

Accepted Manuscript (Uncorrected Proof)

Title: Community Participation in Health Emergency and Disaster Risk Management: A Scoping Review Protocol

Authors: Mohammad Azim Mahmodi¹, Mehrdad Farrokhi², Seyyed Mohammad Reza Hosseini³, Mehdi Najafi⁴, Mohammad Esmaeel Motlagh¹, Hamid Reza Khankeh^{1,*}

1. Health in Emergency and Disaster Research Center, Social Health Research Institute, University of Social Welfare and Rehabilitation Sciences, Tehran, Iran.
2. Department of Health in Emergencies and Disasters, School of Nursing and Midwifery, Birjand University of Medical Sciences, Birjand, Iran.
3. Department of Rescue and Relief, Iran Helal Applied Science Higher Education Institute, Tehran, Iran.
4. School of Medicine, Jundishapur University of Medical Sciences, Ahvaz, Iran.

To appear in: *Health in Emergencies & Disasters Quarterly*

Received date: 2025/01/10

Revised date: 2025/05/7

Accepted date: 2025/05/18

First Online Published: 2025/07/30

This is a “Just Accepted” manuscript, which has been examined by the peer-review process and has been accepted for publication. A “Just Accepted” manuscript is published online shortly after its acceptance, which is prior to technical editing and formatting and author proofing. *Health in Emergencies & Disasters Quarterly* provides “Just Accepted” as an optional and free service which allows authors to make their results available to the research community as soon as possible after acceptance. After a manuscript has been technically edited and formatted, it will be removed from the “Just Accepted” on Website and published as a published article. Please note that technical editing may introduce minor changes to the manuscript text and/or graphics which may affect the content, and all legal disclaimers that apply to the journal pertain.

Please cite this article as:

Mahmodi MA, Farrokhi M, Hosseini SMR, Najafi M, Motlagh ME, Khankeh HR. Community Participation in Health Emergency and Disaster Risk Management: A Scoping Review Protocol. *Health in Emergencies & Disasters Quarterly*. Forthcoming 2025.

Abstract

Background: Emergencies and disasters pose serious health risks, including injuries, diseases, and fatalities, which significantly impact communities. To address both existing and emerging threats to public health, the framework of health emergency and disaster risk management (Health EDRM) emphasizes community participation (CP) as a fundamental component of resilience-building. While previous studies have explored various aspects of Health EDRM, there remains a critical gap in identifying the specific factors, components, and indicators that influence CP. This study aims to address the existing gap by systematically reviewing existing literature to provide a comprehensive framework for enhancing CP in Health EDRM.

Materials and Methods: To achieve the objectives of this study, we will employ a scoping review approach inspired by the foundational framework developed by Arksey and O'Malley and later refined by Levac and Peters. This method comprises several essential phases. It begins with formulating clear research questions, followed by identifying relevant studies. These studies will then be subjected to a rigorous screening process. After selection, the data will be systematically organized and categorized. The findings will be synthesized and presented, and finally, input from experts and stakeholders will be gathered to enhance the depth and relevance of the results. This review protocol was designed following the PRISMA-ScR guidelines to ensure a transparent and methodologically sound approach.

Results: This scoping review will identify key factors, components, and indicators that influence CP in Health EDRM, offering an in-depth summary of the existing body of evidence.

Discussion: The review will clarify concepts related to CP approaches in Health EDRM, evaluating study designs, types of CP approaches, and contextual factors. The findings are expected to offer a conceptual framework for future research and guide policymakers in evidence-based decision-making to advance resilience-building strategies.

Conclusion: By learning from both national and global experiences, this review will contribute to enhanced community resilience in emergency and disaster settings. It will offer meaningful insights for professionals, policymakers, and researchers to support more efficient risk reduction and resilience-building strategies.

Keywords: Health, Community Participation, Disasters, Emergencies, Risk, Scoping Review

Introduction

Disasters and public health emergencies are increasingly impacting communities worldwide, resulting in significant and widespread impacts on human livelihoods, the economic, well-being, and public health (1). The potential health risks, including injuries, diseases, and fatalities, are the most serious consequences of emergencies and disasters and remain the primary concern for communities (2).

Over the past few decades, different disaster management (DM) approaches have been employed across various countries. In the last two decades, the paradigm of DM has shifted from merely responding to disasters to a more comprehensive framework known as disaster risk management (DRM), which includes mitigation, preparedness, response, and recovery (3). Since 2015, following the adoption of the Sendai Framework, there have been significant changes in discussions surrounding DRM, notably highlighting a paradigm shift from government-driven approaches to community-based DRM (4, 5). In response to both current and future public health challenges, as well as the necessity for efficient resource management, health emergency and disaster risk management (Health EDRM) has become a critical framework. This concept integrates contemporary practices and emphasizes the critical role of health systems and community participation (CP). The cornerstone of effective Health EDRM lies in reinforcing a country's health system, with a particular focus on engaging communities and promoting participatory activities (6). By focusing on community-based strategies, Health EDRM aims to build resilience and lay the groundwork for effective mitigation, preparedness, response, and recovery in the face of various hazardous events, including emergencies and disasters (7). Numerous studies have reported the effectiveness of CP approaches in enhancing Health EDRM outcomes (8-13).

Effective Health EDRM can only be realized through the active involvement of local governments, civil society organizations, volunteer groups, the private sector, and individual community members. CP approaches empower communities to play a vital role in identifying health issues, particularly during the challenging response phase of disasters when governments may face overwhelming obstacles (14, 15). These approaches foster community engagement in managing health risks, identifying health issues, and contributing to the selection, implementation, and assessment of solutions (16, 17). For example, involving local communities in risk assessments to identify regional threats and weaknesses can greatly enhance initiatives aimed at mitigating health risks prior to disaster occurrences. Furthermore, an efficient local response during the first hours after an emergency can save lives, even before external assistance arrives (18, 19).

As outlined in the WHO guidelines, various levels of CP have been defined, such as informing, consulting, involving, collaborating, and empowering. Each of these levels plays a vital role in enhancing the health outcomes of at-risk communities (20). However, to achieve effective Health EDRM through CP, it is essential to learn from successful national and international experiences, identifying both opportunities and challenges in community-based DRM. These lessons can help close knowledge gaps and improve the design and implementation of CP strategies in Health EDRM (14). The goal of this scoping review is to examine the use of CP approaches in Health EDRM and highlight existing gaps in knowledge within this essential area. Through a review of the literature, we aim to develop a deeper

insight into the factors, components, and indicators that affect CP and suggest practical approaches for incorporating CP into Health EDRM.

Objectives:

The main goal of this review is to offer a thorough summary of the current research on CP approaches in Health EDRM. In doing so, we seek to identify the critical factors, components, and indicators that impact CP, while also addressing gaps in the literature, emerging trends, and effective practices. The results will assist policymakers, practitioners, and stakeholders in strengthening community-driven strategies for managing health in disaster situations. Given the exploratory nature of the research questions, a scoping review methodology will be utilized to examine these topics and clarify key concepts.

Materials and Methods

Study design

Unlike systematic reviews, which focus on providing detailed answers to specific questions, scoping reviews are designed to explore broader research questions. They are useful for systematically outlining the range and extent of existing literature on a subject, irrespective of its quality, and for identifying fundamental concepts, theories, and knowledge gaps (21-23). To achieve the objectives of this study, we will employ a scoping review approach inspired by the foundational framework developed by Arksey and O'Malley and later refined by Levac and Peters. This method comprises several essential phases. It begins with formulating clear research questions, followed by identifying relevant studies. These studies will then be subjected to a rigorous screening process. After selection, the data will be systematically organized and categorized. The findings will be synthesized and presented, and finally, input from experts and stakeholders will be gathered to enhance the depth and relevance of the results (24-26). This review protocol was designed following the PRISMA-ScR guidelines to ensure a transparent and methodologically sound approach.

Stage 1: defining the research question

The initial step involves the precise formulation of the research questions, which is essential for selecting an appropriate method to develop our search strategy. Therefore, the research questions were thoughtfully crafted to ensure alignment with the objectives of the study. The research questions include:

1. What evidence has been reported in the existing literature regarding the influencing factors, components, and indicators of CP approaches in Health EDRM?
2. What obstacles, challenges, and enablers are associated with the implementation of CP approaches in Health EDRM?

Stage 2: selecting relevant studies

Databases such as Web of Science, Scopus, and PubMed will be utilized to identify relevant studies in the second phase. A comprehensive search strategy will be employed to thoroughly explore these platforms and gather studies that align with the research objectives. Additionally, Google Scholar will be used for further exploration, and grey literature from important organizations like the WHO, UNDRR, CDC, and FEMA will be reviewed

systematically. Grey literature will be located through focused searches on the official websites of these institutions, along with pertinent institutional reports, conference papers, and policy documents. Our search approach will combine MeSH terms, titles, abstracts, and keywords to ensure an inclusive search. We will specifically use Boolean operators to refine our search: terms within each key concept (CP, Disaster, and Health) will be linked by 'OR', and the three central concepts will be joined using 'AND'. The specific Boolean terms for each database are outlined in Table 1 to ensure clarity and replicability. We will also thoroughly review the reference lists of the identified sources to refine and expand our search. Furthermore, a manual search will be performed to identify additional studies that may not have been captured through database searches. To ensure the comprehensiveness of the review, we will cross-check references from highly relevant articles. Importantly, no restrictions on publication date will be applied during the search process.

Accepted Manuscript (Uncorrected Proof)

Table 1: Search strategy

Database	Query
PubMed	(((((communit*[Title/Abstract] OR public[Title/Abstract] OR social[Title/Abstract] OR people[Title/Abstract] OR population[Title/Abstract]) AND (participat*[Title/Abstract] OR involve*[Title/Abstract] OR engage*[Title/Abstract] OR action[Title/Abstract] OR consultat*[Title/Abstract] OR mobile*[Title/Abstract] OR Plan*[Title/Abstract] OR partner[Title/Abstract])) OR (Community Participation[MeSH Terms])) AND (((disasters[MeSH Terms] OR (Epidemics[MeSH Terms])) OR (Pandemics[MeSH Terms])) AND (prevention[Title/Abstract] OR mitigation[Title/Abstract] OR preparedness[Title/Abstract] OR response[Title/Abstract] OR recovery[Title/Abstract])) AND ("health risks"[Title/Abstract] OR "health-related risks"[Title/Abstract] OR "health outcomes"[Title/Abstract] OR "health impact"[Title/Abstract] OR "health consequences"[Title/Abstract] OR "health threats"[Title/Abstract] OR "health dangers"[Title/Abstract] OR "health challenges"[Title/Abstract] OR "health issues"[Title/Abstract] OR "health vulnerabilities"[Title/Abstract] OR "health complications"[Title/Abstract] OR "health perils"[Title/Abstract]))
WOS	#1 communit* OR public OR social OR people OR population (Topic) participat* OR involve* OR engage* OR action OR consultat* OR mobile* OR Plan* OR partner (Topic) #3 #1 AND #2 disaster OR disasters OR crisis OR crises OR epidemic OR epidemics OR pandemic OR pandemics OR emergency OR emergencies OR earthquake OR earthquakes OR flood OR floods OR drought OR wildfire* OR tornadoc* OR avalanche* OR landslide* OR "Mass Casualty Incident*" OR cyclone* OR storm* OR "Heat wave*" #5 prevention OR mitigation OR preparedness OR response OR recovery #6 #4 AND #5 "health risks" OR "health-related risks" OR "health outcomes" OR "health impact" OR "health consequences" OR "health threats" OR "health dangers" OR "health challenges" OR "health issues" OR "health vulnerabilities" OR "health complications" OR "health perils" #3 AND #6 AND #7 and Article or Review Article or Proceeding Paper (Document Types) and Article or Review Article or Proceeding Paper (Document Types) and English (Languages)
Scopus	(((TITLE-ABS-KEY (communit* OR public OR social OR people OR population)) AND (TITLE-ABS-KEY (participat* OR involve* OR engage* OR action OR consultat* OR mobile* OR plan* OR partner))) AND ((TITLE-ABS-KEY (disaster OR disasters OR crisis OR crises OR epidemic OR epidemics OR pandemic OR pandemics OR emergency OR emergencies OR earthquake OR earthquakes OR flood OR floods OR drought OR wildfire* OR tornadoc* OR avalanche* OR landslide* OR "Mass Casualty Incident*" OR cyclone* OR storm* OR "Heat wave*")) AND (TITLE-ABS-KEY (prevention OR mitigation OR preparedness OR response OR recovery))) AND (TITLE-ABS-KEY ("health risks" OR "health-related risks" OR "health outcomes" OR "health impact" OR "health consequences" OR "health threats" OR "health dangers" OR "health challenges" OR "health issues" OR "health vulnerabilities" OR "health complications" OR "health perils")) AND (LIMIT-TO (DOCTYPE , "ar") OR LIMIT-TO (DOCTYPE , "re") OR LIMIT-TO (DOCTYPE , "cp")) AND (LIMIT-TO (LANGUAGE , "English")))
Other	Google scholar, site: .org, .gov, .int and file type: .pdf, .doc, .docx
WOS, Web of Science	

Stage 3: screening the studies

The results of the search will be imported and managed using EndNote X9, a reference management software, to organize relevant articles and eliminate duplicates. The selection process for studies will be carried out in two phases: an initial screening based on titles and

abstracts, followed by an in-depth review of the full texts conducted by two researchers. Each researcher will independently evaluate the relevance of the studies based on the titles and abstracts, and this procedure will be repeated in the full-text review phase. If disagreements arise during the screening, they will be resolved through discussion between the researchers or by consulting a third reviewer. Meetings will be held at different stages of the abstract evaluation to resolve any issues in selecting studies. This may involve revising the search strategy to ensure that they capture all the relevant literature. Consequently, all primary eligible studies, encompassing experimental, observational, and qualitative study designs, according to the criteria outlined in Table 2, will be considered. The search strategy may be adjusted if necessary to ensure all pertinent literature is included. Due to language constraints, the review will include only publications in English and Persian. Although this restriction may limit the global applicability of the results, the primary objective is to conduct an in-depth analysis relevant to areas where these languages are most commonly used.

Table 2: Inclusion and exclusion criteria

Criteria	Inclusion criteria	Exclusion criteria
Population	Studies involving the use of CP approaches, regardless of type, culture, ethnicity, etc.	Research in which the community played no active role and was only used as a subject of study
Concept	Studies exploring the role of community in health risk management across different phases of the disaster cycle, such as prevention, mitigation, preparedness, response, and recovery	Studies in which the community has participated in animal health or veterinary services in the DRM phases
Context	Any kind of emergencies and disasters in any geographic area	None
Type of study	Publications that have undergone peer review, including original research articles, systematic reviews, editorials, commentaries, and case studies. Both quantitative and qualitative research studies. Grey literature, including conference presentations, policy guidelines, checklists, reports, technical manuals, and national frameworks or tools.	Papers presented at conferences, doctoral theses, and articles that have not been subjected to peer review.
Language	Research published in either English or Persian.	Publications written in languages other than English or Persian.

Stage 4: charting the data

All articles included in this scoping review will be extracted using a predefined structured data recording form that was developed and endorsed by the researchers beforehand. Table 3 presents an initial charting table containing the data elements relevant to addressing the research questions. The sample data charting form will be shared with all authors for review, and any necessary adjustments will be made accordingly. To ensure consistency, two reviewers will pilot the data charting table on a subset of the included studies. In case of any discrepancies between the reviewers, a third reviewer will reconcile the differences.

Table 3 Sample data charting elements and description

Author year	Country	Methods	Participatory group	DRM phase	Disaster type	Influencing factors	barriers and challenges
		RCT	local	Mitigation	earthquake		
	By country	Case studies	community	Preparedness	flood		
	By geographic region	Academic community	Response	storm		
		Youth/elderly community	Recovery		
			NGO				
						

Stage 5: collating, summarising, and reporting the result

To fulfill our objective of thoroughly reviewing the existing literature on the application of CP approaches in Health EDRM, we intend to conduct a descriptive analysis addressing the key characteristics of the included studies. These characteristics include:

- Research study attributes (e.g., study design, geographical region, and methodologies employed)
- Participant group characteristics (e.g., local communities, academic institutions, youth/elderly populations, and NGOs), and
- DRM phase attributes (i.e., mitigation, preparedness, response, and recovery).

In addition, we will offer a descriptive overview of the recorded findings, outlining influential factors, areas of research deficiency, and highlighting prospects in the realm of CP approaches in Health EDRM. To address potential bias and heterogeneity among studies, we will narratively explore variations in study designs, contexts, and CP approaches, acknowledging their potential impact on the findings. Furthermore, we will illustrate how these findings can be applied to both research and practical domains. For example, by identifying gaps in the current research on the application of CP approaches in Health EDRM, this study demonstrates their impact on improving CP in Health EDRM, thereby offering a framework for future investigations. Moreover, the identification of influential factors in CP approaches could establish a robust foundation for comprehending the applications of CP approaches in Health EDRM.

Stage 6: Consultation

We intend to arrange a consultation session with seasoned researchers in the DRM field to validate our findings. This consultation will pinpoint additional gaps and offer fresh perspectives for future research endeavors, ultimately enhancing the utility of our findings for policymakers, community stakeholders, and healthcare providers. Consequently, the consultation process will entail presenting the study findings to a panel of DRM experts and solicit their feedback, which will be integrated into the presentation of the final paper.

Discussion

Over the past few years, interest in CP strategies has notably increased among domestic and global organizations. Nevertheless, comprehensive data, standardized criteria, and well-defined conceptual frameworks are still insufficient in this area. Given the nature of scoping

reviews, the primary focus of this study will be to clarify the concepts associated with CP approaches in Health EDRM. To this end, we will map the existing evidence landscape by evaluating the study design, types of CP approaches employed, and contextual factors influencing CP approaches in Health EDRM. We anticipate that the outcomes of our study will offer a comprehensive understanding of CP approaches in Health EDRM and establish a conceptual framework for future research. Furthermore, these findings will assist policymakers in making evidence-based decisions, directing resources and research efforts, and advancing scientific knowledge in this domain. However, scoping reviews have inherent limitations, including the potential for missing relevant studies despite comprehensive search strategies, and the absence of formal quality appraisal of included studies, which may affect the depth of evidence synthesis.

Conclusion: By learning from successful national and international experiences, communities can enhance their resilience and preparedness for emergencies and disasters. This scoping review highlights the key factors, components, and indicators that influence CP in Health EDRM, addressing existing research gaps. The findings derived from this study offer valuable guidance to decision-makers, professionals, researchers, and organizations engaged in disaster and emergency response, contributing to the development of improved strategies for community resilience and risk reduction.

Ethical considerations:

The present review will be conducted as part of a doctoral thesis focusing on developing a practical model for strengthening CP in Health EDRM. The study has received ethical approval (IR.USWR.REC.1402.086). After undergoing peer review and publication, the findings will be disseminated to all relevant stakeholders through conferences, scientific meetings, and academic social media platforms.

Author statement:

Mohammad Azim Mahmodi: Drafted the protocol under the guidance of HRKH, formulated the research approach and performed the preliminary investigation.

Hamid Reza Khankeh: Led conceptualization, contributed to the structure, and completed the final editing. Offered oversight and constructive input on the research methods.

Mehrdad Farrokhi Kari Bozorg: Offered guidance and evaluative input on the methodological framework.

Seyyed Mohammad Reza Hosseini: Developed the research plan and executed the initial inquiry.

Mehdi Najafi: Reviewed and made necessary modifications to the manuscript.

Mohammad Esmaeel Motlagh: Provided supervision and insights on the research approach.

All contributors have reviewed and endorsed the submission of this scoping review protocol for publication.

Funding statement:

No dedicated funding or financial support was obtained for the conduct of this study.

Competing interest's statement:

The authors declare that they have no competing interests related to this study.

Accepted Manuscript (Uncorrected Proof)

References

1. Reifels L, Kryszynska K, Andriessen KJFiph. Suicide prevention during disasters and public health emergencies: a systematic review. *Frontiers in public health*. 2024;12:1338099. <https://doi.org/10.3389/fpubh.2024.1338099>.
2. Mao W, Agyapong VIJFiph. The role of social determinants in mental health and resilience after disasters: Implications for public health policy and practice. *Frontiers in public health*. 2021;9:658528. <https://doi.org/10.3389/fpubh.2021.658528>.
3. Rajabi E, Bazayr J, Delshad V, Khankeh HRJDM, preparedness ph. The evolution of disaster risk management: historical approach. *Disaster medicine and public health preparedness*. 2022;16(4):1623-7. <http://doi.org/10.1017/dmp.2021.194>.
4. Wright N, Fagan L, Lapitan JM, Kayano R, Abrahams J, Huda Q, et al. Health emergency and disaster risk management: Five years into implementation of the Sendai framework. *International Journal of Disaster Risk Science*. 2020;11:206-17. <http://doi.org/10.1007/s13753-020-00274-x>.
5. Busayo ET, Kalumba AM, Afuye GA, Ekundayo OY, Orimoloye IRJIJoDRR. Assessment of the Sendai framework for disaster risk reduction studies since 2015. *International Journal of Disaster Risk Reduction*. 2020;50:101906. <http://doi.org/10.1016/j.ijdr.2020.101906>.
6. Hung KK, MacDermot MK, Chan EY, Mashino S, Balsari S, Ciottone GR, et al. Health emergency and disaster risk management workforce development strategies: Delphi consensus study. *Prehospital and Disaster Medicine*. 2022;37(6):735-48. <http://doi.org/10.1017/S1049023X22001467>.
7. Chan EYY, Hung H, Murray V, Shaw RJPH, Emergency DH, Asia DRMi. Health-EDRM in International Policy Agenda I: Sendai Framework for Disaster Risk Reduction 2015–2030. *Public Health and Disasters*. 2020:59-74. http://doi.org/10.1007/978-981-15-0924-7_5.
8. Aldrich DP, Meyer MAJAbs. Social capital and community resilience. *American behavioral scientist*. 2015;59(2):254-69. <http://doi.org/10.1177/0002764214550299>.
9. Laverack G, Manoncourt EJGhp. Key experiences of community engagement and social mobilization in the Ebola response. *Global health promotion*. 2016;23(1):79-82. <http://doi.org/10.1177/175797591560667>.
10. Marais F, Minkler M, Gibson N, Mwau B, Mehtar S, Ogunsola F, et al. A community-engaged infection prevention and control approach to Ebola. *Health promotion international*. 2015;31(2):440-9. <http://doi.org/10.1093/heapro/dav003>.
11. Den Broeder L, South J, Rothoff A, Bagnall A-M, Azarhoosh F, Van Der Linden G, et al. Community engagement in deprived neighbourhoods during the COVID-19 crisis: perspectives for more resilient and healthier communities. *Health promotion international*. 2022;37(2):daab098. <http://doi.org/10.1093/heapro/daab098>.
12. Hung KK, MacDermot MK, Chan EY, Liu S, Huang Z, Wong CS, et al. CCOUC Ethnic Minority Health Project: a case study for Health EDRM initiatives to improve disaster preparedness in a rural Chinese population. *International journal of environmental research and public health*. 2021;18(10):5322. <http://doi.org/10.3390/ijerph18105322>.

13. Anwar S, Ahmad FJAJoAR, Reports. Positive Health Outcome is Directly Proportional to the Community Participation. *Asian Journal of Advanced Research and Reports*. 2021;15(4):1-5. <http://doi.org/10.9734/ajarr/2021/v15i430385>.
14. Donahue D, Barach P, Swienton R, Hansen J-C, Harris CJP, Medicine D. Creating a Health Emergency and Disaster Risk Management (EDRM) Learning Community. *Prehospital and Disaster Medicine*. 2023;38(S1):s159-s. <http://doi.org/10.1017/S1049023X23004144>.
15. Moghaddam PS, Sohrabizadeh S, Jahangiri K, Nazari SSHJJoIMC. Community-Based Disaster Health Management Approaches: A Systematic Literature Review. *Journal of Iranian Medical Council*. 2023;6(1). <http://dx.doi.org/10.18502/jimc.v6i1.11837>.
16. Grieger K, Cummings CLJES, Decisions. Informing environmental health and risk priorities through local outreach and extension. *Environment Systems and Decisions*. 2022;42(3):388-401. <https://doi.org/10.1007/s10669-022-09864-0>.
17. Allen T, Crouch A, Russell TL, Topp SMJHPJoA. Factors influencing community engagement approaches used in *Aedes aegypti* management in Cairns, Australia. *Health Promotion Journal of Australia*. 2024. <http://doi.org/10.1002/hpja.924>.
18. Mawardi F, Lestari AS, Randita ABT, Kambey DR, Prijambada IDJDM, preparedness ph. Strengthening primary health care: emergency and disaster preparedness in community with multidisciplinary approach. *Disaster medicine and public health preparedness*. 2021;15(6):675-6. <https://doi.org/10.1017/dmp.2020.143>.
19. Novak JM, Day AM, Sopory P, Wilkins L, Padgett D, Eckert S, et al. Engaging communities in emergency risk and crisis communication: A systematic review and evidence synthesis. *Journal of International Crisis and Risk Communication Research*. 2019;2(1):61-96. <http://doi.org/10.30658/jicrcr.2.1.4>.
20. Organization WH. Community engagement: a health promotion guide for universal health coverage in the hands of the people. 2020. (Accessed June 10, 2024)
21. Munn Z, Peters MD, Stern C, Tufanaru C, McArthur A, Aromataris EJBmrm. Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC medical research methodology*. 2018;18:1-7. <http://doi.org/10.1186/s12874-018-0611-x>.
22. Tricco AC, Lillie E, Zarin W, O'Brien KK, Colquhoun H, Levac D, et al. PRISMA extension for scoping reviews (PRISMA-ScR): checklist and explanation. *Annals of internal medicine*. 2018;169(7):467-73. <http://doi.org/10.7326/M18-0850>.
23. Moher D, Stewart L, Shekelle PJSr. All in the family: systematic reviews, rapid reviews, scoping reviews, realist reviews, and more. *Systematic reviews*. 2015;4:1-2. <http://doi.org/10.1186/s13643-015-0163-7>.
24. Levac D, Colquhoun H, O'brien KKJIs. Scoping studies: advancing the methodology. *Implementation science*. 2010;5:1-9. <http://doi.org/10.1186/1748-5908-5-69>.
25. Arksey H, O'malley LJjosrm. Scoping studies: towards a methodological framework. *International journal of social research methodology*. 2005;8(1):19-32. <http://doi.org/10.1080/1364557032000119616>.
26. Peters MD, Godfrey CM, Khalil H, McInerney P, Parker D, Soares CBJJEI. Guidance for conducting systematic scoping reviews. *JBIC Evidence Implementation*. 2015;13(3):141-6. <http://doi.org/10.1097/XEB.0000000000000050>.