



## **Shortcomings in Dealing with Psychological Effects of Natural Disasters in Iran**

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### **Abstract**

**Background:** Natural disasters result in numerous economic, social, psychological and cultural consequences. Of them, psychological consequences of disasters will affect the lives of people long after the critical conditions finish. Thus, concerning the importance of psychological support in disasters, this study has identified problems and weaknesses in dealing with the psychological effects of the disasters occurred in Iran.

**Methods:** This qualitative study was carried out using semi-structured in-depth interviews and focus groups. Sample volume consisted of 26 experts in the field of disaster management. Content analysis was used to analyze data.

**Results:** Nine major problems were identified as weaknesses in handling the psychological effects of the disaster. These weaknesses include: rescuers' unfamiliarity with the basic principles of psychosocial support, shortage of relevant experts and inadequate training, paying no attention to the needs of specific groups, weaknesses in organizational communications, discontinuation of psychological support after disaster, unfamiliarity with native language and culture of the disaster area, little attention paid by media to psychological principles in broadcasting news, people's long-term dependence on governmental aid.

**Conclusions:** Disaster management has various aspects; in Iran, less attention has been paid to psychological support in disasters. Increasing education at all levels, establishing responsible structures and programming seem necessary in dealing with the psychological effects of disasters.

**Keywords:** Pathology, Natural disasters, Psychological support

### **Introduction**

Disasters are either man-made or natural events (1,2) whose general consequences include disruption of social and psychological order of communities, destruction of infrastructure and residential houses, deaths and injuries, destruction of assets and properties and disruption of social life of communities (3). Major disasters require a differ-

ent form of management. In the case of a major disaster, management process may be very complex and full of problems because disasters have very chaotic situations (4). Iran is subject to a broad range of natural and man-made disasters (5) and has historically been damaged a lot by natural disasters (6). Over the past century, hundreds of

thousands of people have died due to disasters like war, earthquake, flood and drought. Bam deadly earthquake in 2003, in south eastern Iran, is claimed to have taken the lives of more than 30,000 people (7). Zarand earthquake in 2005 in central Iran, Silakhor earthquake in 2006 in Western Iran (8), Eastern Azerbaijan earthquake in 2002, Bushehr earthquake and Southern Khorasan earthquake in 2003 are some of the natural disasters occurred in Iran in the recent decade.

Management in natural disasters has various and different aspects, one of which is related to mental issues at individual and social levels. Mental health programs during and after a disaster have recently been very controversial (9). Natural disasters are situations that need high social and psychosocial support (10). Every year, millions of people are affected by natural disasters. Research has shown that exposure to disasters exacerbates traumas (2). Among the effects of disasters, consequences which damage the health and lives of people are of great importance (11). Since some countries, including Iran, are disaster-stricken, having comprehensive and dynamic disaster management structures is essential in coping with disasters. In times of disaster, an approach that addresses physical, mental and social needs of individuals is very crucial (12). Psychological needs of victims and taking measures to deal with the psychological effects of disasters are among the needs mentioned above. Psychological responses must not be limited to disaster period but rather must continue long after disaster due to long-term effects disaster has on victims.

Although number of studies related to psychological support in natural disasters is growing, there is still a shortage of these studies (13). The breadth and severity of medical problems among patients with mental illnesses are not well known (14). People's mental and physical health and behavior are closely linked together (15). These relations will be very important after a disaster (16). Psychological support in disasters focuses on identification of individuals who are at risk of long-term psychological effects and on development of effective strategies to cope with stress after disaster (17). Psychological intervention is one of the im-

portant aspects in the comprehensive chain of mental health cares after disasters and is considered an important factor in preventing mental health problems after disasters and in creating suitable social support (13).

Studies have shown the presence of mental disorders after disasters (18). New research focuses on transforming mental health systems in order to recognize the long-term psychological effects of a disaster (19). Integrating mental response and mental health programs with humanitarian assistance programs can bring about an opportunity to present a model to centralize mental health in public health structures of a country (20). Meredith et al. (2012) considered psychological consequences a priority for preparing for and responding to disasters and presented a conceptual framework for managing the consequences of disasters in order to guide hospitals and clinics. This model consists of structural components (internal organizational structure and a chain of command, resources and infrastructures and knowledge and skills) and process components (coordination with external organizations, assessing and monitoring risk, psychological support and sharing information and communication) (21). A systematic intervention includes three stages: preparation before the disaster, psychological first aid, monitoring and evaluation. Training is required, in all three phases, before assessing the disaster, verbal intervention, individual and group social support, providing sufficient information and sensitivity to cultural and situational diversity (13).

Disasters can have devastating and long-term psychological effects on individuals and communities. What is common in all the disasters is their psychological consequences and effects. Successful disaster management requires a holistic view on the effects and aspects of the disaster. When disasters appear, they don't affect only one area. Various areas, to some extent, experience the effects of the disaster. Therefore, success of disaster management depends on analyzing conditions correctly and reviewing consequences comprehensively in the light of social areas.

The aim of the present study was to identify the most important shortcomings of dealing with the

psychological effects of natural disasters and the problems related to this field.

## Materials and Methods

This study is of qualitative type; statistical universe consists of 26 disaster managers who have had experience in managing natural disasters over the last decade. Purposive sampling was used to collect samples. Information was gathered using in-depth interviews with semi-structured open-ended questions. Interview questions were designed to identify the most important shortcomings and problems related to dealing with psychological effects of previous natural disasters in Iran. These face-to-face interviews lasted for approximately 30 minutes.

Qualitative and quantitative content analysis was used to analyze the results. For qualitative analysis, manifest content analysis was used. At first, the

interviews were studied several times to obtain an overall understanding and determine codes and meaning units. One note 2010 software was used to record the interviews and code extracted. Then, the codes, that were semantically similar, were matched and the most important concepts were extracted. Contingency analysis was used for quantitative content analysis. Thereby, the frequency of each concept was determined. In the next step, to obtain guidelines and solutions, focus group meetings were held with six scientific and practical experts in disaster management and the solutions were extracted.

## Results

Analyses showed that interviewees pointed to nine main problems in this regard; they are shown in Table 1.

**Table 1:** Frequency distribution of managers' viewpoints regarding shortcomings of dealing with psychological effects in disasters

Shortcomings	n	Percentage
unfamiliarity with the basic principles of psychosocial support	25	96.1
shortage of relevant experts in disaster area	24	92.3
inadequate training	24	92.3
ignoring mental needs of specific groups	24	92.3
Lack of suitable communications of organizations in the field of providing mental services	20	76.9
discontinuation of psychological support after disaster	20	76.9
unfamiliarity with native language and culture of the area	18	69.2
little attention of media to psychological principles in broadcasting news	15	57.6
people's long-term dependence on governmental aid	10	38.4

As shown in Table most of the interviewees expressed "unfamiliarity with principles of psychological support" as a major important weakness. This was declared to be as the most common disadvantage (96.1%). Three other shortcomings that had nearly the same frequency were: "insufficient training, shortage of experts and ignoring needs of specific groups" with 92.3% frequency. "Lack of suitable communications of organizations in the field of providing mental services and discontinuation of psychological support after disaster" also gained the same frequency (76.9%). "unfamiliarity

with native language and culture of the area, little attention of media to psychological principles in broadcasting news and people's long-term dependence on governmental aid" were noted as the three least common weaknesses that has lowest frequency in content analysis of interviewees' viewpoints (69.2%, 57.6%, 38.4% respectively).

## Discussion

The results of this study identified nine problems that had most effect on the psychological conse-

quences management of disasters. In continued, these problems are analyzed, some experiences are mentioned, and some guidelines are presented.

When a terrible natural disaster occurs, all relevant organizations and authorities try to save the victims and to provide their basic welfare needs. Viewpoints of disaster managers reveal that psychological support has been taken into less consideration than other factors including houses and meeting physical needs. Unfamiliarity with principles of psychological support results in increased mental problems of people and even rescuers. Meeting mental needs after disasters requires familiarity with principles of psychological support in disasters. The way rescuers and authorities treat victims, look at them and speak to them and the way words are selected are all important keys which must be taught and taken into account. A point mentioned by interviewees was that "it is not enough for people who are in charge of preparing profile of the injured and dead people to only know how to work with computer and to search information; they must also be familiar with principles of emotional support in treating survivors who are looking for some information about their relatives, especially when they are going to be informed of their relatives' deaths. Knowing the basic principles of psychological support is also emphasized by other researchers (22-24). The unconditional nature of disasters makes it difficult to handle. Specialized responses to the mental needs, shortage of experts or ignoring the presence of mental health specialists in disaster management teams have worsen the situation. The most important measure in preventing the injured people's illogical and irrational decisions and behaviors in disasters is to support them mentally and psychologically; if it is done correctly by experts, it will help victims, rescuers and the related authorities.

Education and training about immediate responses are important for all mental health providers of immediate and continuing services to assist victims in the aftermath of disasters (25). Disasters are special situations that require certain psychological principles and supports. Not employing experts to teach these principles to rescu-

ers and to supervise psychological supports will also worsen mental problems in disasters. Presence of these experts will be very helpful for people and rescuers. Numerous efforts must be made in the field of teaching psychological support in disasters. A part of this training is specialized and is used to train psychologists, while other part must cover public education for victims and rescuers. In this case, interviewees mentioned the way physicians and nurses treat patients and the way rescuers treat the injured.

Psychological support is not limited to the victims in a disaster area and in the disaster time. In disaster conditions, it is necessary to pay attention to the psychological needs of different groups (13). These groups include the survivors, rescuers, and ordinary people. Survivors need the most attention and support, but other groups should not be ignored. Survivors are classified into several groups, each of which has special needs. Identifying needs of different groups such as women, children, adolescents, the elderly, the disabled and patients is crucial. Rescuers and other witnesses may also be strongly affected emotionally and psychologically. Thus, in selecting rescuers, their emotional personalities must be taken into huge consideration. Obviously, sensitive and emotional people will find it difficult to respond to painful tragedies. Numerous studies have emphasized specific groups in disasters, especially children (26), women (27) and the elderly (28). Rabiee & Pourhosseini (2014), have added addicts to this groups and have stated that attention to their needs is necessary (23). Kohn et al. (2012), have stated some people have different needs and vulnerability to disasters; they must be taken into huge consideration in national policymaking and programming (29).

Lack of proper coordination is a main problem and challenge for natural disaster management which is caused by undefined disaster activities (30). Different organizations like the Red Crescent, Welfare Organization, charities and international organizations such as UNICEF play an important role in presenting counseling and psychological support to the victims of disasters; however, experience has shown that there is no certain rela-

tionship among these organizations and they perform some isolated services. Establishing effective inter-organizational communications and holding regular meetings between organizations that provide psychological supports in disasters in order to share information and to coordinate with each other must be considered during disaster. Witteveen et al. (2012), pointed to the lack of central cooperation and psychological intervention programs in responding to disasters in East Europe and regarded programming and presenting post-disaster mental cares as key needs in this regard (31).

Although post-disaster traumas decline over time, they will be still visible (32). When it comes to psychosocial support in disaster situations, the first thing that comes to mind is to comfort and console the survivors. It is done and thus can be beneficial until there are different groups in the disaster area. However, mental problems are not short-term and temporary conditions which can be healed as soon as the disaster finishes. Losing family members, seeing painful events and scenes and many other problems can cause lifelong problems for people. If the psychological support programs are limited to disaster times, the feelings of fear, anxiety, isolationism, and other mental illnesses will remain long after the disaster. A common issue in all disasters is that basic needs are provided and finished in a certain time, while psychological and mental needs will remain for years and will hurt the survivors. Continuing psychological support until victims return to their mental and emotional equilibrium through establishing psychological support centers and letting them work long after disaster can be effective.

Another problem found in some areas was unfamiliarity of rescuers with the native language of people of that region. Absence of a common language will not lead to understanding the real needs. Considering the customs, religious beliefs of people and employing rescuers who are familiar with the disaster area and with the language, culture and customs of that area is very important. Although there is a plethora of literature associated with psychosocial aspects of disaster, very little of it specifically relates to culture (33). Everly et al.

(2008), one of the principles of psychological intervention have stated attention to cultural differences (13).

Observing principles of psychological support is not confined to rescuers and service providers in disaster areas. Media also plays an important role in causing or preventing the disturbance in the public, and can affect victims and people's morale. Showing harrowing scenes does not help control disaster; dissemination of essential information, announcing real needs of people, asking for suitable aid and spreading health, safety and comforting messages can be useful activities of media in disaster times. Neubaum et al. (2014), also believes that if the social media play their role properly, they will have more psychological benefits (34).

Previous disasters have shown that although much time has passed since some disasters, people still have not returned to their equilibrium condition of life. One of the most important consequences of disasters is people's dependent on government assistance. Government's support should make people return to their previous daily lives in a short period of time. Providing employment and financial independence in a shortest possible time can eliminate most of people's mental disturbances and can help them gain their mental and psychological equilibrium.

## **Conclusions**

Concerning the issues and problems introduced in this research, some measures and planning must be started to deal with psychological effects of disasters. Although some measures were taken after Bam Earthquake, they were not sufficient. Planning must be considered prior to disaster so as to have fewer problems in the time of disaster.

## **Ethical considerations**

Ethical issues (Including plagiarism, Informed Consent, misconduct, data fabrication and/or falsification, double publication and/or submission,

redundancy, etc.) have been completely observed by the authors.

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