



# The Resiliency of Humanitarian Aid Workers in Disasters: A Qualitative Study in the Iranian Context

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## Abstract

**Objectives:** The purpose of this study is to explore the factors affecting the resiliency of Humanitarian Aid Workers in disasters in Iran.

**Methods:** The present qualitative study has been conducted using a content analysis method. A purposeful sampling method was applied until reaching data saturation. A total of 18 Humanitarian Aid Workers participated in this study. Data were collected using face-to-face semi-structured interviews.

**Results:** Six main categories which influence resiliency of Humanitarian Aid Workers in disasters were extracted from the data: challenges of disasters' scene, self-adequacy, self-care, burnout, organizational support, and supportive network.

**Conclusions:** The officials and executive directors of humanitarian service organizations should be aware of the factors affecting resiliency and try to enhance the resiliency of their workers in order to encourage them for keeping on their voluntary efforts.

**Keywords:** Disasters, Humanitarian Aid Workers, Resiliency

## 1. Background

The number of natural disasters has increased in recent decades. The number of people affected by disasters has increased in recent years. In 2016, over 569 million people have been affected by disasters (1).

Immediately after the disasters, volunteers help injured individuals (2). Volunteers take various activities in the disaster scene, such as relief, rescue, refugee resettlement, and food preparation (3). Volunteers are different from professional personnel participating in the disasters because:

- Disaster relief is not a formal job of volunteers.
- The volunteers often play the role of complementary resources in the disaster scene and therefore, they do something that is not a part of the routine tasks and can create a lot of stress for them.
- Many of the volunteers do not have any experience, readiness, and training to perform assigned tasks (4).

Volunteers face numerous problems during their presence in the disaster scene, such as high workload, insomnia, inadequate rest, improper nutrition, and various diseases (5) that have numerous adverse effects on them (6,

7). Some of these effects include: physical burnout, various diseases (8), anxiety (9), depression (10), fear disturbances (11), alcohol abuse (12), frustration (8), job burnout (13), post-traumatic stress disorders (14) and psychological abnormalities (15).

One of the main concerns of organizations that benefit from Humanitarian Aid in disasters is the prevention of multiple negative consequences influencing volunteers. Resiliency has been considered a key requirement for preventing these problems in recent years (16). Resiliency is defined as "The ability of individuals, communities, organizations or countries exposed to disasters, crises, and underlying vulnerabilities to anticipate, be prepared for, reduce the impact of, cope with, and recover from the effects of shocks and stresses without compromising their long-term prospects" (17).

According to the results of previous studies, the resiliency of individuals is affected by various factors such as age, gender, situation, culture (18), readiness, and social support they received (19).

Despite the importance of the issue of resiliency for the volunteers, no comprehensive study has been carried out to explore the critical factors affecting their resiliency, es-

pecially in Iran. In addition, most of the related studies have worked on the resiliency of the community, hospital, children, and professionals working in various relief agencies (20-22).

## 2. Objectives

The present study aimed to explore the factors affecting the resiliency of Humanitarian Aid Workers in disasters in Iran.

## 3. Methods

### 3.1. Study Design

A qualitative content analysis approach (Graneheim approach) was used for this study. In this approach, information was obtained from the participant's viewpoint; then codes, sub-categories, and categories were derived through an inductive process (23).

### 3.2. Setting and Participants

The study was conducted in the Islamic Republic of Iran, an Asian country that facing various disasters, and one of the five countries with the highest number of volunteers in disasters. This country is one of the most active countries in the world in the field of Humanitarian Aid in Disasters (24).

The participants were chosen by using a purposive sampling method from various NGOs, which work on humanitarian assistance field in Iran, including Iranian Nursing Organization (INO), Medical Council of the Islamic Republic of Iran (IRIMC), Psychology and Counseling Organization of Iran (PCO Iran), and volunteers from Red Crescent Society of Iran with maximum diversity in education, gender, age, and position. Those participants were selected that had experiences of voluntary presence in disasters.

### 3.3. Data Collection

Data were collected through in-depth semi-structured face-to-face interviews. The interview guide included general as well as more specific questions to direct the interview. Some examples of the questions are "Please talk about your volunteer disaster experience?", "What problems you face during humanitarian missions?" and "What do you do when facing with this problems?". Purposeful sampling continued until we reached the saturation point of each concept. A total number of 18 interviews were conducted with various volunteers. After the 16th interview, the 17th and 18th had not any extra information. The interviews took place between May and December 2017. Generally, each interview lasted between 40 - 60 minutes. All interviews were conducted by the same interviewer (The first

author) in Persian after obtaining the consent to record voice. The interviews were transcribed verbatim and then translated into English. The interviewer was trained in qualitative courses and workshops and had the experience of working in Humanitarian assistance (14 years).

### 3.4. Data Analysis

The interviews were transcribed verbatim and analyzed according to the Graneheim approach (25). After transcription of each interview, line by line of the text was read several times to obtain an overall understanding of their content (Familiarization). After the primary code extraction, they were compared with each other in order to identify differences and similarities. Finally, the sub-categories and categories were determined (26). Two researchers independently examined data for categories.

### 3.5. Trustworthiness

We acquired four criteria of creditability, transferability, dependability, and conformability to provide the validity and reliability of the results (27). Prolonged engagement with the participants in the field helped the researchers gain the trust and support of the participants for data collection. During data collection, the participants were asked to validate the results of the analysis and confirm that they reflected their experiences (member checking). For the creditability of the findings, we tried to present the quotes of the participants with fidelity so that the readers had a better judgment over the study results.

The external audit was used to confirm dependability and conformability of data, the interviews, and the results of the analyses, such as the initial codes and subcategories (Not involved in the research process). Furthermore, maximum sampling variation supported the transferability of data.

### 3.6. Ethical Considerations

The Ethical Committee of Shahid Beheshti University of Medical Sciences in Tehran, Iran approved this study (Code: IR. SBMU. RETECH.REC. 1396.208). At the beginning of each interview, we obtained oral and written informed consents by explaining the aim of the study and the reasons for doing the research. The participants were assured that their participation would be confidential and that all responses would be anonymous.

## 4. Results

The participants were at the age range of 26 to 65 years, mean age  $\pm$  standard deviation (SD) of  $36.8 \pm 6.2$  years, and mean working  $\pm$  SD of  $15.7 \pm 5.4$  years. In addition, 33.3%

**Table 1.** Participant Characteristics

No.	Age, y	Volunteering Experience, y	Position
1	35	20	Rescuer
2	34	20	Rescuer
3	38	22	Rescuer
4	34	13	Rescuer
5	32	12	Rescuer
6	42	16	Rescuer
7	40	16	Physician
8	55	28	Psychologist
9	38	18	Rescuer
10	26	7	Psychologist
11	40	16	Rescuer
12	26	10	Psychologist
13	38	18	Physician
14	38	18	Rescuer
15	36	14	Nurse
16	36	8	Physician
17	40	6	Nurse
18	36	18	Nurse

(6) of the participants were female and 66.7 % (12) were male (Table 1). None of the participants left the research.

In this study, 641 initial codes were derived from the deep and rich explanations of the participants. After several reviewing and summarizing and based on similarities and differences, six categories and 31 sub-categories were identified, which included challenges to the disaster scene, self-adequacy, self-care, burnout, organizational support, and supportive networks (Table 2).

#### 4.1. Challenges of the Disaster Scene

One of the main categories was the challenge of the disaster scene. It includes three sub-categories: (1) The crowd in the disaster scene, (2) Improper interventions, and (3) Weakness in the disaster scene security.

The participants stated that the crowds in the disaster scene would disrupt the order and make the services difficult. They believed that the presence of viewers in the disaster scene made the work not well managed and these gatherings led to more deaths. In this regard, a participant said:

“Many times, I have seen more deaths in the disaster scene with the overcrowding of the unrelated people. Viewers disrupt the order and the focus of the volunteers to do the right thing” (P 5).

The second sub-category is an improper involvement of unskilled people in volunteering in the disaster scene.

**Table 2.** Sub-Categories and Categories Extracted from Interviews

Category	Sub-Category	
<b>Challenges of the disaster scene</b>	Crowded disaster scene	
	Improper involvement	
	The lack of security	
<b>Supportive network</b>	Friends' support	
	Family support	
	Social Support	
<b>Self-Care</b>	Physical health	
	Mental health	
	Spiritual beliefs	
<b>Organizational support</b>	Professional identity	
	Motivations	
	Psychological support	
	Logistic support	
	Legal support by the organization	
	Scientific empowerment	
	Effective missions	
	<b>Burnout</b>	High work pressure
		No transparency of the role
		Volunteering in the scene with complaints
Unplanned organizations		
<b>Self-adequacy</b>	Stress of facing with the disaster scene	
	Sympathy/humanism	
	Services' enthusiasm	
	Team work spirit	
	Self-awareness	
	Self-confidence	
	Creativity and innovation	
	Flexibility and compatibility	
	Experience and ability	
	Special disaster knowledge	

In this regard, another participant said:

“Some people do not have the necessary expertise but they like to help with emotions and emotional excitement,

because of lack of skill and experience with an improper involvement, they cause complications for the injured person" (P18).

Security in the disaster scene was one of the main components to which all the participants referred. They believed that if there were all kinds of equipment in the disaster scene, it would result in more success; however, when there is no security, not only we can do nothing but also more lives would be at risk. In this regard, a participant said:

"If there is no security in the disaster scene and the life of the volunteer is in danger, he cannot do his task well. For example, we were distributing tents in a mission that people attacked us to take tents and hurt our colleague and forced us to stop the work. In this scene, the lack of security caused disturbing the work" (P 6).

#### 4.2. Self-Adequacy

This category includes components that are inherent or acquired, and the volunteer needs both of them to succeed in missions. These features include empathy and humanism, self-awareness, self-confidence, flexibility, adaptability, experience, specialized knowledge, and the ability to interact.

One of the intrinsic components most of the participants referred to and believed that a person would enter a volunteer work that would have a sense of humanism and goodwill to others. In this regard, a participant said:

"I really wanted to help others, and I was looking for ways to reach this goal, I saw the volunteer service as a great route; now, in my mission, I want to help my fellow men and reach peace in this way" (P 1).

Many participants believed that success in a volunteering mission was dependent on several elements; one of the most important and most basic was self-confidence and the belief in volunteering skills and abilities. In this regard, a participant said:

"The volunteer should have confidence and should not underestimate himself. He should believe in his abilities and always try to make the best use of his abilities" (P 4).

On the other hand, some cases are acquired, and the volunteer should strengthen his/her skills to achieve more success. The concepts such as flexibility, adaptability, and patience are self-adequacy sub-category when dealing with disaster scene problems. The participant said:

"The volunteer should be patient in dealing with the problems and if the injured person says something that was not right, then he should not be involved with him and should act patiently" (P 7)

In the case of the need to have an experience for the volunteer entering the disaster scene, everyone agreed on this

and considered it very important. In this regard, a participant said:

"I was so confused on my first mission because I had no experience before. I did not know what to do. I was shocked and did not feel at all. For a volunteer, the experience is a necessity to know how to act on the disaster scene" (P10).

Another important topic that was considered by the participants in the category of self-adequacy was the discussion of the specialized knowledge of the disaster. The participants believed that this knowledge was obtained in two ways: first, attending specialized classes and learning relevant topics, and second participating in practices, practical works, and skills training. The participants believed that attending the theoretical classes alone could not empower a volunteer. A participant said:

"The first topic in the training of volunteers is the discussion of specialized training and then training, maneuvering, and gaining experience. Of course, re-training and re-attending courses are very necessary as many of the contents are forgotten over time. In my opinion, the class with no experience and practice is not effective too" (P 9).

#### 4.3. Self-Care

The third category in the present study is self-care, which itself includes physical health, mental health, and spiritual beliefs. The participants believed that a volunteer should be physically fit and maintain fitness before volunteering. In other words, they believed that a volunteer without physical capacity would not only solve a problem but could also create a problem for other volunteers in the mission. In this regard, a participant said:

"Any volunteer cannot be sent to any mission. Some works require high physical power. If the volunteer is not strong, he would be problematic both for himself and for others. We did not have water and food for 48 hours on a mission, and if our physical capacity was low, the mission would not be successful" (P 10).

Many participants have stated that the initial physical ability is important; however, enough time should be also given to a volunteer to recover during the mission, which includes two physical and mental categories. In this regard, a participant said:

"During a mission, we only had 3 hours to rest every day. This reduced the physical capacity of everyone, and some friends became sick. Working under such conditions without rest is a very demanding task" (P 2).

Participants believed that spiritual beliefs during missions helped solve their problems and considered it an important component of resiliency. In this regard, a participant said:

"I was in a scene where there were numerous bodies on earth, I was shocked and could not move. I once remember

God, and with all my trust in God, everything became easy for me and peace came into my heart that I could finish the work with no problem” (P 2).

#### 4.4. Burnout

When a person starts an activity with intrinsic goals and motives, he will do his best to do it in the best way. However, over time and seeing some of the problems and shortcomings, he becomes bored or abandoned, or does not do it with the previous quality. Volunteering is also no exception, and there are some cases that can lead to burnout in volunteers. Some of these factors in the present study include high work pressure, lack of transparency of role, voluntary service in the scene with the complaint, unplanned organization, and stress of facing the disaster scene.

The participants believed that the multiple job descriptions, long-term presence of a volunteer during a mission, and late replacement of subsequent forces would put a lot of pressure on the volunteer, resulting in much more burnout. In this regard, a participant said:

“In Bam earthquake event, I was on a mission for 50 days, and then I was immediately sent to the next mission, which lasted 28 days. The long-term being away from the family had a lot of negative impacts on me. The problem was that the organization sent replacement forces too late” (P 2).

One of the topics repeatedly mentioned by the participants was the lack of planning by the relevant organizations for volunteering missions. They believed that organizations need volunteers to do their own work and leave them after the completion of the mission and this kind of behavior with the volunteer would eventually cause frustration and exhaustion. In this regard, a participant said:

“Volunteer organizations should always keep forces ready and plan them. After completing the mission, the volunteer should not be left to wait for the next mission. They should always be in charge of exercising, maneuvering, and class, as well as maintaining contact with him. They should pay attention to him/her and value his/her services” (P 15).

#### 4.5. Organizational Support

Organizational supports can be categorized at intervals of before, during, and after missions. Organizations should be supported by sponsors in order to attract more volunteers or prevent them from leaving.

The participants believed that an organization that serves volunteers should be grateful for their work and always strive to create and maintain a proper position for volunteers in the community. In this regard, a participant said:

“I, as a volunteer, expect not to be forgotten after the mission, give me personality and respect me, appreciate my services, and, sometimes appreciate my service” (P 3).

Psychological support was considered by the participants’ one of the supporting aspects provided by the organization. In this regard, a participant said:

“When a volunteer returns from a mission, he should be relieved. I have seen a lot of frustrated scenes during missions and have not been relieved. After 15 years of passing a mission, because I have not been psychologically relieved, I am still scared and afraid of remembering the memories of that mission” (P 9).

Performing lots of voluntary services without equipment and facilities is not possible. The participants, therefore, stated that if the organization, which hires a volunteer is not able to provide the necessary equipment and facilities he needs, the volunteer will be in trouble during missions and missions will not be successful. In this regard, a participant said:

“If the specialized equipment required by a volunteer for the mission is not provided or the equipment does not fit with the technology of the day, certainly the mission will be problematic” (P 3).

The specialized knowledge and skills of the manager, the ability to interact with forces, the division of tasks between forces, and the proper use of the capabilities of individuals are important features that the leader should have. In this regard, a participant said:

“A commander should have good interaction with the forces and try to keep the team spirit high by various means. In Varzaqan earthquake, the leader did all the work according to the team’s adviser, very satisfactory results were obtained and the forces enjoyed working with him” (P 4).

#### 4.6. Supportive Network

Since the human is a social being and needs to communicate with others and in some cases support and approval of others, thus the support network can play an important role in volunteering.

The participants believed that if the team members of the volunteers who are on the mission are coordinated and provide good support, many problems will be resolved and more success will be achieved. In this regard, a participant said:

“The support of team members especially those with experiences is beneficial. In the Bam earthquake, our team was solid and supported each other and things were done, or there was no pressure on certain people” (P 6).

Many participants believed that if the volunteer has family support, he would be able to help the affected with-

out worrying about the mission. In this regard, a participant said:

“My wife has an excellent understanding; in fact, she always supports me. She understands my condition. If I’m worried about the family, I cannot work well in a mission. however, my wife and my family all support me” (P 7).

Social support includes the community and media support for the volunteers. The participants believed that if people of a community population respect the volunteers and their services and that the media would also provide the appropriate coverage for the services, volunteers would be more motivated and more persons enter voluntary organizations to provide volunteering services. In this regard, a participant said:

“When I, as a volunteer, see the services, which are supported well by the media, and the community is respectful to those who give their time and help others, this will be the motivation for others to go for volunteering and I have more passion for the services”(P 16).

## 5. Discussion

The present study is the first qualitative study aimed to explore the experiences of Iranian Humanitarian Assistance in disaster regarding their resiliency.

The six key concepts derived from this study were challenges of the disaster scene, self-adequacy, self-care, burnout, organizational support, and supportive network (Figure 1).

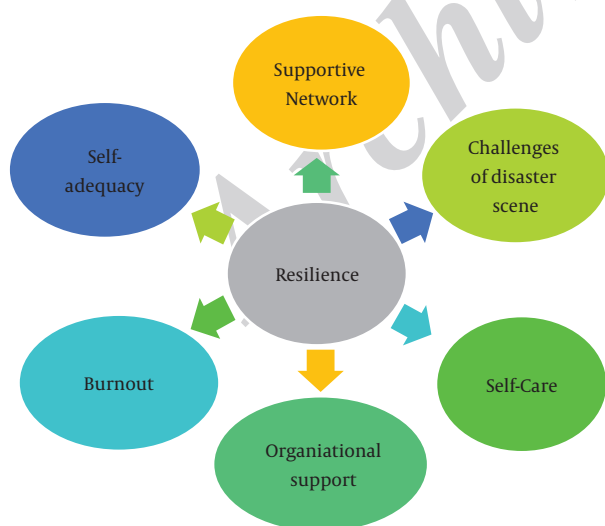


Figure 1. Six key concepts

According to this study, the first category is the challenges of the disaster scene. The crowd in the scene, im-

proper involvement of people and lack of security have been classified as three negative factors affecting resiliency that have been categorized in the challenges of the disaster scene. Several people tend to be in the scene at the time of disaster, which their presence can create anxiety for the volunteers and they cannot do their tasks well (28). According to Gritti (29) and Quevillon et al.’s study (30), disaster scene security is a major topic for relief, especially for women. Study of Bjerneld et al. showed that physicians and nurses contributing to humanitarian measures reported that lack of security in the disaster scene would reduce their task effectiveness (31). In line with this study, Froutan et al. showed that lack of safety and security in the pre-hospital setting can affect the resiliency of EMS personnel (28). Tension at the disaster scene can influence the quality of Humanitarian Aid Workers’ actions such as first aids, evacuation process, and many other aspects.

Self-adequacy is another important component of the resiliency. In this regard, the results of Bjerneld and Blanchetiere’s study showed that individual motivations, willingness to help others, as well as the spirit and experience of the teamwork are among the most important factors affecting the resiliency of the volunteers. Also, Bjerneld et al. stated that purpose and motivation are two important factors for Humanitarian Aid managers (31).

Another important sub-category was a volunteer’s experience and knowledge. A person who has attended several educational courses to deal with disasters and has many experiences can be better suited to facing the disaster scene (32, 33).

Self-care is the third category in the present study. A person who is supposed to be a volunteer in relief operations should have high physical fitness before attending missions and always try to maintain this physical capability (30, 32, 33). Having adequate rest, proper sleep, fewer work hours, having enough time for recovery, having mental support during the mission, and proper nutrition are important factors affecting the rescuers’ resiliency (30, 31, 34, 35).

In the present study, the participants stated that having religious beliefs and praying during missions has a very important role in increasing their resiliency. In this regard, Blanchetiere stated that the use of spiritual methods is an important factor to reduce the negative impacts of being present in the disaster scene (32).

Burnout is the fourth category of the present study, which occurs when a person is not physically and mentally supported. The participants complained of long-term missions, late replacement of forces, long hours of work, and lack of adequate rest during missions. Many of them said that seeing corpses on the scene, providing services in insecure scenes, and other reasons may cause volunteer fatigue

over the time (28, 29) and, in some cases, resulted in refusing to continue working with that organization. Authorities must understand the anger, fear, and anxiety of the volunteers, empathize with them and provide them with support.

The fifth category in the present study is organizational support. Psychological services even after the end of the mission was one of the most important factors. In this regard, Blanchetière believes that after the completion of missions, organizations do not take specific measures for individuals, while many may need support and advice due to problems in the disaster scene (32). Providing opportunities for specialized training, psychological support, and the provision of proper equipment for missions are among the most important organizational supports (33).

The last category in the present study is the social support network. The participants believed that if a person has the support of the family, community, and friends, he can well cope with the problems at the disaster scene. The results of previous studies also emphasize these findings. Good social support (19, 33), support from friends during the mission (30, 32, 34), and support from the team leader (36) are among the most important components of the resiliency of Humanitarian Assistances.

### 5.1. Strengths and Limitations

This is the first qualitative study on the experiences of Humanitarian Aid Workers in disasters in Iran. This study could provide valuable information on the experiences of Humanitarian Aid Workers about their resilience in disasters. Therefore, the limitations and strengths of this study should be considered, as well. Given that the findings of the present study have been obtained with semi-structured interviews, there may be some other effective components that should be extracted using other methods.

### 5.2. Conclusions

Although the results of this study may not be generalized to all countries, it could be a basis for future studies on the resiliency of Humanitarian Aid Workers in disasters. Although little work has been carried out to Humanitarian Aid Workers resilience and previous works have not comprehensively considered about the different aspect of resiliency, different aspects of resiliency have been considered in this study.

In order to reduce the negative consequences of attending the disaster scene for these individuals and improving the quality of services provided by them, it is recommended that all aspects of this study should be considered by the relevant organizations. Accordingly, it is neces-

sary before each mission to provide specialized training related to the type of service to be provided by the volunteer, communicate his tasks, and provide appropriate psychological support before, during, and after returning from the mission, thus he will not leave humanitarian organizations. On the other hand, the support of social media such as radio, television, and newspapers can have a significant effect on volunteers' motivations as volunteers. They will have a sense of being useful for the community by publishing news and information related to the work they have done.

Since the data were collected through semi-structured interviews, we recommended that future studies will explore other methods. Furthermore, developing a valid tool to measure the resiliency of Humanitarian Assistance is recommended.

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### Footnotes

**Authors' Contribution:** Hasan Ghods, Reza Khani Jazani, Sanaz Sohrabizadeh and Amir Kavousi contributed to conceptualization, data curation, investigation, project administration, supervision, and writing of the original draft.

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**Ethical Approval:** The Ethical Committee of Shahid Beheshti University of Medical Sciences in Tehran, Iran approved this study (Code: IR. SBMU. RETECH.REC. 1396.208).

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