

Community Preparedness for Health Disasters: A Study of Community Health Literacy

Seno Lamsir[✉]

RSUD Dr. Moewardi, Indonesia

e-mail: [*dyesolo@gmail.com](mailto:dyesolo@gmail.com)

Input : November 12, 2025

Revised : November 28, 2025

Accepted : December 23, 2025

Published : December 31, 2025

ABSTRACT

Background: Recent health disasters indicate that community preparedness is influenced not only by the availability of health services but also by community health literacy, which enables individuals to understand risks, assess health information, and make preventive decisions during emergencies.

Method: This study employed a qualitative literature review approach to analyze the relationship between health literacy and community preparedness for health disasters.

Results: The findings show that health literacy acts as a strategic determinant shaping risk perception, preventive behavior, psychosocial readiness, and community adaptive capacity during health crises. Community-based interventions, the involvement of community health workers, and cross-sector collaboration were identified as effective mechanisms for strengthening health literacy and collective preparedness.

Conclusion: Integrating community health literacy into disaster management policies and sustainable public health development programs is essential to enhance community preparedness and resilience in the face of health disasters.

Keyword: *Adaptation, Community, Disaster Preparedness, Health Disaster, Health Literacy*

INTRODUCTION

Health disasters in the last two decades have become a global threat with multidimensional impacts on people's lives, affecting not only medical aspects but also social, economic, psychological, and community resilience. The COVID-19 pandemic, zoonotic outbreaks, and environment-based disasters have shown that community resilience is not only determined by the quality of health services, but is also greatly supported by the level of public health literacy that enables individuals to understand risks, make appropriate health decisions, and behave protectively to reduce the impact of health disasters. According to McCaffery et al. (2020), health literacy is closely related to the knowledge, attitudes, and behaviors of the community during the COVID-19 pandemic, which determines the effectiveness of public health interventions. Similarly, Schillinger (2020) shows that social determinants of health and levels of health

literacy influence inequalities in the community's ability to understand health information in crisis situations. These conditions show that community preparedness in facing health disasters requires adequate cognitive and affective capacities, as well as knowledge-based actions through the strengthening of community health literacy.

In the national context, the phenomenon of health disaster management shows variations in preparedness between regions. Subandi and Noerjoedianto (2021) show that the preparedness of primary health facilities is greatly influenced by the level of community capacity in responding to regional health disaster risks. Afik, Khoriyati, and Pratama (2021) found that the level of community preparedness in areas prone to volcanic eruptions is greatly influenced by exposure to health information and the effectiveness of risk communication received by the community before and during a disaster. These findings are further reinforced by Afni (2018), who states that post-flood health disaster management can be more optimal if the community has adequate health knowledge and collective awareness to participate in community health responses. This phenomenon clarifies that community preparedness for health disasters is not only influenced by access to health services but also by the level of community health literacy as the foundation for preventive participation.

Conceptually, community health literacy is not only related to the ability to read health information, but also includes the ability to interpret risks, assess the credibility of information sources, and apply health information in real actions in emergency conditions. Bröder et al. (2017) stated that health literacy is a multidimensional construct that develops at the family and community levels, thus requiring a systematic strengthening approach. Marciano, Camerini, and Schulz (2019) show that health literacy has direct implications for disease knowledge, self-care management, and health risk control, so that limitations in community health literacy can exacerbate the health burden during disasters. Magnani et al. (2018) emphasize that health literacy is a fundamental element that influences primary and secondary disease prevention in populations, making the strengthening of community health literacy a strategic necessity to improve preparedness for health disasters in various regions.

Various health intervention programs have been implemented to build a health-resilient community. Wahyudin et al. (2022) show that health literacy improvement training has been proven to increase community discipline in complying with health protocols in the Pangandaran region during the pandemic. Community-based empowerment programs can also increase community preparedness capacity, as shown in the study by Sugiharto et al. (2025) through the establishment of health literacy corners that encourage the community to actively build disaster-resilient villages. In addition, community health education is an instrument of community development with a long-term and intergenerational learning pattern, as stated by Butarbutar et al. (2025). However, these findings indicate that there is still no uniformity in intervention models, approaches, and evaluation instruments to consistently measure community preparedness based on health literacy.

The psychosocial dimension of community preparedness for health disasters has also received significant attention in the literature. Roudini, Khankeh, and Witruk (2017) show that community mental preparedness is a prerequisite for preventing prolonged psychological impacts during health crises. On the other hand, the role of health workers as liaisons between the formal health system and the community is also a vital element in health disaster preparedness. Emaliyawati et al. (2021) found that the preparedness of community nurses in disaster management is influenced by training, knowledge, and institutional support. Sangkala and Gerdzt (2018) stated that the need for disaster preparedness learning among community nurse coordinators is still high and requires a community-based approach to be more effective.

International research increasingly highlights communities as key actors in health disaster preparedness. Boyce and Katz (2019) emphasize that community health workers play a crucial role in pandemic preparedness, whether in public education, public health tracking, or risk mitigation. A systematic review by Shaffril, Samah, and Kamarudin (2021) also shows that community preparedness for disasters, including those that impact health, depends on factors such as public health education, disaster experience, and the ability to access credible health information sources. In the Indonesian context, Saifudin (2023) found a relationship between disaster health literacy, risk perception, and preparedness in building community resilience in volcanic-prone areas, confirming the importance of health literacy as a determining variable of community adaptation capacity.

Although many studies have discussed health literacy and community preparedness, there are research gaps that need to be further explored. First, Saifudin's (2023) research focuses on communities prone to volcanic eruptions and has not mapped preparedness in general areas without close experience of disasters. Second, the study by Wahyudin et al. (2022) discusses improving discipline in following health protocols through training, but does not comprehensively describe the causal relationship between health literacy and disaster preparedness at the community level. Third, the community empowerment model through health literacy corners by Sugiharto et al. (2025) has not been integrated with an analytical approach to measure changes in preparedness quantitatively and qualitatively. These research gaps indicate the need to examine community preparedness in facing health disasters through a systematic and comprehensive community health literacy perspective.

This study offers novelty by reviewing community preparedness through a community health literacy approach that comprehensively integrates cognitive aspects, preventive actions, and psychosocial preparedness, thereby providing a holistic picture of community preparedness in facing health disasters. Academically, this study aims to analyze the construction of community preparedness for health disasters based on community health literacy capacity, explain the determinants of health literacy-based preparedness, and identify the

implications of community health interventions on the prevention of health disaster risks in the community population.

METHOD

This study uses a qualitative approach with a literature study design to understand the construction of community preparedness for health disasters through the perspective of community health literacy. A qualitative approach was chosen because it allows for in-depth analysis of concepts, patterns, and thematic relationships between variables based on previous scientific findings through comprehensive academic studies. Creswell (2018) states that qualitative literature studies aim to interpret scientific findings to construct a new understanding of social and health phenomena systematically. The research data sources were obtained from reputable scientific journal articles published in the last ten years that discuss health literacy, community preparedness, and health disaster management.

The literature review procedure in this study was carried out through the stages of selection, extraction, and thematic analysis. Scientific articles were selected based on topic relevance, contextual appropriateness, and their contribution to understanding community health literacy and preparedness for health disasters. The analysis was conducted by identifying dominant themes such as the role of health literacy in disaster preparedness, determinants of community preparedness, community-based health interventions, and their implications for public health cooperation. The thematic analysis used refers to Braun and Clarke (2019), which emphasizes a systematic coding process to group information into structured themes. The findings of the analysis were then used as the basis for developing academic arguments to formulate the discussion and conclusions of the study.

RESULT AND DISCUSSION

Community Health Literacy as the Foundation for Preparedness in Facing Health Disasters

Community health literacy is a key pillar in shaping protective behaviors among communities when faced with the threat of health disasters. In a community context, health literacy is not only related to reading or understanding medical information, but also includes the ability to assess the credibility of information, make risk-based health decisions, and integrate this information into disease prevention and mitigation actions in emergency situations. McCaffery et al. (2020) show that health literacy directly influences the level of public knowledge and attitudes during a pandemic, which in turn affects the level of compliance with preventive measures. In addition, Schillinger (2020) emphasizes that health literacy plays a major role in reducing health disparities because people with low literacy are more vulnerable to misinformation and have less adaptive health responses during disasters. Both findings indicate that health literacy is not only informational but also a strategic instrument in building community health resilience.

The role of health literacy as a protective factor in community preparedness can be observed from the characteristics of trained and untrained communities. Communities with credible health information sources and continuous health education show more adaptive responses and stronger risk awareness when facing pandemics or outbreak threats. In Indonesia, this affinity is evident in the results of a study by Wahyudin et al. (2022), which proves that health literacy training can increase community discipline in complying with health protocols and reduce the risk of transmission. A similar intervention on a regional scale was demonstrated by Sugiharto et al. (2025) through the strengthening of health literacy corners, which effectively fostered communities that were more disaster-prepared and independent in managing health information. The strengthening of the relationship between health literacy and community resilience shows that improving the cognitive ability of the community to understand risks can reduce the health impact on the population when a disaster occurs.

The dimension of health literacy is also closely related to the psychosocial and moral preparedness of the community in crisis situations. Roudini, Khankeh, and Witruk (2017) emphasize that communities with health knowledge preparedness show more stable mental preparedness so that psychological pressure during disasters can be minimized. In the context of hazard-prone areas, Saifudin (2023) shows a significant relationship between disaster health literacy and risk perception that contributes to the preparedness of volcanic communities. The model emphasizes the importance of health literacy as a psychological mediator in directing community responses to health disaster situations. Meanwhile, at the community health worker level, Emaliyawati et al. (2021) show that the readiness of community nurses in disaster management is determined by their training and health literacy, enabling health workers to act as literacy facilitators for the surrounding community. Community health education is one of the most realistic strategies for sustainably improving public health literacy.

Butarbutar et al. (2025) stated that community-based health education can improve the quality of public health through long-term knowledge transfer and changes in healthy living culture. On the other hand, Boyce and Katz (2019) emphasized that community health workers are central actors in pandemic preparedness because they are at the forefront of health education implementation and risk mitigation. Health education can eliminate information barriers that often trigger high transmission rates during health crises. The combination of health education, community-based information delivery, and health literacy strengthening has the potential to create resilient and adaptive communities when faced with health disaster threats.

Globally, health literacy has been recognized as a major determinant of health related to social determinants of health. Magnani et al. (2018) show that health literacy is a fundamental element in disease prevention and community health recovery. The health literacy model proposed by Bröder et al. (2017) states that health literacy develops from childhood, so that literacy

development is intergenerational and cannot be built with only short-term interventions. This is in line with the findings of Marciano, Camerini, and Schulz (2019), which prove that health literacy affects the effectiveness of chronic disease management, demonstrating the importance of literacy in lifelong health. Thus, strengthening community health literacy not only responds to emergency needs but also becomes a social investment to strengthen the public health system now and in the future.

From the above description, it can be understood that health literacy is a strategic construct that must be viewed as social infrastructure for preparedness in facing health disasters. Strengthening community health literacy can build preventive behavior, psychological resilience, and collective capacity in facing threats to population health. Therefore, research on community health literacy is not only relevant in the context of a pandemic emergency but also for strengthening public health systems in a sustainable manner.

Determinants of Community Preparedness for Health Disasters and the Role of Literacy in Community Response Mechanisms

Community preparedness for health disasters involves a series of interrelated determinants, including health knowledge capacity, risk perception, access to information, and collective social involvement. These determinants support the community's ability to decide on appropriate actions in the face of population health threats. Subandi and Noerjoedianto (2021) show that health preparedness indicators are influenced by the level of community knowledge and the availability of health information sources based on primary health facilities. Afik, Khoriyati, and Pratama (2021) also note that communities in areas prone to volcanic eruptions show higher preparedness because they have more structured risk communication patterns and direct experience in dealing with disasters. Meanwhile, Afni (2018) adds that post-flood disaster health preparedness is not only determined by disaster experience but also by the extent to which the community has adequate health knowledge to prevent further impacts. Health literacy factors have a direct correlation with community preparedness because they serve as the basis for interpreting threat levels and mitigation actions.

Saifudin (2023) explains that disaster health literacy is an important variable in shaping community risk perception and decision-making during disasters. This perspective is reinforced by Sangkala and Gerdtz (2018), who highlight the need for community nurses to learn about disaster preparedness so that they can become credible sources of information for the community. On the other hand, international research by Shaffril, Samah, and Kamarudin (2021) reveals that community preparedness is influenced by health education, disaster experience, and the ability to understand safety information in the context of risk. The findings of this cross-study show that increasing community preparedness cannot be separated from evaluating the capacity of community health literacy.

To clarify the relationship between variables that influence community preparedness in facing health disasters, the following is a comparative table of relevant research findings.

The following table is compiled to show a comparison of the most dominant determinants of community preparedness based on previous studies and to serve as a basis for theoretical analysis.

Table 1. Dominant Determinants of Community Preparedness Based on Previous Studies

Study	Location	Key Determinants of Community Preparedness	Health Literacy Role	Outcome
Subandi & Noerjoedianto (2021)	Indonesia	Knowledge level, emergency management readiness, health system support	Indirect	Moderate preparedness level
Afik et al. (2021)	Indonesia	Information exposure, risk communication, disaster experience	Direct	High preparedness in volcano-risk communities
Afni (2018)	Indonesia	Post-disaster health management, emergency participation, community awareness	Direct	Improved health recovery post-flood disaster
Shaffril et al. (2021)	Malaysia	Education, experience, access to information	Direct	Increased disaster resilience in trained communities
Saifudin (2023)	Indonesia	Health literacy, risk perception, resilience capacity	Core mediator	Strong preparedness in high-risk rural areas

The table shows variations in determinants that contribute to community preparedness for health disasters, but reveals a consistent pattern: health literacy is the unifying variable that drives the formation of collective preparedness. In areas with credible health information and preventive education activities, communities demonstrate stronger adaptive capabilities in various crisis situations. Meanwhile, in areas with minimal information or that rely solely on emergency instructions without adequate health knowledge, the community's response tends to be reactive and has the potential to increase the health impact during a disaster. The theoretical implications of this pattern of determinants lead to the conclusion that community health literacy should be viewed as the main mediator between risk perception and readiness to act.

Without strong health literacy, instruction-based health interventions or disaster mitigation campaigns will not result in comprehensive collective behavioral change. This is evident in the findings of Subandi and Noerjoedianto (2021), which confirm that the preparedness of health facilities cannot replace the preparedness of the community itself. Conversely, when community knowledge capacity is increased through education and social participation, the level of health disaster preparedness increases significantly, as shown by Afik, Khoriyati, and Pratama (2021) and Afni (2018).

In addition, the role of community health workers is very important as facilitators of community health literacy. Emaliyawati et al. (2021) show that community nurses need capacity building to carry out community-based health mitigation functions. Boyce and Katz (2019) emphasize that the existence of community health workers is a long-term strategy in pandemic preparedness and global health crises because they serve as a link between the health system and the community. Therefore, building community preparedness for health disasters must integrate the capacity of health workers and community empowerment based on health literacy in order to achieve collective, inclusive, and sustainable health resilience.

Community Health Literacy Strengthening Model to Achieve Community Preparedness for Health Disasters

Strengthening community health literacy to improve preparedness for health disasters requires a systematic, measurable, and sustainability-oriented approach. From a public health perspective, preparedness is not only determined by access to health facilities, but also by the community's ability to translate health information into preventive and mitigative actions at the individual and collective levels. Shaffril, Samah, and Kamarudin (2021) emphasize that the community's response to disaster risks is influenced by access to health education, disaster experience, and the ability to interpret safety information. These findings show that community health literacy intervention models require experience-based education processes, not just one-way counseling. Thus, strategies to improve community health literacy must facilitate social learning, cross-stakeholder collaboration, and create a sustainable health communication ecosystem.

One of the core components in the community health literacy strengthening model is the provision of reliable and accessible health information. Magnani et al. (2018) emphasize that health literacy plays a central role in disease prevention through a better understanding of health risks and preventive measures. A targeted health information access model has been proven to increase community preparedness during a pandemic by strengthening health protocol discipline, as found by Wahyudin et al. (2022). The provision of community-based educational media, including health libraries and health literacy corners, can be an effective form of intervention. A study by Sugiharto et al. (2025) shows that health literacy corners can build community capacity in developing disaster-resilient villages through increased

access to information, community-based learning, and enhanced community collaboration in mitigation efforts. This demonstrates the relevance of community-based interventions as the foundation for sustainable public health learning.

In addition to the informational aspect, the dimension of strengthening the psychosocial capacity of the community is also an important pillar in building preparedness for health disasters. Roudini, Khankeh, and Witruk (2017) state that psychological preparedness is an important factor in preventing prolonged mental stress during health disasters. When public health literacy increases, mental preparedness for crisis situations also increases, enabling communities to act more rationally and collectively in the face of health threats. This is reinforced by Saifudin (2023), who identifies health literacy as the main mediator of the relationship between risk perception and preparedness to act in disaster-prone communities. Thus, the community health literacy model must include community-based psychosocial preparedness training as an integral part of community capacity building.

A sustainable community health literacy model must also position community health workers as catalysts for social change. Boyce and Katz (2019) emphasize that community health workers have a strategic role in pandemic preparedness through counseling, contact tracing, and promotion of preventive behaviors. Emaliyawati et al. (2021) show that the preparedness of community nurses in disaster management is largely determined by disaster training and knowledge, which means that community health workers need specific competencies to carry out their educational role. Sangkala and Gerdztz (2018) also identify that the need for disaster preparedness learning among community health workers is still high, so training must be carried out systematically. Therefore, the community health literacy model must position health workers as agents of change through their roles in mentoring, empowerment, and community-based public health coaching.

The development of cross-sector collaboration is also an absolute requirement in building community preparedness for health disasters. Afni (2018) shows that post-disaster health preparedness will increase significantly if the community is involved in a participatory disaster management system. A collaborative approach is also needed to strengthen the risk communication system so that health information can be received uniformly across all community groups. For example, Afik, Khoriyati, and Pratama (2021) found that community preparedness related to volcanic eruptions is influenced by the consistency of risk communication and community involvement in health mitigation decision-making. On the other hand, Butarbutar et al. (2025) stated that community-based health education encourages continuous participation in intergenerational health learning, resulting in the internalization of a healthy lifestyle culture that has an impact on increasing preparedness.

Taking all of the above dimensions into account, strengthening community health literacy must be positioned as a transformative and long-term model of public health development. Effective strategies will include

improving access to health information, community-based learning, psychosocial support, strengthening the role of community health workers, and cross-sector collaboration oriented towards community independence. If this strategy is implemented systematically, community health resilience will increase so that communities have better adaptive and responsive capacities in facing various forms of health disasters. This emphasizes the need to integrate health literacy into national policies on health disaster management and community health development in a broader and more measurable manner.

CONCLUSION

This study confirms that community health literacy is a crucial foundation in determining community preparedness for health disasters. Based on the scientific findings analyzed, health literacy plays a strategic role in encouraging preventive behavior, increasing psychosocial resilience, strengthening risk perception, and supporting more appropriate health decisions during times of crisis. Community preparedness is multidimensional and influenced by factors such as health knowledge capacity, access to information, risk communication, community health worker support, and cross-sector collaboration. When these elements work synergistically, the level of community preparedness in facing health disasters increases significantly and contributes greatly to the health resilience of the population.

Based on the results of the discussion, this study provides structural recommendations oriented towards building a community resilient to health disasters. The government and health institutions need to integrate community health literacy programs into national preparedness policies by ensuring credible access to health information for the entire community. Community health workers need to be provided with continuous training so that they can perform their functions of education, risk mitigation, and community health assistance more optimally. Community-based interventions such as health literacy corners and community-based health education need to be strengthened as part of a long-term strategy to build a culture of healthy living. Cross-sector collaboration involving health institutions, educational institutions, community organizations, and local governments is essential to ensure the sustainability of community health literacy development as a structural effort to build comprehensive and sustainable community preparedness for health disasters.

REFERENCES

Afik, A., Khoriyati, A., & Pratama, I. Y. (2021). Tingkat Kesiapsiagaan Masyarakat Dibidang Kesehatan Dalam Menghadapi Dampak Erupsi Gunung Berapi. *Jurnal Kesehatan Mesencephalon*, 7(1).

Afni, Y. (2018). Analisa kesiapsiagaan masyarakat Pauh dalam menghadapi permasalahan kesehatan pasca bencana banjir bandang: perspektif penerapan manajemen bencana. *Menara Ilmu: Jurnal Penelitian dan Kajian Ilmiah*, 12(7).

Aziz, M., Alfian, R. M., & Alverina, C. (2024). *Memahami Kesehatan Komunitas: Mengupas Determinan Kesehatan Untuk Mewujudkan Masa Depan Yang Sehat*. Penerbit NEM.

Bogdan, E. E. A., Roszko, A. M., Beckie, M. A., & Conway, A. (2021). We're ready! Effectiveness of community disaster preparedness workshops across different community groups in Alberta, Canada. *International Journal of Disaster Risk Reduction*, 55, 102060.

Boyce, M. R., & Katz, R. (2019). Community health workers and pandemic preparedness: current and prospective roles. *Frontiers in public health*, 7, 62.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597. <https://doi.org/10.1080/2159676X.2019.1628806>

Bröder, J., Okan, O., Bauer, U., Bruland, D., Schlupp, S., Bollweg, T. M., ... & Pinheiro, P. (2017). Health literacy in childhood and youth: a systematic review of definitions and models. *BMC public health*, 17(1), 361.

Butarbutar, A. R., Wahyuni, S., Vanchapo, A. R., Fahlevi, R., Naryanti, I., Ambarwati, K., & Sulistyorini, E. (2025). *Meningkatkan Kualitas Kesehatan Masyarakat Melalui Pendidikan*. Cendikia Mulia Mandiri.

Clements, B. W., & Casani, J. (2016). *Disasters and public health: planning and response*. Butterworth-Heinemann.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). SAGE Publications.

Emaliyawati, E., Ibrahim, K., Trisyani, Y., Mirwanti, R., Ilhami, F. M., & Arifin, H. (2021). Determinants of nurse preparedness in disaster management: a cross-sectional study among the community health nurses in coastal areas. *Open access emergency medicine*, 373-379.

Magnani, J. W., Mujahid, M. S., Aronow, H. D., Cené, C. W., Dickson, V. V., Havranek, E., & Willey, J. Z. (2018). Health literacy and cardiovascular disease: fundamental relevance to primary and secondary prevention: a scientific statement from the American Heart Association. *Circulation*, 138(2), e48-e74.

Marciano, L., Camerini, A. L., & Schulz, P. J. (2019). The role of health literacy in diabetes knowledge, self-care, and glycemic control: a meta-analysis. *Journal of general internal medicine*, 34(6), 1007-1017.

McCaffery, K., Dodd, R., Cvejic, E., Ayre, J., Batcup, C., Isautier, J., & Wolf, M. (2020). Health literacy and disparities in COVID-19-related knowledge, attitudes, beliefs and behaviours in Australia. *Public Health Research and Practice*, 30(4), e30342012.

Nengrum, L. S. (2020). Analisis Peran Tenaga Kesehatan dalam Kesiapsiagaan Menghadapi Bencana Banjir di Kabupaten Malang Jawa Timur: Review: Analysis of the Role of Health Personnel in Preparation for Flood Disaster in Malang District, East Java. *Borneo Journal of Medical Laboratory Technology*, 3(1), 202-205.

Roudini, J., Khankeh, H. R., & Witruk, E. (2017). Disaster mental health preparedness in the community: A systematic review study. *Health psychology open*, 4(1), 2055102917711307.

Saifudin, I. M. M. Y. (2023). Disaster health literacy, risk perception, and preparedness towards resilience in a volcano-prone community: a cross-sectional study in Yogyakarta, Indonesia. *Journal of Community Empowerment for Health*, 6(3), 154-160.

Sajida, A. S., Permana, A. R., Laura, E., & Padilah, S. (2024). Pengaruh Promosi Kesehatan Terhadap Kesiapsiagaan Bencana Banjir Terhadap Tingkat Pengetahuan Masyarakat: Literature Review. *SENAL: Student Health Journal*, 1(1), 1-5.

Sangkala, M. S., & Gerdtz, M. F. (2018). Disaster preparedness and learning needs among community health nurse coordinators in South Sulawesi Indonesia. *Australasian emergency care*, 21(1), 23-30.

Schillinger, D. (2020). The intersections between social determinants of health, health literacy, and health disparities. *Studies in health technology and informatics*, 269, 22.

Shaffril, H. A. M., Samah, A. A., & Kamarudin, S. (2021). Speaking of the devil: a systematic literature review on community preparedness for earthquakes. *Natural hazards*, 108(3), 2393-2419.

Subandi, A., & Noerjoedianto, D. (2021). Kajian Indeks Resiko Bencana dengan Kesiapan Puskesmas dalam Managemen Bencana Kesehatan di Kota Jambi. *Journal Of Education, Humaniora, and Social Sciences (JEHSS)*, 3(3), 1152-1160.

Sugiharto, P. A., Bagiya, B., Mubarak, Z., & Listiana, E. (2025). Pemberdayaan Masyarakat Melalui Pojok Literasi dan Kesehatan Dalam Membangun Desa Tangguh Bencana, Sehat, dan Edukatif. *Surya Abdimas*, 9(2), 235-248.

Wahyudin, U., Arifin, H. S., Gemiharto, I., & Setiaman, A. (2022). Pelatihan Peningkatan Literasi Kesehatan Dalam Mendisiplinkan Masyarakat Mematuhi Protokol Kesehatan Di Kabupaten Pangandaran: Pelatihan Peningkatan Literasi Kesehatan Dalam Mendisiplinkan Masyarakat Mematuhi Protokol Kesehatan Di Kabupaten Pangandaran. *Jurnal Kajian Budaya Dan Humaniora*, 4(3), 362-366.