RESEARCH ARTICLE

Ethical Considerations for Living in Temporary Shelters (i.e., camps) Following a Natural Disaster

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Abstract

Background: Some disasters, such as earthquake and flood make the majority of affected people homeless. The accommodation of these people in temporary shelters and camps requires some specific ethical issues. The aim of the present study was to discuss ethical issues regarding living in camps following natural disasters.

Methods: This study is conducted utilizinga qualitative content analysis approach. The required data were collected from four Focus Group Discussions (FGDs). Subsequently, 11 in-depth interviews were completed using the individuals who had the experience of receiving care following natural disasters and continued until data saturation. Data were analyzed using Graham content analysis method.

Results: According to the results obtained from affected people's views, the most important ethical issues that are not considered important in temporary shelters and camps include:1) the violation of privacy,2) the shortage of basic needs (e.g., food, water, and sanitation) and type and quality of services rendered,3) lack of attention to cultural and religious views of the affected people, 4) cause of evacuation, 5)lack of co-operation among disaster managers, 6)respecting the properties of the affected people, 7)conditions and geographic location of camps, 8)property care, and 9)community-based care.

Conclusion: Without paying attention to ethical issues, living in temporary shelters (i.e., camps) violates the dignity of affected people and then the affected people will not have appropriate cooperation with the managers. All these issues expose them to more harm than before.

Level of evidence: VI

Keywords: Dignity, Harm, Natural disasters, Principlism, Privacy, Temporary shelters

Introduction

Thousands of people annually lose their lives, and millions of them are displaced during natural disasters (1). In addition, natural disasters have negative impacts on health, economy, and social status of the affected society (2, 3). Our country, Iran, experiences different types of natural disasters yearly, such as the earthquake, flood, and drought. Since 1900, more than 180,000 people have been died in Iran due to earthquakes (4). Some of the earthquakes have been very destructive. In Tabas earthquake which occurred on 16th September 1978, about 11.000 out of 13.000 (85%) habitats of the stricken area lost their lives (5). An earthquake with a magnitude of6.3 on the Richter Scale in Manjil, Iran, resulted in the death

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of 30,000individuals, injury of more than 50,000, and complete ruining of three cities (4).

Moreover, on18th March 2002, another catastrophic earthquake witha magnitude of 5.8 on the Richter Scaleshook Bam, Iran, where about 90% of the buildings were destroyed, about 30.000 people lost their lives, more than 50.000 were injured at varying degrees, and more than 12.000 injured were transferred to other cities for continuing their treatment (6).

The causalities were very drastic such that about 40 teams from foreign countries were deployed in the area to help the affected population(7). In addition to the mortality, some disasters cause displacement of many people (8). The high destruction rate of buildings (i.e., private and public) has been reported in recent earthquakes in Iran (2, 4, 5). One of the policies pursued during disasters istheevacuation of affected people to temporary shelters, which was also done following the earthquake in Bam (9). In this regard, it is a common task to transfer the injured and affected people to a new place,such as a camp to provide them withnecessary cares. Many studies have discussed considering ethical issues intemporary shelters and have provided evidence of additional harm posed to affected people when living there (10). The lack of healthy water and food, as well as appropriate healthcare and treatment with the violation of privacy and civil rights are the other ethical issues (11).

The crowded shelters could intensify sleep disruptions and increase acute respiratory infection rate (12, 13). Living in shelters could increase the need to care for chronic medical conditions (14). Newnham et al. (15) mentioned reasons for the denial to evacuate to new shelters as follows: Disability or mobility problems, property damage, and lack of knowledge about where to go. The ethical issues raised when living in temporary shelters (i.e., camps) following natural disasters are discussed in the present study.

Materials and Methods

This study was conducted based on an inductive qualitative content analysis approach using focus group discussions (FGD) and in-depth individual interviews with experts. Researchers have done four FGDs with first responders (i.e., individuals from Iranian Red Crescent Society and Emergency Medical Services (EMS)), nurses, physicians, and policymakers who had participated in providing care to injured and affected people or were managers in different disaster management systems in Iran (e.g., search and rescue, camps establishing, distributing relief, environmental health, preventive care, curative care, psychological counseling, and medical care).

In addition, 11 in-depth individual interviews were conducted in this investigation. One of the FGD was achieved in Bam and the other three in Tehran. Moreover, three interviews were done out of Tehran and the others in Tehran. The first and main inclusion criterion was the experience of providing healthcare services or being experts in Emergency and Disaster Health. Overall, 44 people participated in FGDs and 11 interviews

were conducted in this study. Out of44 participants, five cases were females. Moreover, 10 people out of 11 interviewees were male. The educational level of participants was varying from high school diploma to specialist in medicine. Regarding the occupational status of the participants, they were formal employees of the Ministry of Health and Medical Education, personnel of EMS, and volunteers.

All participants were informed of the research procedure and objectives; moreover, they were all ensured regarding the confidentiality of the records of their voices, identity, and interviews. The oral consent was also obtained from the participants. For the convenience of participants, the place of interviews or FGDs was selected based on their request. The interviews and FGDs sessions were recorded and conducted by the first author and lasted between 90 to 140 min. The interviewer simultaneously took notes during the meetings (i.e., interviews and FGDs). Moreover, the interviews and FGDs were verbatimtranscribed for analysis. The prepared texts were read several times for familiarization and better understanding of their general meaning. The analysis of the study was thematic, and the themes were extracted by two researchers who had their own notes on transcripts separately.

Regarding the aim of the study, the collected data were analyzed using qualitative content analysis in eight stages as follows: Initially, the data were prepared and the semantic units were determined which followed by the text encoding. Subsequently, the created codes were compared with the text, and the similar concepts and expressions were categorized and placed in a group. Additionally, the composed groups were compared with the data to ensure the rigor of the codes and the themes were identified accurately and compared together. Eventually, the results were reported (16, 17).

The following strategies were employed to enhance the reliability of our findings (18-20):
1. he prolonged engagement of researcher with data and participants was the main route for creditability of collected data.
2. For dependency, the data were reviewed independently by all members of the research team followed by coding and categorization. Eventually, the feedbacks of the team members were compared with each other.
3. The participants were asked to read and compare our results to their experience.
4. The experts were invited and asked to control the process of the study including, coding and categorization.
5. All stages of the investigation were documented to be useful for other researchers.

Results

According to the results obtained from this study, the participants emphasized the attention to the ethical issues when receiving care services in temporary shelters as follows: 1. People's perspectives, 2. Health condition, 3. Privacy, 4. Historical experience,

Table 1. Study themes	
Themes	**Subthemes**
Affected people engagement	People's perspective
	Community-based care
	Historical experience
Cultural issues	Privacy
	Religious and cultural issues
Camp management	Terms of accommodation
	Camp authorities
Evacuation cause	The cause of the evacuation
Individual health and property	Health condition
	Property care

5.Property care, 6.Community-based care, 7. Religious and cultural issues, 8. The cause of evacuation, 9.Terms of accommodation, and 10.Camp authorities. Table 1summarizesthese subthemes that are categorized into5 major themes.

People's perspective

Some experts believe in the provision of some services immediately after settling people in camps. However, the affected people do not have a favorable impression of living in camps. Therefore, every time that the authorities decided to set up camps after disasters, they meet the lack of interest among affected people regarding living in camps. The most obvious level of unwillingness for living in camps was observed in the Bam earthquake.

"...The situation was such that the affected people wanted to live in the site of their original dwellings that were destroyed by pitching atent and thus they did not want to move to the camps (P-6)".

"...The next issue is that people have an interest in living in their original living site and so they do not like to change places and living in the camps".

"...Because when we speak about the camp, we remember the condition of the Palestinian refugees, who live in a large number of tents. Then, we think we would have the condition as they do. In addition, several films have been shown about the difficulties in camps; so, they prefer to stay right here in their own homes (P-12)".

"...A camp was built there (in Bam). No one was living in that place and the camp was left with no residents since it was not built by the will of the affected people (P-1)".

Health condition

The population density in shelters causes an unhealthy condition. Diseases associated with crowding are observed more in the meanwhile due to the lack of access to primary needs, such as healthy freshwater and food. The quality of facilities is another fact that must be considered by prolonging the stay time in the camps.

"...All people do not have access to healthy drinking water (P-5)". "There are not enough toilets or latrines. During the first months, there was not enough healthy water but the situation was better in the later months (P-17)".

"...When the population density is very high, people prefer to return to the site of their original dwellings (P-10)".

Privacy

The family in camps does not have the privacy they need. The privacy of the families can be viewed from two angles: privacy regarding the family relationship with others and privacy among family members.

"...I mean, we accustomed to having privacy. Privacy is very important to us. Even building a wall all around our yard makes it likely to encounter other cultures, which has been the same since ancient times. The wall is usually 2-m high. In camps, the families suddenly lose their privacy. The first thing that disturbs our peace of mind is that we feel our family is naked; naked in front of others (P-5)".

"...Conventionally, a family lived in a house with a few rooms, and brother, sister, mother, father, sister-in-law, brother-in-law used to live together, but now they are forced to live in a room with an area of 16 m2. It is very difficult and will have unpleasant consequences (P-5)".

"...When we settle in a camp we face certain problems that may not matter for many foreign countries (P-3)".

Historical experience

The participants have negative attitudes toward living in camps and the unpleasant past experiences dominate their opinions. The events during the Iraq-Iran war and the war scenes in movies and news about refugees' camp present a negative view of living in camps. Accordingly, the affected people feel that they are treated the same as refugees.

"...Camp belongs to refugees. In an earthquake, no one is a refugee. People state that they are not flooded to cause living in their own dwelling dangerous and not war-stricken to make there unsecured. There are not any of these. Only, the buildings are destroyed. We are here and we are not refugees (P-9)".

"...The name "camp" evokes the (condition of) Palestinian refugees. People imagine a large number of tents, so they think that if they go camping they will have the same conditions as Palestinian refugees do (P-12)".

Property care

The protection of the properties is another reason for denial of affected people to abandon the site of their original dwellings. They concern about their crops, livestock, and other properties buried under rubbles. In addition, the policies adopted in disasters, such as the establishment of temporary camps, must be such to avoid damage to the properties of the affected people.

"...But the villagers refused to board the boat and leave the flood-stricken area. They insisted on sorting out their livestock since it was the most important means of their earning and livelihood (P-11)".

"... One reason (for refusing to abandon the affected area)

was the protection of the belongings (P-12)".

"...In the earthquake of Azerbaijan Province (2012), do you know what the first asking of affected people who lived in the village was? They wanted barbed wire. They said that our property is a few sheep. Here, wolves are abundant. At night, wolves attack and kill the sheep. If we lose the sheep, we will lose all of our assets (P-8)".

"...In the area where people are mostly farmers using the land for camp construction must be considered carefully in a way that it poses the least damage to them (P-11)".

Community-based care

Lack of attention to affected people's views and opinions during the provision of services is another issue. Disasters managers usually think that they must and can lonely make the decisions and do not need consulting with other people, especially the affected ones.

"...All parts of the relief operation (i.e., accommodation and providing food) must start based on the (opinions) of the affected groups. The respected (for example older) and the elected representatives of the group must be present in the decision-making team. In this way, you plan for the affected people according to their wishes (P-13)".

"...The important thing is the attention to the affected people's views and their needs. Selfishness is incompatible with morality. I am moral when my client is given care properly(P-9)".

"...We must give people the right to choose. We cannot force them to take our services (P-9)".

Religious and cultural issues

Cultural attachments and dependence on living environment prevent the affected people from leaving the destroyed homes.Besides, being in the camp could create unconventional communications that are not consistent with their cultural and religious beliefs. In camps, the affected people will neighbor with strangers that they have not seen before.

"...One of the biggest problems in the camps is that a lot of people live very close to each other. This makes violence; even sexual violence (P-6)".

"...If I go to the camp, I cannot live where my distance to strangers is about 1 m(P-9)".

"...But they had the home garden; they were the owner and a sense of ownership (P-20)".

"...Although they are grieving, they are neighbors and familiar with each other. It somewhat gives them comfort psychologically and emotionally (P-4)".

The cause of the evacuation

The cause of evacuation is also a very important issue. One of the most common causes of camp settlement and affected people transfer to a new location is to prevent chaos and spread of crime, which was the main reason for evacuation in Bam.

"...The crime rate was high in Bam. The number of people was about 40.000at night, but the population that was in the city during the day was about 120.000 persons. It means that around 60-70 thousand people come from outside of the city and leave it at night (P-12)".

"...During the first days, there were all types of thefts

stealing individual jewelry and destroying banks and ATMs (P-12)".

"...If a security ring had been immediately formed around the city after the earthquake and the traffic of people had been controlled, none of these problems would have arisen (P-18)".

Terms of accommodation

Camps must have special conditions to secure the safety and health of affected people who live there. These conditions include the safety of the location, taking people away from hazards and crossing, shared decision making to choose the place of camps, and considering the local climate condition.

"...The settlement should not be threatened with environmental hazards, such as floods and earthquakes (P-17)".

"...The camp consists of tents. Living in a camp is temporary housing. When staying at the camp is prolonged, it is the time to show its negative consequences (P-15)".

Camp authorities

In Iran, the Red Crescent Society is the main organ responsible for managing the temporary camps after natural disasters. Although other organizations help the Red Crescent Society, there is no cooperation among the responsible organizations.

"...The important thing is that we have not a law for mandatory evacuation (P-11)".

"...Just tell me who is responsible for the management of the camp? Yes. According to the written regulation and rules, many (organizations) should cooperate but it is not the same actually (P-5) ".

Discussion

Ethical issues related to living in temporary shelters during natural disasters were discussed in this study. The participants mentioned their reasons for the denial to live in camps or temporary structures following a natural disaster in Iran. Government and disaster managers have ethical duties and decision-making policies toward injured and affected people that are necessary to be evaluated. According to the experience of participants in the present study, ethical issues that are not considered in temporary shelters include lack of providing primary health care and basic needs, such as healthy food and water, privacy violation, lack of attention to affected people's views in decision making process about rendering services, lack of cooperation between organizations to manage the camps, lack of attention to religious and cultural issues, improper care toward the property of affected population, and the cause of evacuation.

People's perspectives and Health condition

The ethical responsibility of disaster managers is not only limited to the improvement of medical care but also involves the provision of primary needs of the residents and protecting them against additional harm. Principlism is the basic system of ethics for a moral decision-making approach in disasters. This system consists of four moral

principles, such as Autonomy (i.e., free will or agency), Beneficence (i.e., do well), Non-maleficence (i.e., do no harm), and Justice (i.e., social distribution of benefits and burdens).

Out of these four principles, Non-maleficence (i.e., do no harm) is prominent in the emergency situation, especially during disaster management. In addition, receiving an adequate standard of living, including adequate and healthy food as well as water, clothing, and sanitation are necessary elements of the right to live with dignity (21).

Therefore, the policymakers should be cautious not to impose additional harm to the affected people. After rescuing and treating the injured people, meeting their basic needs, such as healthy drinking water, food, and sanitation are the primary duty of disaster managers (22, 23). Many reports show that dissatisfaction with the services regarding meeting the basic needs may lead to other major problems during the temporary sheltering.

Some of the individuals living in a temporary shelter (e.g., container homes) encountered a shortage of safe drinking water and insufficient supplies of sanitary food after two years from Bam earthquake (6,24). Investigations show that natural disasters that cause great displacement of affected people are usually associated with outbreaks of diseases. The issue of crowed camps in addition to the lack of adequate sanitation facilities and suitable hygiene is another problem observed during the temporary settlement. These situations could increase morbidity and mortality among affected people by spreading different diseases (8).

On the other hand, long-term residency in camps is another problem that can cause different harms to the affected people. Living in temporary camps is accompanied by poor dietary intake of necessary nutrients resulting from fewer intakes of meat, vegetables, and fruits (25). Ebner et al. stated that living in temporary shelters could increase lifestyle-related diseases (26).The poor condition of health and nutrition intake make affected people who live in temporary camps more vulnerable than before.

Privacy

The average size of the houses in Bam was more than 400 m2 that included a yard, a garden with some trees, and a few rooms in which every person (i.e., children and adults) had a secure space. A family who used to live in such houses must live in a single room of 16-20 m2 (3m*6m or 4m*4m) after disaster (27). In such a situation, it is impossible toexpect to have privacy, especially when 6-8 individuals are obligated to live there. Privacy is considered from two angles: the relationship between family members and strangers, such as a neighbor, and the relationship within family members. Both aspects of privacy are violated under such conditions and in camps (28).

Historical experience

Historical experience could have an effect on the

decision of people (29). Although we might have no solution for the historical experience, we must consider it in our decision-making process and disaster management.

Property care

The protection of individuals' properties during disasters is the duty of government and authorities (30). The authorities must consider the strategies to reduce the anxiety of the affected people about their properties. The livelihood of the affected people (i.e., agriculture land and Orchard's livestock) must be protected. In addition, some policies, such as the construction of camp site could bring harm to people's properties. If the earning sources of their income are removed, they must lay their hands on others for the basic needs of life. How will we speak of the dignity of human beings who are dependent on others for a living?

Community-based care

The majority of disaster managers in Iran believe that they have the ability and the required knowledge about deciding what is necessary for the affected people. However, these authorities do not usually pay attention to people's comments and make decisions lonely. It should be noted that the managers must pay attention to these people since without considering the individuals' opinions it is impossible to do the best for them and gain satisfaction. Shared decisions making with the affected people definitely affect their desires. During disasters, decision makers take usually a paternalistic approach; however, they have to consider not to ignore the civilian rights and views of the affected people under the pretext of an emergency situation. The community-based management will have a positive effect on different aspects of disaster (e.g., mitigation, preparedness, response, and recovery) and can reduce the vulnerability of population (31). Accordingly, the affected population will have a higher quality of life and a safer community in which they can protect themselves and their property in addition to their environment (32).

Religious and cultural issues

Paying attention to the anxiety of people about religious and cultural issues is a very important consideration. According to religious Islamic practices in the Iranian context, Mahram and non-Mahram people are considered in all relationships between individuals. According to the participants' point of views, individuals that are not Mahram could not live in a place together. In addition, cohabitation of males and females is unacceptable without a dedicated space (28). In literature, it is emphasized to consider the religion and culture of the affected people (33, 23).

The cause of the evacuation

According to a study, bringing order to the public could not be an ethical reason for the evacuation of affected people (11). This issue could be accepted in war but not after natural disasters. The establishment of security in

the affected area is most important to avoid mandatory evacuation and its horrible consequences. The managers could take help from army and police forces to prevent chaos and bring security. Therefore, it is necessary to create a security ring around the affected area to control people's entry and exit preventing the traffic of non-native individuals (the persons who used to live in the affected area at the time of earthquake). Baker et al. (34) stated the following characteristics to manage chaos: preparedness, disaster planning, clinical competence, leadership skills, flexibility, and good communication.

Terms of accommodation
Physical and geographical conditions of the camps
The camps should be located where it could provide access to main routes, be safe from accidents, and be suitable in terms of climatic conditions (such as rain, snow, heat, and cold). Another important issue is to have easy access to people's workplace where they can easily go to work. Otherwise, the affected people will encounter many difficulties (21).

Camp authorities
The establishment and management of a camp is impossible to be performed by only one authorized organization. Although the Iranian Red Crescent Society bears the major responsibility for this purpose, many other organizations and institutions should be involved in running it. The poor cooperation after a disaster is another problem which is observed during the catastrophic events. Co-operation (also named as team working) as an ethical principle in disaster management must be regarded as providing necessary high-quality care to affected people. Accordingly, Larkin discussed team working ethically and emphasized the utilization of a holistic team approach to provide care to injured and affected people after a disaster (35).

According to the results of this study, the main ethical issues that are not considered in temporary shelters (i.e., camps) include the violation of privacy and lack of paying attention to religious and cultural views of the affected people. The cause of evacuation is another issue since an evacuation due to public order is not justified ethically. Therefore, it is possible to observe order with the help of police and army forces. In addition, the lack of co-operation among organizations responsible for providing services to people is another issue. Additionally, the protection of affected people's properties is the duty of authorities which is usually neglected. Due to unpleasant and unjustified consequences of living in temporary shelters, affected people are better to be resettled near the site of their original dwellings since minimal properties are needed to live with dignity. The ethical issues mentioned in the present paper are not all the present issues. In addition,

lack of attention to ethical considerations leading the affected people to deny disaster manager's policies which makes the people vulnerable than before and increases the likelihood of additional harm to them.

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