# **Research Paper:** Community MentalHealth Preparedness in Disasters: A Qualitative Content Analysis in an Iranian CrossMark Context



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# ABSTRACT

Background: Disasters are stressful events not only for individuals who suffer from personal loss but also for the community at large. It seems necessary to study the mental health of the community in disaster situations so as to endorse their health, care planning and prevent disorders. A pure understanding of the community mental health preparedness, based on the experiences and perceptions of involved people is necessary in order to attain this aim. The purpose of this article is to put forth a subjective and comprehensive description of community mental health preparedness in disasters.

Materials and Methods: A qualitative inductive content analysis method was exploited since community mental health preparedness is a subjective, context bond and complex phenomenon, which is better described based on in-depth experience and perceptions of involved people. The study consisted of 14 participants including experts and lay people. Data were collected through in-depth, semi-structured interviews. All interviews were transcribed and data analysis was accomplished based on qualitative inductive content analysis principles.

Results: From the analysis of the data content, 5 themes were explored including 1) Cultural values and beliefs; 2) Risk beliefs; 3) Mental preparedness in disasters; 4) Psychological process; 5) Trust.

**Conclusion:** Mental health preparedness is a multifactorial phenomenon that requires a clear understanding and definition of perceived threats, public trust on social structure and formal and informal supportive organization. This preparedness involves proportional, mental, social, familial, religious beliefs, and cultural sensitivity along with the ability to handle mentally disastrous situation, which can be measured after concept analysis and tool development process.

#### **Keywords:**

Content analysis, Community, Mental health, Preparedness, Disasters

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# **1. Introduction**

# Influential factors on community mental health

hroughout history, natural disasters have affected the world with numerous effects on the community. For many people, catastrophes constitute personal tragedy involving loss of health, properties, loved ones and affecting their occupations and resources. According to the definition of the International Federation of Red Cross and Red Crescent Societies (IFRC), a disaster is an unexpected, catastrophic event that seriously interrupts the functioning of a community or society and causes human and economic or environmental losses that exceed the community's or society's capacity to use its own resources.

Iran has a high level of exposure to numerous disaster risks. Located in one of the most arid areas of the world, droughts, earthquakes, floods, sand and dust storms, forest fires increasingly affect different parts of Iran. The Bam earthquake on December 26, 2003, at 1:56 AM UTC, was one of the several devastating earthquakes that have repeatedly struck Bam throughout its ancient and modern history. The disaster was estimated to have left over 40,000 people dead and injuring up to 30,000 [1].

Indeed, disasters have a deep impact on different aspects of health, especially on mental health. People may experience anxiety, sadness, fear, interpersonal conflict and anger; other physical feedbacks may include changes in eating, or sleeping habits, stomach aches, increased alcohol or drug use [2]. Posttraumatic stress disorder (PTSD) is the most commonly identified disorder that is known to occur after experiencing a traumatic event [1]. PTSD is considered as re-experiencing of the traumatic event, avoidance, numbing and hyperarousal. Depression is the second most commonly observed psychological disorder in survivors of disasters followed by anxiety related problems [3, 4].

Nowadays, what is generally understood as "mental health" can have its roots in developments of clinical psychiatry, public health and in other branches of knowledge [5]. Presently, World Health Organization (WHO) defines mental health as "not just the absence of mental disorder" but "as a state of well-being in which every individual realizes his or her own potential, ability to cope with the normal stresses of life, can work productively and fruitfully, and be able to contribute to her or his community" [1].

# The lack of knowledge about community mental health preparedness

The studies showed that providing only the basic medical and financial support in disasters cannot decrease the long-term psychological and mental effects of disasters [6, 7]. In man-made and natural disasters, with a focus on mental health difficulties, there is a lack of a welldefined concept of mental health preparedness for disasters. In Asia, mental illness such as PTSD, a major depressive disorder, and anxiety is due to lack of mental health preparedness and insufficient knowledge and practices where the mental health preparedness is concerned [8]. In several researches, the absence of mental health preparedness information on vulnerable people such as children, women, people living with disabilities and the elderly has been indicated [9-11].

Therefore, according to the results, assessment efforts for mental health preparedness training in general and vulnerable populations such as children, women and elderly people (in specific) should be encouraged [10, 12]. Given the shortcomings and/or lack of current knowledge about community mental health preparedness, further studies are desirable for discovering and clarifying the phenomenon of community mental health preparedness and exploring its related factors.

# Importance of preparedness and exploring this concept in Iranian context

Iran is one of the most disaster-prone countries in the world [13] and for many of reasons, Iran and other Asian countries do not have appropriate preparations for dealing and coping with disasters and their consequences. The inevitable occurrence of disasters makes it essential to organize a series of plans and actions aimed at strengthening individual and community support systems in order to increase their capability for coping with conceivable mental health crises.

In the situation of Bam earthquake that struck the southeastern Iran on December 26 2003, all the survivors required extensive psychological counseling and psychiatric treatment. Around 40% of the affected population had developed PTSD [1]. At that time, due to a lack of proper training, awareness, and preparedness, some people were psychologically affected by the incident and were emotionally uncontrollable. Following the Bam earthquake, the significance of preparing the community mentally for impending disasters has been reinforced.

In order to decrease the psychological impacts of natural disasters in the community, a comprehensive plan should be structured in advance; therefore, we need perceived threats, public trust, social structure, and formal and informal supportive organizations. This preparedness involves proportional, mental, social, familial, religious beliefs, and cultural sensitivity along with the ability to mentally handle disaster situation, which can be measured after concept analysis and concept development process.

The importance of mental health preparedness in disasters is increasingly being documented as a superiority for community mental health emergency in different researches [14-16]. Mental health is closely linked with physical health, behavioral health, recruitment, educational proficiency, crime reduction [17, 18]. Mental health preparedness supports people and communities to reach their potential and also increase their abilities in emergency situations [19]. In most countries of the world, health preparedness especially in term of disasters. This relates to a conceptual failure to recognize the value of mental health preparedness to the individual and community level.

The recent attention to the mental health preparedness from governments is a remarkable development. In order to avoid long-term psychological effects, communities must be mentally prepared to cope with impending disasters; therefore, with the existing lack of knowledge on mental health and mental preparedness in such incidents at the community level, the aim of the current study is to explore this important phenomenon through the perception and experiences of people.

### 2. Materials and Methods

#### Study design

Community mental health preparedness is subjective, culturally sensitive and context bond; therefore, a qualitative approach was an appropriate method to understand and explore this phenomenon [20]. Schwatzman and Struss in 1973 consider the in-depth interview system as a suitable method for data gathering, recording and analyzing. Therefore, a qualitative inductive content analysis was used for the text of the interview. The content analysis method was selected for reaching a deep understanding of community perspectives and their limitations about mental health preparedness in disaster situations. The analysis divided the experiences of expert and non-expert group into several categories. Data were collected by concentrating on interviewes' perspectives. By using an inductive approach, codes were set to decrease volumes of verbal information into manageable data so as to identify patterns and gain insight.

# Study participants

Taking into consideration the analysis of the content and phenomena of mental health preparedness, the study group consisted of 14 people including health researchers and experts in disasters and emergencies (n=8), the lay people with traumatic experience (n=4) and psychologists (n=2). All the study participants belonged to the Muslim community and their age varied from 28 to 56 years, with an average of 40 years. The study was carried out in the flood disaster area of Sijan village, Tehran in the year 2015.

### Data gathering

Semi-structured interviews were conducted as the data gathering tool. The interview guide included general and specific questions to direct the interview. Some examples were as follows: 1. Do you think you are at risk?; 2. Remembering the times of the flood that destroyed everything, could you please tell me about your and your family's emotional and mental situation at that time? Please talk about your concerns and anxieties you faced at that time; 3. Are you prepared for confronting another disaster?; and 4. What kind of problems did you experience at the time of the disaster?

These interviews were carried out in a relaxed atmosphere. Data collection was continued until the investigators reached the point of saturation. The interviews lasted between 30 to 60 minutes on average.

#### Data analysis

A qualitative content analysis was used for interpretation of interviews. This method was used to recognize both the manifest and latent content of the text [21]. This method can help the researchers when a new area is to be discovered with an investigative method, or when researchers want to discover a known area from a new aspect [22]. In order to achieve an initial and better understanding of the phenomenon under investigation and its setting, interviews were transcribed by the interviewer. The interpretation process was started by reading the text several times, the reduced meaning units were condensed into codes, and sub-categories and categories were emerged based on the similarities and differences in content. Finally, a combination of categories was done by connecting them to the themes and by using methods including immersion in the data, reviewing memos, making descriptive sentences and drawing diagrams.

#### Trustworthiness and ethical considerations

The content analysis method recommended by Lundmen and Grancheim, is comprised of five stages, that ensured the astringency of this study [21]. The ethical considerations of the study included namelessness, withdrawal from the study, informed consent, and recording authorization. Prior to the study, the participants were informed about the purpose of the study. It was mentioned that they could withdraw from the study at any time without being penalized. The study was approved by the research center of emergency and disaster health, at the University of Social Welfare and Rehabilitation Sciences in Tehran, which corroborated its ethical consideration. To ensure the trustworthiness of data, specific strategies were used including a) Peer review, involving checking of data interpretation by other researchers in this field; and b) Checking and rechecking of the data and its inference, which was subsequently revised and confirmed by them.

# 3. Results

The ideas of psychologists and health experts in disasters were investigated. The data was gathered using semistructured interviews and observation. In this study, 14 participants were interviewed. Qualitative interviews analysis was done through inductive content analysis. For the purpose of the current research, more than 253 items were extracted (47 items from literature reviewing and 196 items from qualitative interviews). Hybrid model from Schwarts Barkot and Kim (2000) were used as the theoretical framework for developing a tool, which can be used for assessing the mental health preparedness of people in disasters.

The first application resulted in determining 5 themes that could assess the mental preparedness of people in disasters including: 1. Cultural values and beliefs; 2. Risk beliefs; 3. Mental preparedness in disasters; 4. Psychological process; and 5. Trust (Table 2 and 3). The second application is the directing new definition of community mental health in designing or producing the kind of good tool and items.

Based on the content analysis, the attributes of the data of mental health preparedness for disasters can be divided into five majors themes, including 12 categories and 31 subcategories, as follows: 1. Cultural values and beliefs; 2. Risk beliefs; 3. Mental health preparedness in disasters; 4. Psychological process; and 5. Trust (Table 1). These themes, categories and sub-categories are described in the next sections. Following are some excerpts from the qualitative interviews that were conducted:

Question: Our aim is to develop an instrumentation to assess the mental preparedness of people in disasters. As you know, the subject of this PhD dissertation is to see how people look at disasters in their minds. Do they predict? Do they believe that it happens? Are they concerned? If yes, how do they handle it? Let's suppose that a 7.5 magnitude earthquake hits Tehran. Firstly, what would be your mental and emotional reactions? What would be your emotional and mental state in a situation when you see dead bodies and chaos around you during an earthquake?

# Categories and sub-categories of community mental health preparedness in disasters

#### Cultural values and beliefs

In this study, "cultural values and beliefs" were one of the challenges, which was extracted from experiences and perceptions of the participants and divided into two sub-categories: Spiritual Beliefs and Disaster Beliefs. Religion and beliefs play significant roles because of their supporting defines for disasters.

One of the affected participants (female, 48 years old) indicated: *After disaster, I am calmer and children back to the school. Anyway, we should tolerate because this is the act of God and we must be patient.* 

Affected Participant (female, 56 years old): *The disaster* is God's decision and we can't be preparing for incidents.

Affected Participant (female, 41 years old): At the time of the earthquake, my grandfather was lying next to me. I was shocked and shouted, but he told me not to be afraid and everything would be fine if we just trust in God. On the other hand, most of the experts mentioned that this belief should be taken into consideration, because people are not ready for confronting disasters due to spiritual beliefs.

Expert Participant (male, 39 years old): Unfortunately, even the people who are fully engaged with disaster issues may not have first aid box in their homes. The absence of this first aid kit means that they might have a fatalistic view to disasters. I think we should make a change in the attitude of people about their fatalistic view.

Expert Participant (male psychologist, 35 years old): Some people were blasphemous in disasters and thought that this incident is a deliberate act of God.

Source Categories **Subcategories** Plan for preparation Safety and individual preparedness Planning and safety Education Family protection Attribute Readiness Practice, repetition, media, education in workplace, maneuver Awareness and sensitization Preparedness strategies Attribution of disasters and belief Planning prerequisites Punishment, destiny, projection Adaptive and maladaptive coping strategies Psychological reactions Psychological mechanisms Consequences Psychological strategies Defense mechanisms **Religious beliefs** Threat perceived risk Not perceived threat risk Misconceptions of disasters Insufficient trust Lack of trust in the organizations, relief workers, media, psychologists

Table 1. Finding sources from fieldwork phase

Emergencles and Disasters Quarterly

Expert Participant (female, 42 years old): We should consider that sometimes people's beliefs in God will help them relieve their stress, for example, we trust in God and we say whatever God wants.

**Religious beliefs** 

Absence of belief on disaster incidents

#### **Risk believe**

Antecedent

This concept contains two sub-categories: Feeling and understanding the disaster risk and lack of risk understanding. Another theme frequently discussed by the experts was feeling and understanding the risk.

The current study shows that communities don't have same risk understanding of disaster and disaster risk management. Rather than concentrating on what limits communities' ability to decrease their risk, emphasis should be laid on understanding risks across different group of communities.

Expert Participant (female, 42 years old): For example, many people are still confused about understanding the risks.

Expert Participant (male, 43 years old): Understanding disaster risk requires us to not only consider the risk and vulnerability, but also community's capacity to keep itself from catastrophes, and to struggle, engage, recover from catastrophes. There was a low level of awareness among the lay people regarding the threat that disasters represent to them and to their community.

Security/ reliance on formal structure

Lack of acceptance of disasters, Lack of knowledge of incident, Lack of risk belief, Lack of anticipation, Lack of experience

Affected Participant (female, 41 years old): When the disaster happened, I didn't have any idea about what to do and what happened to me; I just screamed.

Affected Participant (male, 29 years old): I never had any idea regarding the flood.

The participants' perceptions of risk were also determined by their level of knowledge and experience with disasters.

Affected Participant (male, 29 years old): *The risk perception comes to me as a citizen that how much I thought about the issue.* 

The participants were asked how much information and experience they had regarding hazards. They were asked how informed they were about disaster risks, and how keen they were to learn about such incidents. Finally, they were questioned on what kind of information regarding disasters they had been exposed to over the last year.

Affected Participant (male, 29 years old): I am afraid of the earthquake, because I have experienced this disaster before. I believe that if people can understand the risk Table 2. Finding items from fieldwork phase

Them	Categories	Sub-Categories		
Antecedent (Source)				
Beliefs	Religious belief	Fatalism Determinism Reliance Thankfulness		
Lack of disaster perception	Absence of be- lief on disaster incidents	Lack of acceptance of disasters Lack of knowledge of incidents Lack of risk belief Lack of anticipation Lack of experience		
Risk believe	Feeling and understanding the risk	Not the same understanding of the risk Lack of perceived risk Temporary attention Impact of severity and magnitude on attention Lack of preparedness due to lack of believe to the risk Improbability of the risk Not risk believing in young people Misconceptions regarding disasters Threat perceived risk		
Insufficient trust	Trust to the structures	Lack of trust in organizations Lack of trust in the relief workers Lack of trust in media Lack of trust in psychologist Security/ reliance of disaster		
	ntecedent (So Beliefs	Intecedent (Source)   Beliefs Religious belief   Lack of disaster perception Absence of belief on disaster incidents   Risk believe Feeling and understanding the risk   Insufficient Trust to the		

and have risk perception, their behavior may change after a disaster.

Affected Participant (female, 41 years old): *I am eager to know how to protect myself and my family in times of disaster, but I don't know how and where I can get this information.* 

Expert Participant (female, 40 years old): *People of Tehran know that the risk of earthquake is imminent; but they don't have perceived risk, so they do not understand the risks and consequences of a disaster to them.* 

# Temporary attention and impact of severity and magnitude on attention

Most of the participants mentioned that the community paid attention to a disaster; depending on the severity of the disaster and its significant impact on the people. Expert Participant (male, 39 years old): One of our biggest problem is short term attention paid to the disasters, both by media and scientific societies that respond to it just for a first few days or weeks after a catastrophe. This temporary attention is also related to the severity of the disaster.

Expert Participant (male psychologist, 35 years old): You will see that in television, newspapers, news and media whenever an accident happens, it is given a shortterm attention and then forgotten.

### Lack of risk believing in young people

The number of children and young people affected by catastrophes and emergencies is anticipated to increase threefold over the next years due to climate change, disasters, and population growth.

Themes	Categories	Sub-Categories
Cultural values and beliefs	Spiritual beliefs and disaster beliefs	Thankfulness Determinism Reliance Fatalism Punishment, destiny, projection
Risk believe	Feeling and understanding the disaster risk	Lack of risk understanding Lack of risk perception Temporary attention Impact of severity and magnitude on attention Lack of risk believing in young peoples
	Lack of risk believe	Lack of acceptance of disasters Lack of knowledge and belief of different kind of disaster risk Lack of the possibility of disasters Lack of risk belief Lack of experience in emergency workers Lack of anticipation Ignorance
Mental health preparedness in disasters	Planning and strategies	Education Social participation
	Presence or absence of mental health preparedness Awareness, sensitization, knowledge and finding informa- tion	Existence of individual safety and preparedness Lack of mental health preparedness Curiosity and sensitivity Awareness, knowledge and finding information Curiosity and sensitivity
Psychological process	Psychological effects and reac- tions	Adaptive and maladaptive psychological coping strate- gies Psychological reactions Psychological disorders
Trust	Trust in the structures	Lack of trust in organizations Lack of trust in relief workers Lack of trust in media Lack of trust in psychologists

Table 3. Themes, categories and sub-categories of community mental health preparedness in disaster

Emergencies and Sisasters Quarterly

Expert Participant (male, 39 years old): Young people don't want to believe in the risks in disasters, they neglect about this theme, but they want to make a change. We can help them to develop their contributions by awareness programs.

Expert Participant (male, 50 years old): These people neglect the impact of disasters. We have to promote a pioneering child-centered approach to disaster risk reduction that restrains the idea and the energy of children and young people to effort towards making lives safer and society more resilient to catastrophes.

#### Lack of risk believe

Lack of acceptance of disasters and ignorance

People refuse to live in fear of the unknown; therefore, they don't want to accept a disaster risk in future.

Expert Participant (male, 39 years old): We must notify the communities so that they do not have to live in fear. They have to take steps to prepare for the disasters that may happen in their area. Then do their best to educate their loved ones so that they too can live without fear. Affected Participant (female, 41 years old): *I am sure that my faith will carry me through; therefore I don't want to think about future disasters.* 

People don't want to accept the probability of disaster in future because they believe that such thoughts make them sad. They believe that acceptance of a disaster will take away happiness and good moments from their lives

Lack of knowledge and belief of different kinds of disaster risks

Most people don't have sufficient knowledge about the disaster and its consequences. They think that just because a disaster happens, it means that it is time for them to "die".

Expert Participant (male, 36 years old): People don't have enough information that different types of disasters need different kinds of preparedness. They think about the risk only when a disaster happens. And among people is a strong likelihood that they will not survive from an incident.

Affected Participant (female, 41 years old): *Preparation* for a disaster will be a jinx and if I do it, it will surely happen. Therefore, there is no need to worry and prepare.

Affected Participant (female, 41 years old): *I cannot afford to prepare because I don't have enough money.* 

Expert Participant (female, 28 years old): The community should know that they can progressively increase their backup supplies over time and they must be prepared even if they don't have enough money.

Lack of experience in emergency workers

Most participants mentioned that emergency management at different levels tried to perform their duties but they had no experience in handling catastrophes.

Expert Participant (male, 39 years old): When you don't have qualified and accomplished people in those places, more people suffer.

Expert Participant (female, 40 years old): You need people there who not only have confidence and experience but also the expertise in emergency management work and who can educate us about that the roles of every part of emergency center mission.

#### Lack of anticipation

According to the present study, the majority of people don't want to anticipate future disasters since they believe that they will have more stress and anxiety with anticipation of future incidents and this would lead to unhappiness.

Expert Participant (male, 50 years old): Unfortunately, people never seem to learn from catastrophe. We too fast forget the past and we too eagerly follow the lead of people who are no less myopic than we are we under attend to the future.

Affected Participant (female, 41 years old): *Thinking the floods or any other disasters make me anxious, there-fore I always ignore such things.* 

#### Mental health preparedness in disasters

#### **Planning and strategies**

Most of the participants mentioned that there is no planning or strategies for communities at different levels. They also said that social relief workers don't have sufficient knowledge about the reactions and responses of people in disasters.

Expert Participant (male, 50 years old): Unfortunately, there are no plans to educate social relief workers to manage simple psychological subjects in disaster situations.

#### Education

Expert Participant (male, 50 years old): We must create awareness among people in schools and workplaces and train people specifically according to local culture and beliefs.

Expert Participant (male, 36 years old): For mental health preparedness of the communities, we can use authorities of young clergymen

Expert Participant (male, 36 years old): The social relief workers are not adequately prepared to help people in disasterous situations. It is necessary to educate the social relief workers to handle their own feelings during a catastrophic situation, and be helpful to the affected people at the same time.

#### Social participation

Community mental health preparedness is not a completely individual effort as it can also be developed by social participation and networks.

Expert Participant (female, 43 years old): Social participation offers a channel through which perception of risk and enthusiasm to take suppressive action can be moved. Expert Participant (male psychologist, 39 years old): Interconnected groups are usually better prepared mentally for threat events, since followers are more eager to cooperate in solving mutual problems.

### Presence or absence of mental health preparedness

Existence of individual safety and preparedness, lack of mental health preparedness

Psychological preparedness can play a vital role in emergency preparedness, in coping with the stress of disaster, and preventive severe post-incident distress.

Expert Participant (male psychologist, 35 years old): Most people who trust themselves "prepared" for catastrophes aren't often as prepared as they think they are, and in a disastrous situation, they feel more anxious and stressful.

Expert Participant (male psychologist, 35 years old): Being psychologically prepared includes the knowledge and realistic anticipation that any disaster situation is unpredictable, such as an earthquake can become uncontrollable very quickly.

# Awareness, sensitization, knowledge and finding information

Curiosity and sensitivity, awareness, knowledge and finding information

Psychological preparedness can be improved through acquisition of specific psychological knowledge and strategies, and through sensitization to disastrous issues.

Expert Participant (male, 50 years old): We have poor awareness at all levels of health management and mental health needs' communities, but fortunately, most people get news about disasters from media and their social communications.

Expert Participant (female, 43 years old): We must create awareness in the community on how to manage their emotions and reduce stress during disaster.

Expert Participant (male psychologist, 35 years old): Information on psychological preparedness should be made accessible to the communities from reliable sources such as media and in educational materials produced by emergency services and other organizations.

## **Psychological process**

Psychological effects and reactions

# Psychological reactions, psychological coping strategies and psychological disorders

Most people can experience mild distress reactions and/or behavioral transformation, such as numbness and hopelessness, flashback, sleeplessness, increased smoking or alcohol use and worrying; however, a small range of people may develop psychiatric disorders such as major depression, PTSD and need specific treatment. Participants indicated that traditional coping strategies like faith, religious beliefs and family involvement were important to help them to cope with the impact of disasters.

Affected Participant (female, 41 years old): In this flood incident, I lost my five relatives and family members, house and everything. Now what will I do, how will I live. After the disaster, I'm not able to sleep. I feel fidgety and I have headache most of the time.

Faith and religion and their interventions were already rooted in the communities, so people could turn to their faith during the disaster. Therefore, people after disasters were more resilient and they could get back to their normal life rapidly due to their cultural coping strategies.

The role of the clergymen in providing psycho-social and mental health support was also viewed as significant by some participants.

Expert Participant (male, 36 years old): We are Muslims and I think the clergymen have a great impact on the people perceptions; therefore, they must have the skills and the capacity to improve community awareness regarding mental health in disasters.

The role of family involvement and support as a strategy for coping with disasters was also recognized by participants.

Expert Participant (Psychologist male, 35 years old): Because of the support from the family members, people are more able to deal with the impact of disasters; so, for example, when we are here in our office in Tehran or other cities and disaster strikes anywhere, we know exactly where our families are and we can then help them. Even though the social relief workers and other organizations are going to everybody, we go and see our relatives to support and help them.

### Trust

# Trust to the structures

# Lack of trust in the organizations, lack of trust in the relief workers, lack of trust in the media, lack of trust in the psychologists

Most of the participants mentioned that people don't trust the government, media relief workers, and even the psychologists in disastrous situations.

Expert Participant (female, 42 years old): I believe that people don't trust the organizations and there is a lack of integrity and lack of trust managing the programs, for instance, sometimes they don't donate to disaster relief funds because there is great concern about how the money is used.

Using media will be increased during a disaster among people who are either directly or indirectly affected. According to study results, there is a lack of trust in the data exchanged via media and social media and this lack of trust may expressively prevent decision-making by emergency management and community during disasters.

Expert Participant (Psychologist male 35 years old): People will trust the media when message of disaster risk is not changed often; therefore, clear message should be frequently repeated.

#### 4. Discussion

According to our qualitative findings, we concluded the following definition of mental health preparedness, "mental preparedness in natural disasters is a complex and relative concept, which is dependent on public trust in structures and organizations, official and unofficial supportive sources. Based on this trust, people organize their supportive actions for themselves and their families. This trust can lead to positive, psychological reactions".

Proposing this definition of Community mental health preparedness in disasters, which is based on the theoretical and field work stage definition of the concept, has two main applications in developing the instrumentation.

In the theoretical stage, findings of our systematic review showed that currently there is no clear and comprehensive definition of community mental health preparedness and also no clarity on related tools to evaluate community mental health preparedness. This study showed that community mental health preparedness plays a crucial role in responding to public health emergencies in every country. Therefore, there is a need to develop a more context-bond tool to evaluate the mental health preparedness of the community.

During the field work stage, the ideas of experts in health in disasters, psychologists and experienced people were investigated. Based on the content analysis, the related factor of mental health preparedness for disasters can be divided into five major themes and 14 categories, including 1) Cultural values and beliefs; 2) Risk beliefs; 3) Mental preparedness in disasters; 4) Psychological process; 5) Trust. Based on this study are cultural values and beliefs concepts, which mean the collection of perception and reaction of the community to a disaster like a thankfulness, determinism, reliance and fatalism. In our study, we revealed that beliefs are related to disaster risk because it can provide a stage for support community to cope with impacts of incidents and educating peoples about risk reduction, for instance, increase level of awareness of the community by the help of religious leaders. Religious leaders' effects on communities' beliefs regarding disasters as a kind of God's punishment. Religion should hence shape an essential part of any context investigation. Religious leaders and authorities need to be involved in religious and spiritual beliefs and perform in such a way that might have constructive impacts on disaster reliefs.

Regarding risk beliefs, people have the right to know the risks that they may confront in future, and be aware of the actions that need to be taken. This means that recognizing and understanding disaster risk is the underpinning for disaster preparedness and it is significant to recognize the aspects that affect people's degree of acceptance to the risks. Most investigations on natural disasters indicated that it is problematic for communities to properly perceive risks related to natural disasters. Study of Faure shows that low-probability natural disasters, such as floods and earthquakes, are steadily misunderstood [23].

For instance, most people tend to believe that if a disaster like a hurricane occurs in a certain year, no another serious hurricane or dust storms will occur for some time after. However, we have to consider that experiencing a natural disaster causes people to perceive that they now confront a bigger risk of a future catastrophe and this transformation in perception of background risk causes people to take fewer risks [24]. One of the other categories that is inferred from the present study is temporary attention to the disasters. However, main catastrophes have long-term effects and repeatedly impact our second generation, but the communities, authorities and particularly the media do not pay much attention to the disasters.

Concerning mental preparedness in disasters we need to make the community sensitive to future disasters. We believe that children, who are among the most affected by such incidents, have the right to contribute in supporting and reconstructing their societies. Efforts have to be made to encourage children and youth for their participation in preparedness, implementation and evaluation process of disaster preparedness. People who are equipped and prepared for confronting a disaster cope better, but people who fail to prepare are caught unawares and are less able to manage and cope when the unavoidable catastrophe happens.

Communities should be informed that with cautious planning, it is not problematic to take steps toward preparedness and being able to anticipate that such a condition could occur. Psychological preparedness can be improved through the acquisition of specific psychological knowledge and strategies, and through being sensitive to disaster issues and acquiring information. We must consider that the community has a sense of curiosity regarding any disaster and it can be a good point to improve this sense in an appropriate way.

Regarding psychological process and reactions to disasters, several researches have shown that after a major catastrophe, a great percentage of people especially children may develop adjustment responses connected to anxiety, trauma or depression [16]. These reactions are due to the community's experience and responses to a tragedy; and due to perceived stigma, many people and families cannot or do not access mental health facilities. Therefore, it is significant to discover plans and strategies that offer support and preparedness to all communities including children, youth, women and elderly people before and after a major disaster, rather than relying completely on the oldstyle clinical method of triage and recommendation for those patients who are recognized as needing attention.

This study revealed the fact that connection between religious communities was an important preparedness strategy. In fact, the council of mosques or equivalent organization in each city acts as a significant, effective, cultural and social organization in disaster response. Religious and pilgrimage centers like mosques were found to play a vital role in the lives of people and often used as emergency hearts or shelters in times of catastrophes. Therefore, it is significant that old-style method of functioning and supporting local peoples are recognized by the emergency organizations. The aim of anticipation of disasters is to understand risk, recognize actions and allow communities to take preventative actions. We have to consider that investments in disaster anticipation and preparedness allow communities to endure the impact of disasters more effectively than people who are not prepared for disaster.

Studies have shown that trust building is connected with developing relationships and risk taking with unidentified actors [25, 26]. In a study from Chile, it has been determined that if initial social capital is very low, then the influence of the trust-increasing effect is smaller. It also shows that the effect of the disaster was not momentary, but that it persisted and in fact improved over time [27]. The findings of the study showed that there was a lack of trust between communities and emergency centers and related organizations. A significant category that was voiced by many participants was mistrust in media, government, utilities and other organizations and these organizations have less information regarding other's activities and responsibilities of expertise and actions for operation.

This lack of understanding can lead to mistrust among administrations and improbable expectations of operations, which can in turn lead to an undervaluing of the imperative tasks and the expertise required doing them. Experts, volunteer and even communities need to know that their contributions and support will be considered. Therefore, emergency administrators must regularly engage with communities to create trust. This kind of interplay, training and exercise, are the keys to include communities and new administrations in disaster response preparation.

The mental preparedness planning of disaster management must include the development of existing mental health facilities. The healthcare employees in primary healthcare can be used to deliver mental first aid which is traditionally and culturally suitable and acceptable. The satisfactory method of disaster preparedness in mental health is to have a fortified community mental health system. Therefore, the community must learn about how a catastrophe situation is likely to be experienced, how they can support in handling one's stress and anxiety and general psychological reactions, and how an effective decision can be made at imminent disaster threat.

# 5. Conclusion

According to the result of this study, we can conclude that mental health preparedness in Iran is a multifactorial phenomenon that requires a clear understanding and definition of perceived threats, cultural values and beliefs, public trust to social structure and formal and informal supportive organizations. This preparedness involves proportional, mental, social, familial, religious beliefs, and cultural sensitivity along with the ability to handle mentally disastrous situations which can be measured after concept analysis and tool development process.

Impacts and serious effects of major catastrophe like Bam earthquake show that there is an immediate requirement to develop the conceptual tools, plan and programs to confront the increasing challenges of disasters. Therefore, rather than regarding disasters as unpredictable events, it is necessary to scientifically study the factors that prevented a clear perspective regarding disaster, and require serious attention on preparedness for disaster situation.

Community mental health preparedness is important to discover the most appropriate tool to enable a suitable response when facing disasters. Given the weaknesses or lack of the current community mental health preparedness tools, further qualitative studies and mixed methods are desirable to explore and clarify the concept of community mental health preparedness. Developed comprehensive context-bound tools based upon concepts of definition and analysis, are highly desired. These tools will facilitate the assessment of the functional features of mental health preparedness. Community mental health preparedness is measurable, therefore, for further investigation, based on result of this study developing a context bound tool is recommended.

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#### **Conflict of Interest**

The authors declared no conflicts of interest.

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