Advisers should be invited, and they should not be part of the ‘convergence phenomenon’ (McFarlane, 2000), i.e. the tendency of many, including onlookers and putative helpers, to arrive uninvited at the scene of a disaster (where they can become an impediment and consume limited resources, including food, water and accommodation). Ideally, the adviser should leave a legacy, for example, plans for training courses, and research and evaluative programmes. Disasters are opportunities to learn; these painful opportunities must not be missed.

Preparation

Disasters do not leave much time for planning and preparation but the adviser should consider the following issues.

Box 4 Considerations for a mental health adviser

Motivation and personal suitability

Aims of the advisory work

Preparation

- Support network
- Credibility
- Materials
- Disaster site visit

Protocol and etiquette

- VIPs
- Hospital visits
- Photographs

Media involvement

Personal welfare

Support networks

To be a single-handed adviser is difficult as it places many responsibilities on one person. Before becoming involved, the adviser should identify a network of colleagues who can be contacted for advice and support.

Credibility

The arrival of the adviser, often a stranger to most involved in the local mental health response, will not be seen by all as welcome. There may be resentment and doubts about his or her ability to contribute. All efforts should be made to enhance credibility. Professional knowledge and competence are obviously essential, but it is imperative that the adviser finds out as much as possible about the cultural background to the disaster. Chemtob (2000) advocates the pairing of the adviser with a 'culture expert', to reduce the risk of political, racial or religious indiscretions. Important issues may relate to mourning practices and dealing with dead bodies (e.g. Speck, 1978; Gibson, 1998). Similarly, if the adviser is to be working with specialist groups such as divers, aircrew or emergency service personnel, every effort should be made to learn quickly about their work, their values, their terminology and their own support systems.

Materials

Notepads or other methods of record-keeping are essential, as an adviser will be bombarded with questions to answer, names to remember and tasks to do. A dictating machine and/or a laptop computer are also of value, as will be argued below. It may also be useful to take copies of seminal publications, leaflets and assessment instruments, and training materials.

Disaster site visit

It is an unpleasant necessity that the adviser visit the scene of the disaster. It is a mark of respect, particularly if people have died, and it also helps the adviser to understand what happened and what individuals had to endure, which in itself increases credibility.

Protocol and etiquette

VIPs It is important to identify the key personnel in the disaster response. Bear in mind that disasters generate ad hoc leaders and their role may be crucial. The adviser may not have a natural enthusiasm for meeting political and other VIPs, but such encounters are an appropriate courtesy and, moreover, these individuals may have the authority and resources

to facilitate the adviser's work. In certain cultures, Russia for example, it is important to accede to protocol regarding the hierarchy among authority figures. Religious figures may also be key contributors to the response, and they should be on the list of individuals whom the adviser should contact.

Hospital visits A delicate matter is whether or not the adviser should visit the injured in hospital (particularly since the media are likely to cover such a visit). One needs to bear in mind that survivors often feel they are in the metaphorical goldfish bowl; they do not like to be objects of what they construe as voyeurism or a token visit. Also, advisers need to consider what they could offer injured patients.

Photographs For legitimate reasons the adviser may wish to take photographs. Permission should be asked of those in charge of a particular setting such as a hospital or even a disaster site. It would not be realistic to obtain permission from every individual who might appear in shot (in, for instance, a crowd scene), but certainly close-ups of individuals should be taken only with their explicit permission. In certain cultures males may be offended if one were to photograph their wives, and in other cultures a photograph is a threat to the soul. It is important that the adviser does not behave like a privileged tourist.

Media involvement

Disasters are irresistible to the media, which may arrive at the same time as rescue and emergency personnel. Mental health specialists are popular targets for reporters in such situations, and this should encourage caution and foresight. It is helpful for advisers to have a prepared press statement on their role. It is wise for advisers to resist taking sides in any conflict and to avoid speculation, because their opinions will carry particular weight.

The media enjoy identifying 'heroes' and 'villains' in the wake of major incidents. Hassling (2000) described how the emergency services were unfairly vilified after the discotheque fire in Göteborg, Sweden, in 1989. Similarly, Alexander (2001) reported on allegations against the Americans and the Israelis after the Nairobi terrorist bombing in 1998. Individuals and organisations do become displacement objects on which a suffering community can vent its anger and other feelings. An adviser's collusion in this dynamic is not helpful.

Although the media have been implicated in causing unnecessary distress, particularly to children, after disasters, they have a legitimate and potentially helpful role. They can provide accurate information about the disaster and about normal

reactions following such an event and how to combat them. Sources of professional and voluntary help can also be identified through the media.

Personal welfare

I have already mentioned the need for advisers to identify a support network. The concept of compassion fatigue (Figley, 1995) is now widely recognised as a risk among those who care for trauma survivors, and it is a risk not just for the inexperienced or junior professional (Alexander & Atcheson, 1998). Advisers must keep a realistic perspective and resist developing the 'counter-disaster syndrome', i.e. the belief that they are indispensable and/or indestructible. It is helpful to keep in touch with family and friends to maintain a wider perspective and to obtain emotional support. A dictating machine can be used to articulate thoughts and feelings and to make structured sense of what has been experienced. This suggestion is related to Pennebaker's (1999) assertions that trauma patients gain therapeutic value from putting down on paper their traumatic experiences.

Although it is not always easy, advisers should try to ensure adequate sleep, a balanced diet and exercise. They should also protect their time, as they will be bombarded with requests for visits, meetings, talks and so on.

The 'accidental' adviser

Occasionally, psychiatrists find themselves unexpectedly cast in the role of advisers because they happen to be in the vicinity of a major incident. In such situations, they must act without preparation and perhaps even without knowledge of local resources. Most of the points already mentioned still pertain, but there are three additional principles.

First, the psychiatrist should not be pressured into taking action without adequate assessment: during the earliest phase after major trauma doing 'something' (i.e. 'anything') is not necessarily better than doing 'nothing'.

Second, an essential element in assessment is the identification of local individuals who could constitute an early-response team. As was found after the Piper Alpha oil platform disaster (Alexander, 1991), such a team should be reasonably small (about 6–8 people) and its members should be senior personnel who are experienced in dealing with crises. (Senior staff are more able to authorise action and to take responsibility.) As the post-incident phases unfold, the core group can co-opt other suitable individuals.

Third, a particularly valuable role is the screening of intervention proposals that inevitably mushroom from private individuals and organisations in the

wake of a catastrophe. There should be no squeamishness in challenging the putative expertise and credentials of those who advance themselves. Some are excellent; some are certainly not. Relevant information can often be obtained from the Royal College of Psychiatrists, the British Psychological Society and the International Society for Traumatic Stress Studies (ISTSS) and its affiliates (e.g. the European Society for Traumatic Stress). The ISTSS has produced guidelines regarding competent training for those providing mental health and psychosocial interventions for populations exposed to trauma (Weine *et al*, 2002).

Conclusions

The impact of a disaster on individuals and communities can be extensive, varied and long term. Not all effects are negative; positive outcomes derive even from extreme adversity.

The mental health response to disaster is of great importance and it should be guided by evidence-based findings and intervention principles. It is unacceptable to ignore the lessons of the past, although they need to be applied flexibly as no two major traumas are identical.

The role of a mental health adviser is a privileged one that requires the individual to demonstrate a thoroughly professional approach to the task before, during and after involvement in it.

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MCQs

- 1 'Psychological first aid' was principally developed by:**
- Mitchell
 - Lindemann
 - Raphael
 - McFarlane
 - Everly.
- 2 'Critical incident stress debriefing' is particularly associated with:**
- Mitchell
 - Caplan
 - Everly
 - Figley
 - Gibson.
- 3 Which of the following statements are true:**
- panic is a common reaction after major trauma
 - Caplan pioneered 'crisis intervention'
 - the principles of PIE were first developed after the Vietnam War
 - psychological first aid does not include catharsis as a key component
 - Lindemann followed up survivors of the Coconut Grove nightclub fire.
- 4 The following factors reduce the likelihood of post-traumatic psychopathology and adjustment problems:**
- male gender
 - extended exposure to the trauma
 - perceived (rather than real) threat to life
 - dissociation in the acute phase
 - substance misuse.
- 5 The following are normal reactions to major trauma:**
- heightened sense of risk and vulnerability
 - avoidant behaviour (in the face of reminders of the trauma)
 - confusion/disorientation
 - guilt
 - heightened libido.

MCQ answers

1	2	3	4	5
a F	a T	a F	a T	a T
b F	b F	b T	b F	b T
c T	c T	c F	c F	c T
d F	d F	d T	d F	d T
e F	e F	e T	e F	e F