

Review Paper

The Role of the Mosque as an Emergency Shelter in Disasters: A Systematic Review



Shandiz Moslehi^{1,2}, Arezoo Dehghani³, Gholamreza Masoumi^{4,5}, Rahim Ali Sheikhi⁶, Fahimeh Barghi Shirazi^{7*}

1. Health Management and Economics Research Center, Health Management Research Institute, Iran University of Medical Sciences, Tehran, Iran.
2. Department of Health in Disasters and Emergencies, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran.
3. Department of Health in Disasters and Emergencies, School of Public Health and Safety, Shahid Beheshti University of Medical Sciences, Tehran, Iran.
4. Department of Health in Emergencies and Disasters, School of Health Management and Information Services, Iran University of Medical Sciences, Tehran, Iran.
5. Emergency Management Research Center, Iran University of Medical Sciences, Tehran, Iran.
6. Community-oriented Nursing Midwifery Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran.
7. Department of Health in Disasters and Emergencies, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran.



Citation Moslehi Sh, Dehghani A, Masoumi G, Sheikhi RA, Barghi Shirazi F. The Role of the Mosque as an Emergency Shelter in Disasters: A Systematic Review. *Health in Emergencies and Disasters Quarterly*. 2023; 8(Special Issue):223-232. <http://dx.doi.org/10.32598/hdq.8.specialissue.310.4>

doi: <http://dx.doi.org/10.32598/hdq.8.specialissue.310.4>



Article info:

Received: 02 Nov 2022

Accepted: 06 Mar 2022

Available Online: 01 Jan 2023

Keywords:

Mosque, Emergency shelter, Disasters management

ABSTRACT

Background: Providing emergency shelter for disaster victims is a part of disaster risk mitigation strategies. International organizations have proposed a framework for appropriate planning and emergency shelter design. These agencies are encouraging local authorities to manage events to use existing structures such as schools, community centers, etc., as emergency shelters for the victims. According to the social religious and spiritual status of mosques in communities, these centers are one of the crucial elements to create a safe and trusted shelter during disasters. This study aims to identify the role of mosques as emergency shelters in disasters.

Materials and Methods: This study was a systematic study that searched the words related to the research title (disaster management, emergency shelter, mosque) with AND, OR operators in PubMed, Web of Sciences, Science Direct, and Scopus databases, and the Google scholar search engine, as well as Persian language databases of SID, Magiran, Irandoc, and Iran Medex. A three-step screening process was used to select studies using the Preferred Reporting Items for Systematic Reviews And Meta-Analyses (PRISMA) checklist. Finally, the data were analyzed thematically.

Results: Out of a total of 175 articles found, 6 articles were relevant to the purpose of the study and were analyzed. The results of the present study showed that mosques can be suitable shelters for risk management during accidents and disasters. Also, in this regard, a range of strategies for designing programs for public participation and mosques were identified.

Conclusion: The services and the role of mosques in disaster occurrence as a shelter are very effective and these valuable services can be further extended using social capital, attracting the attention of religious institutions, and public participation.

* Corresponding Author:

Fahimeh Barghi Shirazi, PhD. Candidate.

Address: Department of Health in Disasters and Emergencies, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran.

E-mail: barghishirazi.f@iums.ac.ir

1. Introduction

In the last few decades, the number of disasters, as well as the number of killed and injured people, material losses caused by disasters, and the number of people affected by this issue have been increasing significantly all over the world. In the last two decades, disasters have affected 4.4 billion people in the world and caused the death of 1.3 million people. According to the disaster epidemiology research center, about 396 natural disasters occurred in 2020, 95 million people were affected and 11755 people died, which was more than the average of the last 10 years per year. The damage has been nearly 130 billion dollars. More than 40% of all accidents, 45% of all deaths, and 74% of victims were assigned to the Asian continent [1]. Disasters have caused extensive environmental, economic, social, psychological, and emotional damage and have affected the safety and health of humans [2].

The disasters that have occurred in recent years indicate that societies and individuals have become more vulnerable and the risks have also increased [3]. As a result of accidents such as floods, earthquakes, droughts, and storms, societies have always suffered significant human and financial losses. At least, 86% of Iran's soil is located in the earthquake area. In such a situation and considering that a large amount of Iran's gross national product is spent on compensation for losses and damages caused by natural disasters, planning for the use of people's capacities and contributions has become particularly important [4]. In case of a strong earthquake in the metropolis of Tehran, we will witness a huge loss of human and economic capital; therefore, considering the variety of disasters and the effects of some of these critical disasters, which shows the dangerous position of Iran in this regard, it is necessary to pay attention to the concept of scientific disaster management more seriously than before [5, 6].

The participation of religious organizations in Community-Based Disaster Risk Management (CBDRM) is a process in which all groups and members of society participate in the exchange of ideas and thoughts for decision-making as well as practical actions to solve problems related to their society, and its purpose is to strengthen the knowledge of residents, awareness, and ability to respond to disasters with a suitable, efficient, and economical speed [7]. The participation of religious organizations is to have a suitable diagnostic framework for selecting and screening the characteristics, capabilities, issues, and potentials of local communities in a community [8, 9].

Many international organizations, such as IOM (International Organization for Migration) and FEMA (Federal Emergency Management Agency) have presented several strategies to reduce the risk of disasters and use local capacities and public participation. Also, the role of mosques as a shelter in emergencies and crises in places such as floods in India and Mali has been analyzed and its importance has been emphasized [10]. Several studies have been conducted focusing on religious institutions including the qualitative study of Cheema in Pakistan titled "Revealing the hidden role of community-oriented religious institutions in disasters and describing the roles of the mosque and its imam after disasters" [11]. Therefore, this study aims to identify the role of mosques as emergency shelters in accidents and disasters.

2. Materials and Methods

The present study is a systematic study that was conducted between August and December 2020, which collected comprehensive information about the role of the mosque as an emergency shelter in accidents and disasters. Preferred Reporting Items for Systematic Reviews And Meta-Analyses (PRISMA) statements were used to report the articles.

The search for sources was done electronically through the following databases:

Based on preliminary investigations, all the studies related to the present study were found in the scientific databases Web of Science, PubMed, Scopus, Cochrane Library, Science Direct, Google scholar, and Embase, and the rest of the scientific databases in terms of articles related not only overlapped to the mentioned databases but also with fewer related articles. As a result, the above scientific databases were selected for search.

The strategy of resource search

The resource search strategy was defined by integrating the words related to the role of the mosque as an emergency shelter in disasters with the indicators AND (between groups of words) and OR (within each group of words) from November 2020 to June 2021. A manual search was also used to find other reports and documents. A total of 175 documents were found and a preliminary review was done on them. The articles, their titles, abstracts, and main text were examined. Also, the titles and prefaces of reports and other documents were studied. Among the articles entered, 50 duplicate articles were removed from the remaining 125 articles in the first stage, the first 50 duplicate articles were removed

through the End Note software and 75 articles remained. In the second stage, by studying the abstracts and including the inclusion and exclusion criteria, 65 articles were removed. In the third stage, by studying the original articles and using the critical appraisal standard, a qualitative evaluation of the articles was done, 4 other articles were removed, and 6 articles that met all the inclusion and exclusion criteria were selected (Table 1).

Sample search strategy in PubMed

(Mosque [Title/Abstract]) AND (Emergency [Title/Abstract]) OR (Disasters [Title/Abstract]) OR (Catastrophe [Title/Abstract]) AND (Shelter [Title/Abstract]) AND (Management [Title/Abstract]) AND (“Shelter Emergency” [Title/Abstract]) AND (“Management Shelter” [Title/Abstract]) AND (“Disasters Mosque” [Title/Abstract]) OR (“Mosque Catastrophe” [Title/Abstract]) AND (“Management Mosque” [Title/Abstract]) AND (“Mosque Shelter” [Title/Abstract])

Inclusion and exclusion criteria

The documents and evidence from August to December 2020 in English and Farsi investigating the role of the mosque as a shelter during disasters were included in the study. Also, the studies that did not pay attention to the role of the mosque as a shelter during disasters and were only related to public participation and official disaster management organizations, and the abstract of conference and conference articles were excluded. Also, the studies whose main text was not accessible were excluded from the study. Articles published between November 2020 and June 2021 were included in the study.

3. Results

From the total of 175 studies that were reviewed, 6 articles were eligible and related to our purpose and were analyzed. The preferred reporting items for systematic reviews and meta-analyses (PRISMA) statements were used to report the articles (Figure 1). A study conducted in 2020 by Naeem et al. aimed to provide an emergency shelter for victims of natural disasters as part of disaster risk reduction strategies. The findings of this research showed that a framework should be considered for mosques during accidents and disasters and a structure, such as schools and social centers should be designed so that mosques can prepare for and deal with disasters for homeless people by planning. Also, from the point of view of Islamic theology, the mosque is for providing social and welfare services to society [12]. Community participation at the local level in villages and neighborhood strategic councils in cities

is vital. People's forces were organized and guided in the form of 6 committees for operations, support, safety and security, public relations and media, planning, education, and research, and they can provide services to mosques during accidents and disasters.

Another study conducted by Sheikhi et al. in 2019, which investigated the role of religious institutions in risk management against disasters, aimed to examine the participation of religious organizations in disaster risk management and understand the methods of influence of these organizations on disaster management. Today, as a very effective approach, community-based disaster risk management has been emphasized, which concluded that the potential of religious institutions for disaster management is vital. Religious institutions will provide valuable services during disasters [13].

Suitable cultural and social platforms exist for people's participation in dealing with disasters, and non-governmental organizations active in the field of dealing with disasters help government institutions in disaster management in the stages before, during, and after the crisis [14].

Another research entitled “investigating the role of mosques in the development of a neighborhood in Mashhad City, Iran” which was conducted by Mohammad Ali Ahmadian et al. with a descriptive-analytical method in 2015, examined the variables related to the multiple activities of the mosque at the neighborhood level in eight general axes (the role of the mosque in enriching leisure time, creating a cultural space, providing financial assistance, holding religious-cultural ceremonies and meetings, increasing the participation of neighborhood residents, providing advisory assistance, prioritizing issues, problems and needs of the neighborhood, and promoting personal and social security through the increase of internal and external monitoring) as well as the neighborhood people's welcoming of the activities, programs, and contexts provided by the mosque to analyze the role of the mosque as the most comprehensive social network and its role in the development of a neighborhood in Mashhad City. It mentions some examples of the results obtained from this research that are related to the current research [15].

Cheema analyzed the role of the mosque in the earthquake-stricken villages of Pakistan in 2005 in an article titled “Unnoticed but crucial: Revealing the hidden role of community-oriented religious associations (mosques) in disasters.” This study has investigated the role of the mosque with the key players of the government, urban communities, and the private sector during the re-

Table 1. Titles and specifications of the articles included in the study for final review

Line	Journal	Authors (y)	Title	Method	Findings
1	Journal of Urban and Transit Planning	Naeim et al. 2020 [12]	Evaluating the role of the mosque as an emergency shelter during natural disasters	Descriptive and analytical	Mosques provide a context for providing social services to people, and mosques should be fully equipped in terms of equipment and resources to provide services so that they can provide needed services to people during accidents and disasters.
2	Journal of Disaster Medicine and Public Health Preparedness	Sheikhi et al. 2019 [18]	The role of religious institutions in disaster risk management	Systematic review	Religious institutions have an important role and great potential in disaster management. They often contribute to disaster response and recovery phases, although these services are valuable, the potential of these groups is to contribute to preparedness and mitigation as part of the disaster cycle
3	Journal of Social Sciences & Humanities	Utaberta et al. 2017 [10]	Mosques as emergency shelters in areas prone to disasters	Descriptive-adaptive	-Mosques are seen as a place to provide social and welfare services to the society -Supporting injured people during accidents can reduce the severity of people's psychological injuries to some extent
4	Journal of Geography and Urban Space Development	Ahmadiyan et al. 2015 [19]	Investigating the role of mosques in the development of a neighborhood in Mashhad City	Descriptive-analytical	It analyzes the role of the mosque as the most comprehensive social network and its role in the development of a neighborhood in holy Mashhad and calculated the level of people's participation in various activities of the mosque such as attracting people's participation in the activities of the mosque like Basij base, cultural and artistic centers, religious delegations and participation in the preparation of food, etc. (creating a platform for voluntary collective activities), holding meetings and the possibility of establishing communication between officials and people, and providing advisory assistance.
5	Journal of Natural Hazards	Cheema 2014 [14] New Zealand	Unnoticed but important: revealing the hidden role of community-oriented religious associations (mosques) in disasters	Qualitative and case study	Interviews with key factors present in the earthquake-stricken area (army personnel, private sector, contractors, national, and international companies), imams of 5 mosques in different villages, and residents have been conducted and analyzed. The findings showed the multiple and separate roles of the mosque in the cultural, economic, social, and political aspects of life in earthquake-stricken communities.
6	Journal of Architecture, Planning and Construction Management	Abdul Mohit, 2013 Malaysia [17]	The role of the mosque in disaster management: a preliminary search for evidence from Asia	Examination of evidence and documents	Evidence and documents have been examined in this field, a basic model has presented the potential role of mosques in the phases of preparation, response, aid, recovery, rehabilitation, and reconstruction of disasters in detail, and it has been determined that the mosque has the potential to play a crucial role in disaster management in the early warning system, as an information center, and as an evacuation site.

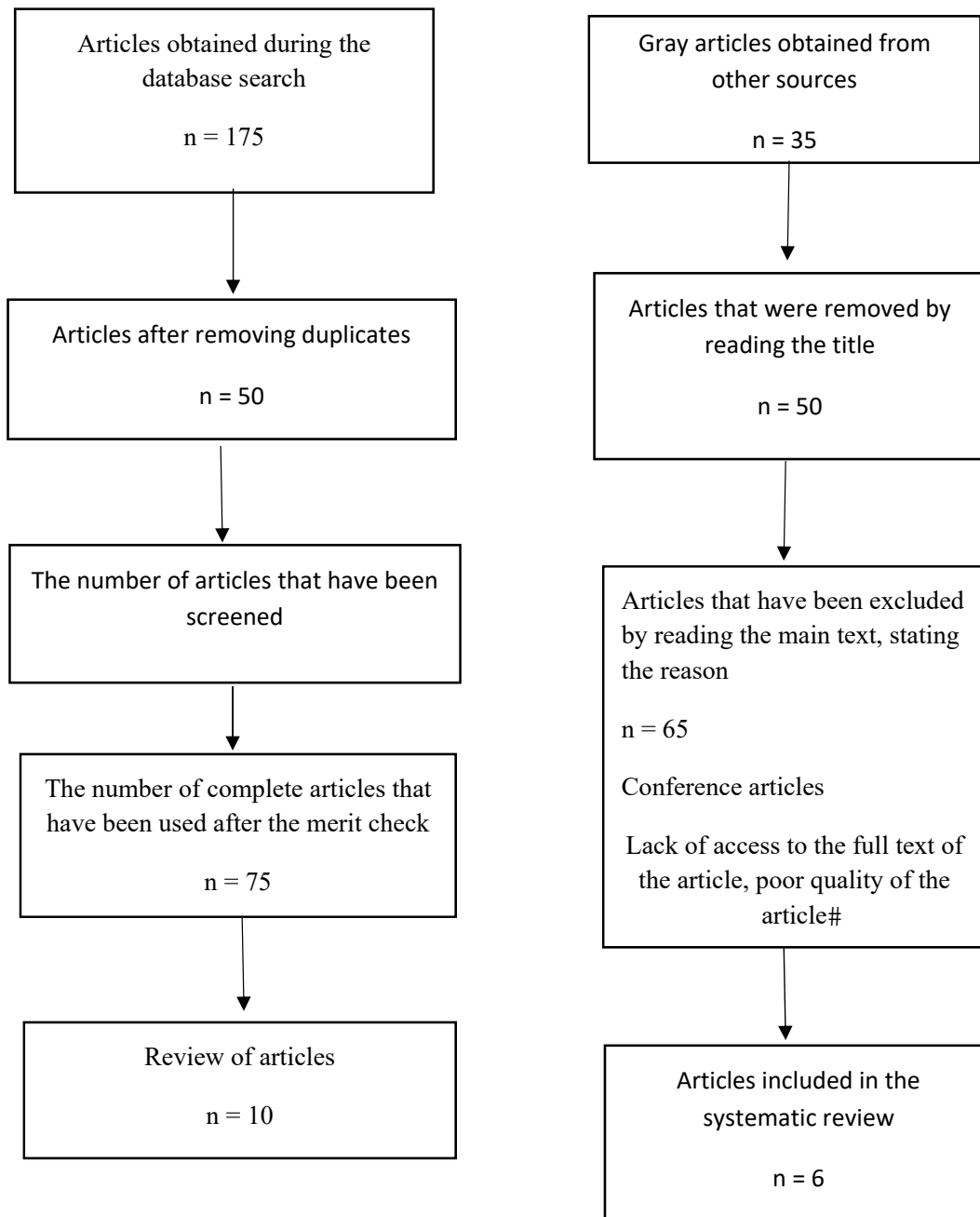


Figure 1. Flow diagram of selecting the process of final articles

response, relief, recovery, reconstruction, and rehabilitation phases. In this qualitative and case study research, the researcher collected information during 5 months in the earthquake-stricken area from interviews with key factors present in the earthquake-stricken area (army personnel, private sector, contractors, national and international companies), Imam Jamaat of 5 mosques in different villages and residents and analyzed them. The findings showed the multiple and separate roles of the

mosque in the cultural, economic, social, and political aspects of life in earthquake-stricken communities. The researcher suggests that the government, urban communities, and private sectors should be involved in disaster management and they need religious (mosques) associations and complex relationships that involve people in disaster management and understand its effects on the social aspects of recovery [11].

The role of non-governmental organizations, non-profit organizations, and religious groups in disaster response and recovery is critical. Non-governmental organizations provide important services related to public safety and public health after disasters due to their ability to quickly provide services, flexibility, and their unique capacity to reach the marginal population. In addition to the high diversity in the provision of services by non-governmental organizations, they face serious problems in coordinating and providing services. The government budget to expand the capacity of local volunteer organizations active in the victim groups helps non-governmental organizations and the government to make their efforts to be more responsive and coordinated and able to provide appropriate services [16].

In another article entitled “The role of the mosque in disaster management: a preliminary search for evidence from Asia” published by Abdul Mohit in 2013, the potential role of the mosque in responding to disasters is discussed. This study has investigated the role of the mosque in Asian countries and found that the mosque plays a vital role in different phases of the disaster management cycle in Asian countries. This study, which has reviewed evidence and documents in this field, has presented a basic model of the potential role of mosques in the phases of preparation, response, relief, recovery, rehabilitation, and reconstruction of disasters in detail, and it has been determined that the mosque has this potential ability to play a crucial role in disaster management in the early warning system, as an information center and as an evacuation site [17].

Studies have emphasized the importance of religious organizations and the participation of non-governmental and international organizations as a strong point in society and the use of their capacity considering the mosque as a comprehensive national network that can play an undeniable role in solving social problems and play a role in the development of the neighborhood. In all countries, depending on the type of culture dominating the society, they have tried to encourage people to participate in community-based projects to reduce the risk of disasters, and all studies acknowledge that participation is necessary to reduce the risk of disasters.

4. Discussion

According to the findings of the research, mosques have two main uses: A place for accommodation and shelter for injured people and accommodation for treatment teams and volunteers. First, as a safe shelter, mosques usually have the facilities and capacity to

cook food, as well as supply water and healthy food, and maintain water reserves and other needs of people suffering from disasters, and these capacities help the possibility of temporary accommodation of people after disasters. The benefit of mosques from volunteers, who are usually from different sections of society and especially the youth, makes it possible for the officials of the mosques to have the necessary preparation in terms of providing manpower in times of emergency. Therefore, it is possible for temporary accommodation in mosques as a shelter, and therefore mosques can play a very crucial role in accommodating people who have lost their homes due to various incidents or those whose homes are uninhabitable. Another thing is that mosques can be used as shelters for homeless people after disasters, by coordinating with the sub-groups of the Ministry of Health, nurses and doctors can be used to visit patients. In the case of attending voluntary nurses and doctors in every neighborhood and mosque, it can use the capacity of medical volunteers by planning and playing a role as a place to accommodate volunteers and relief forces to provide health care services. At the same time, considering the spiritual aspect of mosques, the role of this place in providing psychological needs and mental health to the victim people during disasters is crucial.

According to the current findings, mosques are one of these community-oriented organizations that have access to critical resources when accidents and disasters occur, and therefore, they have an increasing and significant role in this field. Mosques are mostly involved in the response and to some extent recovery phases of the disaster cycle, while international organizations, such as FEMA emphasize that community-based organizations involved in disaster management can be involved in all phases of the disaster cycle, including the stage of reduction of effect and preparation. In this regard, Gianisa et al. in 2018 state that mosques should use two approaches in disaster management; a response-oriented approach and a prevention approach [17]. Also, this study showed that religious-based organizations can play a crucial role in providing the material, emotional, and spiritual needs of their communities when disasters occur [21]. Religious organizations, including mosques, churches, and other religiously affiliated buildings, can be as vital as shelters during disasters, distribute the necessary equipment, and disseminate information received from government organizations [22-24]. Religious organizations provide significant assistance to refugees such as feeding, clothing, emergency financial aid, reuniting families, and providing services [23, 24]. Mosques and other religious organizations are the first places that many victims look for help and services after disasters, and until govern-

ment aid arrives, they are the main factors in supporting people in need [24].

The World Health Organization also says that the services provided by the network of religious organizations are often useful, reliable, and cheap. Religious organizations are close to the affected area or even a part of the affected society [24]. Their volunteers are often from affected communities, people who are committed, reliable, and responsible for helping refugees. It may take 48 to 72 hours for government aid to reach the affected areas. During this time delay, religious organizations can provide emergency relief services needed by the community during the disaster response phase [25].

According to the current findings, mosques also are vital during disasters. In Muslim societies, mosque loudspeakers can be used as a warning system immediately before disasters occur, and also after disasters, they can be used as a communication channel with people to organize the stages of relief, rescue, and recovery [9] or inform the public about the announcements of government organizations in this way [11, 21]. Mosques will take very appropriate measures during disasters and act as a communication system between people and other organizations.

The Imams of the mosque also can communicate with society and the officials, and with the influence on the officials and the trust that both the officials and the people have in them, they can be a link to transfer the problems of the people to the officials and accelerate the transfer of government aids to victims. In this regard, the findings of other studies indicate that clerics and priests can give people a sense of peace and security. They can also facilitate the access of the local community to the needed items by communicating with government organizations [26].

Mosques do not belong to a specific group and all classes, including men and women, old and young, with different levels of literacy and different income levels attend, and it is a place trusted by the community to refer to and raise problems. In this regard, the findings of other studies show that people will be much better when they have a family or a social structure around them. They know that they are part of a group and will not be forgotten. A safe and stable place exists to refer to when they need it. In addition, they know where they can serve others. In this network, they are not just victims of an incident but part of the solution. Therefore, the answer goes far beyond the physical aspects and the increase of social capital in society will have a great impact in response to disasters [17, 27, 28]. According to the findings, the officials of the government bodies usually have a good

relationship with the mosques and sometimes they refer to the mosques to perform the prayer, which can be a great opportunity for the people and the officials to communicate. The communication of people with people and people with the imam of the congregation is also well formed in mosques, and in this communication, people learn about each other's problems, and an opportunity is created for good and capable people to solve the problems of others. Also, people with many specialties can be found in mosques, and usually, these people are ready to participate and accompany mosques and carry out humanitarian measures to meet the needs of the needy and the poor. People gather in mosques to pray, learn about each other, empathize, support each other, and make decisions for the livelihood of those in need. These mosques gather all stakeholders under one roof and provide this opportunity for people, especially poor and illiterate people, to express their needs to the representatives of public and private institutions [21, 29, 30].

5. Conclusion

Mosques in urban and suburban areas should receive the injured during an accident. It is also recommended to be in contact with other religious organizations to provide the required. Toilets, ablutions, and bathrooms should be available for adequate services to people during a crisis. Other facilities like kitchens and classrooms are important for a long stay. Every Muslim community considers the mosque as the center of its establishment. Many mosques exist around the world. If these mosques can be used as emergency shelters in times of disaster, it will benefit society. Now, it is the duty of the governing bodies, academics, and professionals to identify and introduce mosques as potential shelters during disasters to save lives and reduce costs [10]. According to the results of the study, mosques and religious organizations can be introduced as one of the disaster management bases in the country and as part of the country's disaster management and response system. This issue should be considered by the officials and managers in the field of disasters.

Ethical Considerations

Compliance with ethical guidelines

All ethical principles are considered in this article.

Funding

This research did not receive any grant from funding agencies in the public, commercial, or non-profit sectors.

Authors' contributions

All authors equally contributed to preparing this article.

Conflict of interest

The authors declared no conflict of interest in the present study.

References

- [1] Froment R, Below R. Disaster* year in review 2019. Centre for Research on the Epidemiology of Disasters: Brussels, Belgium; 2020.
- [2] Andharia J. Blurred boundaries, shared practices: Disaster studies as an emerging discipline and disaster management as a field of practice. *Disaster Studies: Exploring Intersectionalities in Disaster Discourse*. 2020;33-76. [DOI:10.1007/978-981-32-9339-7_2]
- [3] Mayunga JS. Understanding and applying the concept of community disaster resilience: a capital-based approach. *Summer Academy for Social Vulnerability and Resilience Building*. 2007; 1(1):1-6. [Link]
- [4] Nekoei-Moghadam M, Amiresmaili M, Aradoei Z. Investigation of obstacles against effective crisis management in the earthquake. *Journal of Acute Disease*. 2016; 5(2):91-5. [DOI:10.1016/j.joad.2015.10.001]
- [5] Marsh G, Smale S, Buckle P. Community impact issues: group report on community impact issues following possible major prolonged disruptions to utilities or possible Y2K situations". mimeo; 1999. [Link]
- [6] Liu Y, Yin K, Chen L, Wang W, Liu Y. A community-based disaster risk reduction system in Wanzhou, China. *International Journal of Disaster Risk Reduction*. 2016; 19:379-89. [DOI:10.1016/j.ijdr.2016.09.009]
- [7] Renwick N. China's approach to disaster risk reduction: human security challenges in a time of climate change. *Journal of Asian Security and International Affairs*. 2017; 4(1):26-49. [DOI:10.1177/2347797016689207]
- [8] Agarwal A, Nagi N, Chatterjee P, Sarkar S, Mourya D, Sahay RR, et al. Guidance for building a dedicated health facility to contain the spread of the 2019 novel coronavirus outbreak. *The Indian Journal of Medical Research*. 2020; 151(2 & 3):177-83. [DOI:10.4103/ijmr.IJMR_518_20] [PMID] [PMCID]
- [9] Cheema AR. Exploring the role of the mosque in dealing with disasters: a case study of the 2005 earthquake in Pakistan: a dissertation presented in fulfillment of the requirements for the degree of Doctor of Philosophy in Development Studies at Massey University, New Zealand: Massey University; 2012.
- [10] Utaberta N, Asif N. Mosques as Emergency Shelters in Disaster Prone Regions. *Pertanika Journal of Social Sciences & Humanities*. 2017; 25(S):207-16. [Link]
- [11] Cheema AR, Scheyvens R, Glavovic B, Imran M. Unnoticed but important: revealing the hidden contribution of the community-based religious institution of the mosque in disasters. *Natural Hazards*. 2014; 71(3):2207-29. [DOI:10.1007/s11069-013-1008-0]
- [12] Asif N, Utaberta N. Evaluating the Role of Mosque as Emergency Shelter During Natural Disasters. Springer: Urban and Transit Planning; 2020. [DOI:10.1007/978-3-030-17308-1_49]
- [13] Jahangiri K, Izadkhah YO, Jamaledin Tabibi S. A comparative study on community-based disaster management in selected countries and designing a model for Iran. *Disaster Prevention and Management: An International Journal*. 2011; 20(1):82-94. [DOI:10.1108/09653561111111108]
- [14] Sheikhi RA, Seyedin H, Qanizadeh G, Jahangiri K. Role of religious institutions in disaster risk management: A systematic review. *Disaster Medicine and Public Health Preparedness*. 2021; 15(2):239-54. [DOI:10.1017/dmp.2019.145] [PMID]
- [15] Ahmadian MA, Erfanian S. The Role of Mosques in Neighborhood Development in Mashhad. 2015; 2(1):sn2. [Link]
- [16] Sledge D, Thomas HF. From disaster response to community recovery: nongovernmental entities, government, and public health. *American Journal of Public Health*. 2019; 109(3):437-44. [DOI:10.2105/AJPH.2018.304895] [PMID] [PMCID]
- [17] Mohit MA. Role of the Masjid in Disaster Management: Preliminary Investigation of Evidences from Asia. *Journal of Architecture, Planning and Construction Management*. 2014; 4(1):1-16. [Link]
- [18] Sheikhi R, Seyedin H, Qanizadeh G, Jahangiri K. Role of religious institutions in disaster risk management: a systematic review. *Disaster Medicine and Public Health Preparedness*. 2020:1-16. [DOI:10.1017/dmp.2019.145] [PMID]
- [19] Ahmadian MA, Erfanian S. [The role of mosques in neighborhood development in Mashhad (Persian)]. *Journal of Geography and Urban Space Development*. 2015; 2(1):93-110. [Link]
- [20] Gianisa A, Le De L. The role of religious beliefs and practices in disaster The case study of the 2009 earthquake in Padang city, Indonesia. *Disaster Prevention and Management*. 2018; 27(1):74-86. [DOI:10.1108/DPM-10-2017-0238]
- [21] Joakim EP, White RS. Exploring the impact of religious beliefs, leadership, and networks on response and recovery of disaster-affected populations: A case study from Indonesia. *Journal of Contemporary Religion*. 2015; 30(2):193-12. [DOI:10.1080/13537903.2015.1025538]
- [22] Adiyoso W, Kanegae H. The preliminary study of the role of Islamic teaching in disaster risk reduction (a qualitative case study of Banda Aceh, Indonesia). *Procedia Environmental Sciences*. 2013; 17:918-27. [DOI:10.1016/j.proenv.2013.02.110]
- [23] Ai AL, Richardson R, Plummer C, Ellison CG, Lemieux C, Tice TN, et al. Character strengths and deep connections following Hurricanes Katrina and Rita: Spiritual and secular pathways to resistance among volunteers. *Journal for the Scientific Study of Religion*. 2013; 52(3):537-56. [DOI:10.1111/jssr.12043]

- [24] Pant AT, Kirsch TD, Subbarao IR, Hsieh YH, Vu A. Faith-based organizations and sustainable sheltering operations in Mississippi after Hurricane Katrina: implications for informal network utilization. *Prehospital and Disaster Medicine*. 2008; 23(1):48-54; discussion 5-6. [DOI:10.1017/S1049023X00005550] [PMID]
- [25] Bonney R, Hussain A. Faith communities and the development agenda. London: Department for International Development (DFID); 2001.
- [26] Muller VM, Burke RV, Berg BM, Lin AC, Upperman JS. A mixed-methods pilot study of disaster preparedness and resiliency among faith-based organizations. *Prehospital and Disaster Medicine*. 2014; 29(2):127-33. [DOI:10.1017/S1049023X14000120] [PMID]
- [27] Rose B. Developing a Model for Church-based Disaster Relief; 2016. [Link]
- [28] Wang J, Yuan B, Li Z, Wang Z. Evaluation of public health emergency management in china: a systematic review. *International Journal of Environmental Research and Public Health*. 2019; 16(18):3478. [DOI:10.3390/ijerph16183478] [PMID] [PMCID]
- [29] Dick WF. Anglo-American vs. Franco-German Emergency Medical Services System. *Prehospital and Disaster Medicine*. 2012; 18(1):29-37. [DOI:10.1017/S1049023X00000650] [PMID]
- [30] Stein JG. New challenges to conflict resolution: humanitarian nongovernmental organizations in complex emergencies. *Conflict Resolution*; 2000. [Link]

This Page Intentionally Left Blank