

## **PSYCHOSOCIAL INTERVENTIONS IN DISASTERS**

### **Prevention and treatment of psychological disorders**

From the psychological point of view the primary prevention of disasters must deal with denial as a common psychological reaction to be found among populations exposed to a threat. The negation of an imminent threat can make forewarning useless, and expose populations to avoidable risks by producing a delay in adopting preparedness measures. Therefore health workers may have an important role in reinforcing warnings and thus making timely and effective prevention possible.

Psychosocial prevention can also play an essential part in preventing and minimizing the psychological consequences of disasters, especially the occurrence of PTSD. In terms of intervention programmes aimed at preventing and treating psychological disaster-related disorders, the main needs following natural disasters exist in developing countries and among socioeconomically deprived individuals. Since in developing countries the resources devoted to mental health are often inadequate to meet even routine needs, the primary health care system is the first and often the only health network available in the case of a disaster. Moreover, for socioeconomically deprived individuals, primary care is the only mean of extending health and mental health services. In addition, in many disasters, besides a certain number of people who have been severely affected by it, there will be a much larger number of less affected people who will however, display a variety of functional complaints and psychological disorders. Functional complaints and somatization disorders will be particularly common among people attending primary health care and medical facilities, as the majority of people in developing countries tend to express psychological distress in somatic terms (Goldberg & Bridges, 1988). In order to cope with general anxiety and also uncertainty about the possible health effects of the disaster, people focus on the more tangible aspects of their physical state of health, seeking out the health care system and requesting explanations. Especially in the absence of reliable data about the health effects of the accident (for example in the case of toxic, chemical and nuclear disasters), medical workers lack adequate explanations and may well respond with extensive and intensive diagnostic screening of populations and individual patients. The paradox in the situation, however, is that attempts to reduce such illness behaviour and such extensions of the diagnostic procedures, in order to diminish the probably unfounded attribution of symptoms to the disaster, would deprive people of a coping strategy if no alternative were made available. For all these reasons, the primary health care worker represents the crucial locus for the intervention. The proper handling of the psychological problems associated with a disaster is of great importance and must be included in the training

programme of all health workers potentially involved in the care of affected people. The training of primary health care workers to give appropriate treatment to people attending health centres and showing emotional distress due to a very stressful event, deserves priority (Lima, 1986); such training represents one of the main preparedness activities.

There are other considerations which underscore the importance of integrating mental health services within the framework of the existing health system, and especially the primary care system:

1. Many potential users do not come to a facility which is openly labeled as a mental health service, since they do not see themselves as people needing specialized help but consider themselves only as victims of extreme adversity.
2. It is well known that the large majority of cases of psychological distress among attenders of health centres go unrecognized, do not receive proper care and represent an important burden for the health services. Better and prompt recognition and management of these disorders, including PTSD, can improve their outcome and reduce the burden on the health services.
3. The primary health care network, thanks to its central position in the community, can guarantee proper follow-up of victims and their families for as long as they need.

In this framework, the role of the specialized mental health team should essentially be one of supervision and training, and only especially difficult cases should be referred for direct treatment.

#### **Function of the mental health professional expert in preparedness activities**

The mental health professional(s) at the national or subnational (e.g. provincial) level should be responsible for:

1. Teaching preventive psychiatry

This will involve educating and training the entire spectrum of professions concerned with disaster rescue operations in the basics of disaster psychiatry, such as emotional first aid. The target groups are not only the medical, paramedical personnel and ancillary staff (such as switchboard operators, who have a vital role to play) found in a hospital, but also personnel in the associated organizations such as the police,

fire brigade, civil defence, the clergy, industrial safety personnel, and administrators with special responsibility for disaster planning etc.

2. Leadership

The senior professional should organize and lead the specialized disaster psychiatric teams made up of other mental health professionals as well as others that are activated during the acute phase of an actual disaster (loss support group, liaison psychiatric team, stress management/debriefing teams, as set out below).

3. Mental health care during the first 6 months

The first 6 months after a disaster may require general counselling for those who present to primary care with recognition and referral of those with special mental health problems such as PTSD, depression and grief. Early treatment may help to prevent problems.

4. Planning long-term follow-up of victim groups

The second 6 months or so after a disaster, that is between the acute phase and the longer term, is an important time, as much of the psychological work is done then.

During this stage, one should be aware that "anniversary" reactions tend to crop up; certain days may serve as reminders of what the victims have been through. There may also be a need to follow-up avoidance behaviour, because this may indicate a delayed onset of symptoms in victims who have not displayed the full post-traumatic stress syndrome.

5. Mobilizing support at different levels

This includes the giving of advice to victims and helpers about coping techniques and the mobilization of support from family, friends, work mates and neighbours. A clearing house for information on available resources should be set up.

It may be useful to have some model pamphlets presenting essential information that can be rapidly adapted to a particular disaster situation and distributed to relevant groups, such as survivors, bereaved families, rescuers etc.

In the rare, but massive disasters in third world countries, killing tens of thousands of people, the only active element of the psychosocial organization that is possible in the turmoil of the acute post-disaster phase may be that at the staff level, trying to influence decisions and providing psychological support.

### **Functions of the mental health team at the disaster site**

While the considerations described so far apply both to developed and developing countries, the following proposals, focussing on the functions of the specialized mental health team, are applicable especially in the developed countries. Only these countries can usually afford the heavy burden of setting up and maintaining a specialist mental health service which can be mobilized at times of disasters. Nevertheless, it is hoped that the following guidelines can provide useful leads for those working in developing countries.

### **Groups requiring psychosocial support**

Psychosocial support at the site of a disaster should in principle be carried out by the rescue workers and (somatic) emergency health personnel. The leader of the mental health team with collaborators should establish the priorities of psychosocial support activities, mainly based on their evaluation of the particular traumatic aspects of the disaster, taking into account the different groups which are to be considered:

1. The next-of-kin
2. The injured survivors and their close ones
3. The uninjured survivors

These groups are likely to have suffered the most severe stressful experiences and thus require support and preventive activities. Often a family may include all three above. Other groups need to be considered, but they usually have less pressing needs.

4. Onlookers (particularly at risk are the helpers' helpers)
5. Rescue teams (particularly when failing to rescue, especially children)
6. Persons doing body handling (particularly when they are non-professionals)
7. Health personnel (mass injury situations that demand difficult prioritizing)
8. Persons holding responsibility
9. Workmates (in company disasters), and
10. Evacuees.

Individuals at the disaster site displaying grossly deviant behaviour or other severe psychological reactions should be rapidly referred to psychiatric care.

### Establishing an information/support centre

This centre can be located either at a hospital or at a convenient place not too far from the disaster area, (hotel, school, etc.) but nevertheless far enough away from where rescue activity is taking place, so that congestion and interference is reduced. If the identity of the dead is uncertain (which is frequent), or the number of dead is unknown for a time, a great number of families will be distressed until they ascertain that their missing family member is safe. Establishing an information-support centre has turned out to be useful. The existence of such a centre and its telephone numbers should be distributed by radio and TV. Families who are worried that one of their number is amongst the victims should be invited to come to the centre. Survivors may also be asked to gather there. Particularly after transport/communication disasters when people die far away from their homes, this centre may be useful, for several reasons: it gives the bereaved a chance to meet survivors to get a first hand report about what happened to their loved ones, how they died, perhaps even what they uttered before they perished, and what was done to rescue them. The survivors and possibly also onlookers and rescuers have information that often cannot be given by others.

For the survivors it is often an important experience to be of help to the bereaved.

The main functions of such an information/support centre are:

1. To provide rapid, authoritative information about tragic news that can be conveyed in a humane, direct way in a setting sheltered from public and media attention,
2. To provide support and a holding environment for the affected persons (health personnel, clergy, police and others)
3. To serve as a forum or meeting place where affected individuals and families can support each other. Self-help groups may develop from this forum,
4. To be a place where the police can collect identification data about missing/dead persons from their close ones,
5. At times the police should be able to use the centre to interrogate survivors about the disastrous chain of events as a part of their investigation,
6. The information/support centre should help to reduce the convergence of people on the disaster site that may create congestion and therefore movement problems for rescuers.

A meeting may be organized for everyone affected (this may be possible for up to one thousand people) or at least one or two representatives from each affected family. At such a meeting information can be given about rescue, identification, investigation of causes, insurance, psychosocial support services and religious services.

Attempts can also be made for early identification of persons at risk. The Post-Traumatic Symptoms Scale - 10 for instance, can be used after a few days. The survivors' mental state can be evaluated, as can the possibility for mobilizing social support from people's own networks (family, work colleagues, friends, neighbours).

#### Specific procedures for helping survivors

The mental health team should reach the scene of the disaster as soon as possible. There have been very positive responses to anticipatory guidance, i.e., information about the natural post-traumatic stress reactions that may be expected. Information meetings are effective means to talk about this and what the survivors themselves and their close network can do to help. Anticipatory guidance works by helping the victim accept the reactions as normal and expected, and not as pathological, thus reducing uncertainty and feelings of helplessness. Nightmares suffered by the victim are often alleviated by physical contact; if this fails it may be better to wake the patient and let him go back to sleep again afterwards. Hypnotics may be given briefly for severe sleep disorders.

At this early stage most survivors are psychologically open and willing to talk about their experiences, an attitude, however, that may soon change into a defensive, withdrawn, non-cooperative position if time is allowed to pass without attempting to make contact. Therefore it is of utmost importance that the survivors are encouraged to seek help if problems develop.

When disasters involve people away from their home areas, it may be necessary to help them to establish supportive contacts with health or social service professionals in their home district. One of the first needs of survivors in these circumstances, is to be able to inform their families about their fate, preferably even before the media have announced news of the disaster. Some may have an urgent need to get home themselves. This makes organization of a mental health support service more complicated than if the victims are local people or members of a homogenous social system.

## Help for bereaved families

It has been demonstrated quite clearly that the family is the unit providing the most important source of strength for enduring a disaster loss. There is strong evidence that sudden and violent death causes more pathology in the bereaved than expected losses and this can be made worse by the terrible circumstances surrounding the death in disasters, perhaps even witnessed by the family. Equally distressing however, are deaths happening far away from them, possibly with times of waiting and uncertainty for the family until the death is confirmed.

Sometimes the bereaved may be unable to travel to the site or they may never see the dead because the remains may not be identifiable or even found. Frequently, this failure to retrieve the body or to identify the remains has complicated grief work. In the acute phase, measures taken to alleviate the consequences should have as the first goal, to help the family fully grasp the death of one or more of their number, and secondly to help start them on the road to accepting the loss. The full realization of the loss seems to be helped by the identification of the dead body and an awareness of the physical aspects of death, as well as the circumstances in which it happened.

### Experience in Norway

The psychiatric team working with the bereaved families after a disaster, (the loss support group), usually sets up its headquarters at the local hospital, for example in the out-patient department of internal medicine. Each team consists of a psychiatrist, chaplain (priest), psychiatric nurse, clinical psychologist and sometimes a social worker or others experienced in loss and grief reactions. Gathering the bereaved families in one place protects them from wandering aimlessly around or engaging in unplanned searches for missing family members. Some experience indicates that the support group should work exclusively with the bereaved families and not combine this work with support to survivors, because of the entirely different needs of the clients. Each family has two group members designated as personal contacts. The group will work in close cooperation with the police which is the agency that carries out the identification work.

In disasters where people die away from their homes, the team will have some hours to organize the reception of the bereaved families. If there is a large number of dead, it is important to join the different families into a cohesive group by, for instance, lodging them in the same hotel. If the dead come from a similar background, as in a school-bus accident, the parents will already have a natural affinity with each other, and this will strengthen the bonds for an extended period. If the dead make up a group which has come together by chance however, as in some airplane crashes, the bereaved may form a group only during the acute phase when they are sharing many of the same services and undergoing many of the same experiences.

The first day after a disaster is usually filled with a succession of practical problems to be solved. The bereaved families are encouraged to travel with a companion (who might be a local priest or a friend of the family), because it has been shown that the breaking of the

strong bonds that often arise between the team and the bereaved family will be made less difficult in the aftermath of the event when a continuing link to an after-care service at the home place is provided through this person.

### Role of the Psychosocial Support Team

The psychosocial support team may be involved in the following activities for the bereaved families:

1. Notification of death

Seeing that this duty is carried out in an appropriate way by the local police, priest, etc. It is important that notification is given in such a way that the family can be helped to grasp what has happened. It is a common experience that the bearer of the sad message is not in possession of the full facts about the death; this is a burden for both parties involved. If the body has not yet been recovered, the next-of-kin will nearly always express a strong wish to travel to the scene of the disaster.

2. Identification of the body

A member of the team should be present when the next-of-kin is asked by the police to make a positive identification of the body.

3. Viewing the dead

It is important that the bereaved are provided with an opportunity to see the body of the dead if they wish and if this is possible, and that they are provided with information about the death. It is also important that as far as possible, appropriate funeral and mourning rituals are provided in accordance with the practice of the bereaved's culture. An important task for the loss support group has been to arrange for this viewing of the dead bodies. This must be scrupulously planned after evaluation of each family and considering the state of the body. Meeting the dead gives the family a chance to see, talk and touch and to fully comprehend that the loss is real, that the uncertainty is over, and that they must take a final farewell. If the face is too mutilated to be seen, other parts of the body may be recognized. For children it can be a help to leave something in the coffin, a favorite doll, a drawing or a letter to the dead mother or father.



#### 4. Information about the circumstances of death

Regularly the family has many questions about how the dead person was found and the manner of death. Therefore they should be given an opportunity to meet survivors who have something to tell, the rescuer who found the body, and any nurses and doctors who tried to resuscitate the victim. It may be necessary to ask the pathologist to provide information.

#### 5. Visiting the site of death

The team normally encourages viewing of the scene of the disaster to be carried out in groups, and a rather private memorial ceremony may be arranged there. This allows the bereaved families to come close to their dead and express their solidarity. This final farewell must be shielded as much as possible from the intruding gaze of outsiders and the media.

#### 6. Public memorial service

The bereaved families should also be helped to attend some kind of public memorial service. Public mourning is an important symbol of the wider society's support to those bereaved.

Personal relationships are particularly important in the emotional reactions after disasters, providing support and help in dealing with the stress. People are also very distressed when separated from those they love during and after a disaster, and information and support services to help the reunion of family members are likely to be helpful. Special relationships and closeness between people of all social groups who have suffered the same stressful experience together may provide a "therapeutic community" effect after the disaster, where people talk through what has happened, share feelings and support one another in several ways that may help recovery. Similar bonds may be formed between victims and rescuers.

#### The physically injured

Many hospitals are capable of handling 20 or more injured cases, but not many can take care of the one hundred or more close family members belonging to this number of injured. This may be a reflection of the usual emphasis on physical injuries in disaster planning. The surgical and intensive care personnel should therefore be reinforced by a

psychiatric liaison team who can have responsibility for both the injured and for their family members. As regards handling the injured, the most common error in psychological handling is leaving the injured alone; they are especially vulnerable to being abandoned in darkness.

### Crisis intervention

"The good talk" is the psychotherapist's main tool. It is as important as the scalpel to the surgeon and contains several therapeutic elements: the interpersonal contact, the verbalization which increases control, the cathartic effect of ventilating emotions and the need for working through the experiences again and again, if the fragmented and overwhelming impressions are to be neutralized and integrated. To turn the passive reliving of the trauma, as in nightmares, into an active reconfrontation seems to work well if the patient feels that the therapeutic environment is safe enough. It is natural to use the group approach with victims of collective trauma because, having faced danger together, strong bonds have been created between them.

### Debriefing

The majority of rescuers report a need to work through the emotional disaster experiences by sharing their feelings with others. The psychiatrist can act as the formal leader of the debriefing group or may give training to professionals in rescue organizations so that they can lead such activities. Frequently it is a great advantage to have taken part in the rescue operation when leading such a group, but there may be occasions when a neutral professional should take on this role. Debriefing involves going through, in detail, the sequence of events as experienced by each participant. The rescuers should also share with the rest of the group their thoughts and feelings during and after the disaster. The goal of debriefing is not only to prevent psychiatric problems, but also to deepen learning experiences about rescue work and mastering stress.

### Role of information

Accurate information is very important at every stage of disaster response. As part of preparedness, people should be provided with clear information about what to do in the event of a disaster affecting their community. Such information should be relevant to disasters that are frequent or likely to occur, but also be of general utility for unexpected circumstances. It should convey the nature of the threat and what to do about it in simple and concrete terms. Information in the event of an imminent threat should be reported

through at least several channels including TV and radio and should be presented by those who are seen as trustworthy leaders. Training, including information on what to do, should be incorporated into community life in places which are frequently subjected to threat.

During disasters, particularly in developing countries, victims are often poorly informed about the events that are occurring. Rumours are frequent, authorities give conflicting information and ineffective action follows. Illiteracy, a multiplicity of languages or dialects and a lack of media, can all contribute to difficulties in disseminating information rapidly and accurately.

The responsibility for transmitting information rests with both public authorities and the mass media. The authorities should take and retain the initiative in communicating with the public in the event of an emergency. Communication within the government should be well coordinated, and the authorities should seek to establish a climate of trust with the media, which should handle the information given in an open and unambiguous manner. To achieve these objectives, the national authorities responsible for the various aspects of disaster protection should coordinate their actions as far as possible. International organizations may also be sending out information. Diverse interpretations from the various national and international organizations of the potential public health consequences of a disaster, can seriously confuse the public, and create difficulties for national authorities.

Developing country populations are notoriously non-compliant with warnings for evacuation. While a variety of psychological mechanisms can be invoked to understand these reactions, a more concrete approach must also be taken. The evacuation order expects the victim to leave behind all his possessions with no protection against looting. Often survival is dependent upon small-scale agriculture or livestock, making it very difficult for people to leave behind all their wealth and means of subsistence. Failures of prediction can also diminish trust, when evacuation orders are given for events that never occur.

Accurate, trustworthy, and easily understood information about a disaster should be provided to the population at a local level. Such information should be provided in collaboration with local leaders and community representatives. In particular:

- specially prepared brochures and pamphlets, updated as necessary, should be widely distributed to the population of the affected areas, as far as possible in collaboration with the local media;
- dialogue should be encouraged between the community, the authorities, scientists and

health professionals, as also envisaged by the European Charter on Environment and Health;

#### Possible adverse effects of public information

Public information can however lead to adverse psychosocial consequences by creating a sense of confusion and mistrust. Reassuring assertions by experts may be contradicted by other experts or by later events. It is the right, even the duty, of scientists to give an opinion on a scientific matter, but they must do it in a way that will avoid any confusion between facts and judgments on facts. A further difficulty is in the nature of communication between scientist and non-scientist. The latter may be trained to think in arbitrary terms requiring "yes" and "no" answers and they may in consequence be bothered by the scientist's answers in terms of gradation and multiple qualifying considerations. This pressure for what might be thought of as "bipolar" thinking and decision-making is bound to be a source of great exasperation, misunderstanding and irrational decision: the authorities feel they are getting answers which are impossible to use, while the scientist feels he is being confronted with unanswerable questions and coerced or tempted into committing himself.

In considering the provision of information to "victims", it is necessary to consider their definition. Traditionally victims of a catastrophe would be defined as those who were physically touched by its effects. On the contrary, however, the notion of victim cannot be limited to those persons physically exposed to toxic emissions or physically affected by the disaster. The victim group of a major disaster potentially encompasses all those who receive the bad news of the accident. For larger populations, the bad news will not necessarily be accompanied by directly visible events or damage. This is especially the case of toxic/nuclear disasters, and many of the following considerations refer specifically to this type of disaster. The Chernobyl disaster was especially striking in this regard. In the first weeks and months after the accident, very limited public information was provided to the affected populations. Over the following years however, these populations have been exposed to a barrage of information, with many contradictory and inconsistent news items and rumours, all of which have resulted in an information overload. The "victims" therefore now include large numbers of people who are suffering because they think they may be affected by the accident, but who in fact have never been exposed to toxic levels of radiation.

International organizations with responsibilities in the field of public safety and health have therefore a clear duty to provide both general and specific background information. Diverse interpretations from these organizations of the potential public health consequences of an accident could seriously confuse the public, and create additional difficulties for national authorities. Accurate, trustworthy, and easily understood information about radiation and its health effects should be provided to the population at a local level. Equally or even more important, is the way in which the authorities should present information if an accident occurs. In many cases, people have been flooded with information and nobody has shown them how to deal with it. One of the few "principles" in this field that seems to be useful is that comparisons are more meaningful than absolute numbers or probabilities, especially when these absolute values are quite small. The key role which can be played by an international organization is crucial at this level, since the information provided by it is generally seen as more "neutral" and "authoritative" than that coming from other sources, and it can therefore facilitate public compliance with necessary measures, prevent or minimize worries and fears likely to produce extensive psychosocial consequences, and finally help to restore a cooperative climate.

Building a better public understanding of risks and informing the public correctly in the case of an emergency is only a part of what needs to be achieved if people are to be enabled to respond more rationally to a future emergency. The central issue then is how to facilitate an evolution from the provision of information and recommendations, to a situation of effective learning, which allows people to develop better coping strategies during and after an accident. Setting up such effective learning implies more than providing available knowledge of the risks associated with industrial activities and substances through improved risk analysis and assessment. It also implies improving the knowledge and understanding of the reactions and needs of individuals and groups in times of emergency.

This last supposes a substantial change in the current methods of risk analysis, risk assessment and risk management.