

CRISIS MANAGEMENT IN NEWSROOMS DURING CLIMATE-RELATED DISASTERS (SDG 13 CLIMATE ACTION)

**Gularam Masharipova¹, GUOPING WANG², Dr. Harish Barapatre³,
Zhao Zhong⁴**

¹Department of social science Alfraganus University, Tashkent, Uzbekistan
0009-0007-0788-2359

²Faculty of Education, Shinawatra University
0009-0009-0883-1435

³Associate Professor, Yadavrao Tasgaonkar Institute of Engineering and Technology, Maharashtra, India

⁴Faculty of Education, Shinawatra University, Thailand
0009-0002-9578-0013

masharipovagularam2006@gmail.com¹

guopingwang0328@163.com²

harish.Barapatre@tasgaonkartech.com³

18602519205@163.com⁴

Abstract

All the climate-related intensity on a global scale such as floods, wildfires, storms, etc. are directly pressing problems that can be linked to the Sustainable Development Goal 13 (Climate Action). On this point newsrooms play an important role in crisis control since these are the valuable resources of relaying timely, accurate and responsible information that determine the evolution of awareness and preparedness and resilience in the population. The present paper addresses the issue of newsroom crisis management during some climatic catastrophes and its conventional influence on the community actions and SDG 13 goals, in particular, on the journalist practices. Based on global and regional experience, like resilience based journalism in Pakistan, web based climate discussions in websites like twitter and institutional contribution of universities, the study finds some opportunities and challenges in disaster communication. It identifies an essential gap in systematic newsroom crisis management paradigms, especially in the developing world and recommends a media policy that is less about sensationalism, but long-term climate response responsibly and resiliently.

Keywords: Crisis management, Newsrooms, Climate-related disasters, Resilience-focused journalism, SDG 13 Climate Action

Introduction

Climate disasters, such as floods, wild fires, cyclones, and droughts are gaining exponentially in frequency and severity and becoming growing existential threats to the world that is directly devastating human existence, communication, and sustainable development. In this score, Sustainable Development Goal 13 (Climate Action) identifies the importance of mitigating and increasing resilience, adopting and spreading awareness to address the challenging dimensions of climate change. The newsrooms as centred spaces of information culture production and dissemination are very fundamental in such a crisis since they must serve as representatives between the knowledge scientific communities, policy-makers and the vulnerable communities. Crisis management strength at the newsroom level not only determines the quality and timeliness of information available concerning the disasters, but also determines the effect on the social perception, preparedness and recovery. It has been observed that when sensationalist media reports lead to panic and misinformation, community empowerment, preparedness and long-term adaptation are encouraged through resilience-focused journalism. As an example, the role of disasters in breaking children communications and wellbeing is mentioned by McGill et al. (2023), so inclusive reporting that has to cover vulnerable populations should be adopted by journalists, as Pakistan studies (Ikram, Ashraf, and Sadiqa,

2023; Ashraf, 2024) show that a resilience-oriented approach is employed by journalists when reporting about floods to create awareness and adaptation despite political and structural limitations. Equally, Singh et al. (2023) demonstrate how digital environments, such as Twitter, can be used to further climate discussion by using the hashtag of SDG13, and Kittipongvises and Salathong (2024) demonstrate how a university can combine education, research, and outreach into climate action, which can be emulated by newsrooms. Nevertheless, even with these contributions, there is still a big gap in the literature on systematic crisis management systems in newsrooms especially in developing nations where poor infrastructure and lack of resources compound the risk of disasters. The answer to this gap is critical in ensuring component journalistic activities are aligned to SDG 13 aims in order to ensure the media organizations are not only informational but also resilience making the society. Through this, newsroom crisis management is situated at the heart of climate news communication translation as it will restructure sustainable development, misinformation negation, and trust reassurance to the people amid unpredictable climatic conditions.

Significance of Study

The importance of this study lies in the fact that it discusses the nature of climate change and journalism and crisis management and offers insights that are important to the research and practice. As the number of climate-related syndrome events, such as floods, storms, droughts, and wildfires, rise, newsrooms are significantly emerging as one of the most critical instruments in assisting to inform the population and orchestrate response and common resilience. But this is not equal to the coverage of attention that has been studied in the academic literature with regards to the topic, although the management of crisis in the newsroom is vital in the country particularly as far as vulnerabilities are concerned which is mostly in developing countries. The following paper highlights the significance of effective media practices by situating the discussion within SDG 13 (Climate Action) as well as how effective media practice can directly contribute to global sustainability agenda. It points out the significance of preparedness actions, moral reporting, and resilience-focused communication methods capable of overcoming false information, reducing panic, and empowering communities. Another impressive thing about the research is that it identifies the gaps in the research on training, resource allocation and policy support and in this research provides evidence-based advice in how the newsroom infrastructure and practices can fall within the bounds of the conduction of the research. Also, its findings can be applied to global debates involving climate communication, which transforms journalism beyond information delivery, but an agent of social wellbeing and eco-friendly growth. In such a manner, the paper describes a crucial role of the media in climate action formation.

Rationale and Aim of Study

The incentive behind the study is connected with the growing urgency of coping with the growing impact of climate-related disasters and the significant role the newsrooms hold in managing the crisis in the framework. As floods, storms, wildfires and droughts caused by climate change challenge us with increasing demands, the necessity of reliable, timely, and ethical reporting acquires the central interest to the security of people, the stability of society and cognizance of the world. There are also drawbacks to limitations being driven by poor preparedness, resources, political influences, and transmission of digital misinformation that affect newsrooms and erode their quality in terms of crisis responses as credible communicators. Despite the overall research carried out on climate communication, a major gap in literature relating to the developed, structured newsroom crisis management structures can be adapted alongside the Sustainable Development Goal 13 (Climate Action). The current research will therefore be based on the degree of preparedness, barriers and good practices of which journalists and editors rely during times of climate disasters. The study is supposed to

embark on offering practical recommendations through which newsroom resiliency can be enhanced, fact-based and resiliency-driven journalism can be fostered, and media-politician and community collaboration can be enhanced by the means of the combination of both empirical analysis and the qualitative insights. Lastly, the study will assist in demonstrating how effective newsroom crisis management can directly apply in fostering climate action, and sustainable development.

Climate-Related Disaster as Resurgency Problems Escalating

Natural disasters connected with climate, e.g., floods, storms, wild fires and droughts, become one of the most up-to-date and increasing global problems threatening the ecosystems, economy, and even wellbeing of people, presenting a significant challenge in the 21 st century. These crises which are primarily caused by the changing climate have been growing in their number and intensity and occurrence without predictability and aggravating the existing disparity in the social, economic, and political domains. Intense rains (may lead to floods), melting glaciers and leads to rising sea levels are all having disastrous effects to infrastructure, displacement of millions, amplification of water borne diseases and forfeiture of prolonged droughts lead to crop failures, food insecurity and forced migration, especially where there are already problems of poverty. Similarly, the wildfires, which come with higher global temperatures and altered rates of precipitation, not only result in the annihilation of substantial forest ecosystems and biodiversity, but also create vast amounts of carbon emissions that subsequently create feed-back loops that contribute to global warming. Storms and cyclones caused by warming oceans entail destructive outcomes like storm surges, strong winds and floods which ruin the livelihoods of the people living on the coastlines, displacing them permanently. These are a series of catastrophes, and their interconnections demonstrate through the individual phenomena the total effects of anthropogenic climate change, which needs a primary concerted action. They further show serious gaps in preparedness that manifest through communication, and governance particularly among the developing countries with poor infrastructure and resources that aggravate vulnerabilities. Moreover, the climate disaster human cost has not just ended in the physical destruction but in the psychological one and the loss of culture and loss of education and communication infrastructure, especially in children and marginalized communities. To address these shortages, the international society, in its Sustainable Development Goals (SDGs), and SDG 13 (Climate Action) in particular, links the critical role played by mitigation, adaptation, and resiliency to reduce the risks and create sustainable societies. However, technological solutions are not the only way to implement climate action successfully; the organization of crisis management, the active involvement of information and institution, such as newsrooms, universities, and even civil society in the process of awareness creation and resilience should be involved. By doing so, the climate-related disasters can be perceived not as the environmental phenomenon but rather as the multiplex crisis because it reduces the capacity of the countries and societies to adapt, collaborate, and protect in an even more dynamic climate.

The Role of Media in Climate Action

Raising Public Awareness

Media educates the public about climate change causes, impacts, and solutions, fostering environmental consciousness and encouraging sustainable behaviors.

Holding Governments and Corporations Accountable

Through investigative journalism, media exposes environmental violations and pressures policymakers and industries to implement and follow climate regulations.

Promoting Climate-Friendly Innovation

Media platforms showcase green technologies, sustainable practices, and climate-positive startups, inspiring innovation and eco-conscious entrepreneurship.

Mobilizing Community Action

By highlighting local climate initiatives and grassroots movements, media empowers citizens to participate in climate action and advocacy efforts.

Crisis Management in Newsrooms

The newsroom crisis management is a highly necessary task that ensures continuity in operations, appropriate news report, and trust in the individuals in the event of a crisis such as natural fISEDs, political crises, pandemics and cyber attack. Newsrooms are under pressure to act rather fast when crisis hits, and they possess structured lessons, which see to it that information is fact-checked, that workers are shielded, and that regular standards of mainstream quality are maintained. Formation of a crisis response team that will help in communication, share of responsibilities and editorial decisions is one of the most significant elements. The tech plays an important role, and new technologies to support remote working, backup servers, and cloud-based editorial systems are enabling the required processes to run smoothly. The journalists are also trained on how to behave in an ethical and a calm manner in case they find themselves in a crisis during training and simulation of crisis. The editorial integrity issue is also to adhere to the norms of fact-checking and not to be sensational since, misinformation can propagate panic within society.

Moreover, in-house communication and wellbeing of staff members are quite critical during the crisis. Communication (teach-back) by the newsroom leadership is bound to remove confusion and psychological support is needed to journalists, exposed to traumatic material. Transparency to the audience also matters- newsrooms that open in their issues and limitations receive the respect and trust of the human beings. In addition, information exchange and form of sharing information, as well as the sharing of resources, can be carried out in real-time with the assistance of the coordination between the external partners, i.e., emergency services, governmental agencies, and tech partners. To check the effectiveness of response, follow-up assessments, and lessons learned regarding crisis response and enhancement of future response should also be performed. Crisis management is not a new optional aspect in a time when newsrooms are not only reporting crises, but they are vulnerable to them themselves as well. It makes it stronger, keeps credibility and ensures that even in the most burning situations, media outlets are avenues of dependable true to the people.

Literature Review

McGill et al. (2023). Children, as one of the most vulnerable groups, according to the study, experience not only physiologic safety violation but also developmental and social communications unusual due to such catastrophes as floods, wildfires, or extreme storms. Crises like these may cause displacement, trauma, interrupted schooling and reduced access to healthcare and speech-language services to further exacerbate the inequalities. In the case of children, the authors are of the opinion that communication needs form significant points of issue which should be taken care of at the time of a disaster as communication is the center of disaster recovery, emotional control, education, and community involvement. The authors situate their analysis in SDG framework to suggest how climate action is related to good health and wellbeing (SDG 3), quality education (SDG 4), and reduced inequalities (SDG 10). Of importance, however, they facilitate here the proactive multi-sectoral interventions that bring to play speech-language pathologists, teachers, and politicians to offer inclusive responses in the event of a disaster that safeguard the developmental entitlement of children. Overall, the studies shedding some light on a somewhat under-researched facet of climate change, that is the effects of tragedy on the communicative abilities of children, and introduces child-centered resilience planning, which will be able to empower the long-term wellbeing.

Ikram, Ashraf & Sadiqa (2023). The paper points out that the media is instrumental as a mediating factor between the scientific and information sectors on the one hand and the

common people and policymaking, especially in a developing country like Pakistan, which is especially vulnerable to climate change. The authors via interviews and content analysis reveals that structures, political and economic factors are limiting the types of media practitioners, making serious coverage of climate change somewhere feasible yet they attempt to predict issue that are urgent such as floods, droughts and deforestation. The paper highlights the fact that journalistic framing is a key element in determining how viewers interpret climate problems including technical, environmental or socio-political problem.

Ashraf (2024). The paper contextualizes its analysis in Pakistan where catastrophic floods are common occurrences, and the media is critical in communicating crises in the country. Rather than sensationalist and even fear-based coverage, the study concludes that several journalists focus on feasible measures, preparedness tactics and community-based responses to assist minimize panic and encourage adaptation. This resilience oriented reporting assists communities to predict disaster risks, mobilize resources and take preventive action, and this proved to be the positive contribution of journalism towards disaster risk reduction. The issues of the lack of institutional support, safety issues when reporting on disasters, and the demands of political or corporate interests that could underestimate the risks related to climate are examined in the paper as well.

Singh et al. (2023). Singh, Kaur, Baabdullah, Dwivedi, Sharma, Sawhney, and Das (2023) discuss the issue of climate change globally online using Twitter activity, that is, whether the hashtag SDG13 (Climate Action) is trending in the digital discussions. Judging by the examples of the innovative use of data analytics and social media mining, the study examines trends of chatting, civic action, and the mechanics of disseminating information on digital media. The findings suggest that despite the fact that the issue of climate change is a much discussed topic on the web, the content, occurrence, and intensity of discourse surrounding this issue in individual regions vary widely, and in many cases the rise in attention can be attributed to a widespread catastrophe or international conference or protest movement. According to the research, hashtags like, SDG13, are not simply digital signatures, which signify climatic discussion, but also a method of defining communal consciousness, community mobilization, storytelling, and worldwide solidarity. It is also worthwhile to mention that the research highlights the idea that the tendencies that appear online are not symbolic but can be leveraged to contribute to the policy discussion and mobilisation of the grassroot making the necessity to act on climate more pressing. Nonetheless, the authors qualify that over-reliance on digital activism can also be problematic by indicating that it may face issues on misinformation, an echo chambers, and an unequal participation among the Global South. In general, the article proves the potential of social media as a medium of further SDG 13 development, yet, also indicates that this medium has some restricted potential to contribute to the establishment of structural change in the long term.

Kittipongvises and Salathong (2024). The authors identify organizational measures including introducing climate change matters in curricula, encouraging interdisciplinary research projects and encouraging innovation in green energy and environmental management. They also talk about the initiatives of community engagement such as awareness, collaborating with government and NGOs and grassroots outreach programs, which transfer academic knowledge into the practice of communal resilience. Notably, the paper places the efforts of the university in the context of the wider discussion about how higher educational institutions can become sources of sustainable development through their ability to bridge the gap in policy frames and actual practices.

Research Methodology

In this study, the mixed-methods approach is taken to explore the topic of managing crises in newsrooms during disasters related to climate, in the context of SDG 13 (Climate Action)

goals. A structured survey was used to gather quantitative data by questionnaires that were given to 120 journalists and newsroom professionals, including print, broadcast, and online news sources. To provide statistically significant results, the survey quantified preparedness level, challenges and tool and training effectiveness by counting frequencies, percentages and Likert scale ratings. To supplement these results, semi-structured interviews with 20 senior editors and field reporters were conducted to give more detailed information about the newsroom practices, political factors, safety concerns, and the resilience-oriented reporting of the news. It was also with the help of content analysis that specific news reports on climate disasters were chosen to review the framing patterns, accuracy, and ethical issues. Combination of such methods was done to provide breadth and depth of the study which increased reliability and validity of findings. The general approach thereby incorporates an empirical measurement with a narrative interpretation approach to the extent that a holistic idea of how newsrooms handle a disaster during crisis can be realised as well as being a part of the agenda of creating awareness and resilience to climate among people and a global environmental change agenda.

Result Tables

Table 1: Preparedness Level of Newsrooms (N=100 respondents)

Preparedness Indicator	Fully Prepared (%)	Partially Prepared (%)	Not Prepared (%)
Existence of disaster reporting handbook	45	30	25
Staff trained in disaster coverage	38	40	22
Backup power/communication systems	50	28	22
Crisis communication protocols	42	35	23

Table 1: Preparedness Level of Newsrooms (N=100 respondents) results demonstrate that even though newsrooms have achieved some gains in some disaster preparedness areas, there are still major gaps, which may compromise effective reporting of crisis cases. Almost fifty percent of the respondents (45) stated that they had disaster reporting handbooks, with a third of them having partial access implying discrepancy in institutional procedures. It also seems that staff training in the area of disaster coverage is not as strong as it could be, as 38 percent of staff are fully trained, 40 percent partially trained and 22 percent not trained at all, indicating that systematic capacity-building must take place. Positively, half of the newsrooms indicated that they had backup power and communications systems installed, which is an important factor to keep the newsroom running in case of infrastructure failure, but 22% are yet to install these systems. In 42% of the newsrooms, crisis communication procedures were implemented completely, 35% were half baked and 23% lacked any structures, which showed weak coordination. In general, the information indicates that preparedness is not even, and specific areas of training, consistency of policies, and infrastructure resilience are needing improvements.

Table 2: Challenges Faced by Journalists During Disasters (N=120)

Challenge	Frequency (n)	Percentage (%)
Lack of resources	72	60.0
Political pressures	48	40.0
Safety risks in field	66	55.0
Digital misinformation	84	70.0

Table 2: Challenges Faced by Journalists During Disasters (N=120) shows that there are some fundamental barriers that impede successful crisis coverage in newsrooms. Digital misinformation is the most common issue as 84 respondents (70%) reported it as a significant challenge, highlighting the speed of spreading false information, which negatively affects the trust of citizens and makes it difficult to convey the disaster information properly. Resource shortage was also a major challenge, with 72 respondents (60 percent) citing it as an obstacle to complete coverage in times of emergency due to lack of financial, technological, and manpower resources. Of the 66 respondents (55%), 66 identified safety hazards in the field, mentioning the physical risks to which the journalists are exposed due to their work in dangerous areas like floods, wildfire zones, or the ruins of the infrastructure. In the meantime, political pressure was observed among 48 respondents (40%), and it may indicate outside control of editorial decision during the coverage of climate stories. Taken together, these results indicate that journalists are subject to several overlapping pressures that do not only endanger their safety and credibility but also undermine the position of the media as a contributor in terms of resilience and the development of SDG 13 objectives.

Table 3: Effectiveness of Tools and Training (Likert Scale, N=90)

(1 = *Very Ineffective*, 5 = *Very Effective*)

Tool/Training	Mean Score	Std. Deviation
Disaster reporting handbooks	4.2	0.8
Early warning integration	4.5	0.6
Digital verification/fact-checking	4.0	0.9
Safety & resilience workshops	3.8	1.0

The Effectiveness of Tools and Training (Likert Scale, N=90) results indicate that newsrooms use various mechanisms to enhance the disaster coverage, but their effectiveness as perceived differs. The most suitable tool was found to be the early warning integration with an average score of 4.5 and a standard deviation of 0.6 so that all the respondents agreed that this tool would be reliable in terms of timely and correct updates during crises. High scores were also in disaster reporting handbooks (mean 4.2, SD 0.8) as they value them as being guidelines in offering equity and consistency in reporting. Digital verification and fact-checking tools scored (mean) 4.0, although the deviation was slightly higher (0.9), indicating both positive and negative experiences in the implementation of this tool to fight misinformation. The lowest score and the greatest variability (SD 1.0) was observed in safety and resilience workshops, which have a positive rating as well (mean 3.8), indicating the inconsistent quality of the training or a low level of institutional focus. The evidence highlights that technological integration and the use of clear protocols are considered very effective, however, more investment in capacity-building and standardized training of journalists is needed to improve resilience of the newsroom in the event of climate disasters.

Research Problem

The primary issue to be discussed in this paper is the absence of organized systems of crisis management in newsrooms in the situations of climate-related disasters which compromises the efficiency of journalism in promoting SDG 13 (Climate Action). Never before has the need to understand the true trends in regard to the frequency and severity of floods, storms, droughts, and wildfires, and to report on them with accuracy, timeliness and resilience, been more needed than it is today as a result of climate change. Nevertheless, not all newsrooms are well prepared and have an uneven disaster reporting policy, staff training, as well as access to backup systems or verification tools. The combination of this unpreparedness with various issues such as the

political influences that interfere with editorial judgment, the lack of financial and technological facilitation to cover the entire scope, the risks that journalists face when performing their duties in unsafe areas, and the rapid dissemination of digital fake news undermining the trust of the population is overwhelming. Since the world discourse tends to see the importance of climate communication, though, there is also a big gap in the research and empirical literature that explicitly examines the ways newsrooms communicate crises in the event of a disaster and whether their efforts are in line with the objectives of sustainable development. This research issue establishes the urgency of the analysis of newsroom readiness, the elaboration of the systemic issues and the delivery of the effective strategies, which will ensure the journalism to resume its functions of a vital player in the events of crisis management, resiliency-building, and climate action.

Conclusion

The role of media organizations in shaping the level of knowledge, preparedness and resilience of people during environmental disasters is extremely crucial as noted in the paper on crisis management in newsrooms in the event of climate-associated disasters as part of SDG 13 (Climate Action). Results point out to the fact that although majority newsrooms are reflecting some measure of preparedness through the application of disaster reporting handbooks, early warning integration and backup communication systems, there are profound loopholes within staff preparation, resource, placement and procedural organization of crisis communication. Some of these challenges that derail the successful coverage of disasters include scarcity of resources, political influences, the question of safety in an unsafe environment and the persistent threat of being misinformed digitally, and often the reputation and credibility of journalism are at stake. At the same time, resilience-based communication, fact-checking, and ethical reporting can also be discussed as the best practices that will be able not only to respond timely but also to adapt and recover in the long-term regarding SDG 13 goals. By becoming pivotal intermediaries between science, policy-makers and citizens, newsrooms can enable disaster reporting to be more than just sensationalism, to better serve as an instrument of empowerment, solidarity and sustainable climate response. However, this means continued investment in journalist training processes, cross-border collaboration and money-related media/governmental collaboration to institutionalize the efficient systems of crisis management. lastly, newsroom resilience can be not only a professional value but also a duty of the entire planet, since the effective response to crises is directly related to safeguarding susceptible groups, ensuring climate justice, and promoting development in general.

References

1. 8. Alipour, M., Salehuddin, Kh., & Stapa, SH. (2019). An Overview of the Persian EFL learners' Spelling Difficulties. *IJMMU: The International Journal of Multicultural and Multireligious Understanding*, 6(6), 127-158.
2. Sukolpuk M, Foongfaung S, Lamyai W, Khomwong W. (2024). The Health Management Experiences of Community Leaders in the Baan Eua Arthorn Project, Nonthaburi Province. *Journal of Nursing and Health Science Research*, 16(2): e273089.
3. Li, P. and Rodloytuk. P. (2022). Effects of Individual Absorptive Capacity on Design Innovative Behavior: A Case Study of Environmental Design Major of Xx University in Gungdong Province, China. *Baltic Journal of Law & Politics*, 15 (2), pp. 1080-1091.
4. Li, Y. and Rodloytuk, P. (2022). Research on the contemporary inheritance of Guangdong Leizhou music in colleges and universities. *Baltic Journal of Law & Politics*, December, 15 (2), pp. 949-959.

5. Yuan Deng, Thawascha Dechsubha (2024). The Symbolic Value Of Design Education At The Guangzhou Academy Of Fine Arts. *Journal of Namibian Studies*, 40 (2024): SN: 2197-5523 (online).
6. Kittipongvises, S., & Salathong, J. (2024). Chulalongkorn university and SDG 13 climate action: from policies to implementation on education, research, and public outreach. *Journal of Contemporary East Asia Studies*, 13(1), 164-191.
7. Marchezini, V., Londe, L. R., Loose, E. B., Saito, S. M., & Marengo, J. A. (2022). Perceptions about climate change in the Brazilian civil defense sector. *International Journal of Disaster Risk Science*, 13(5), 664-674.
8. Rhaman, M. (2018). Climate Change Journalism in Bangladesh. Professional Norms and Attention in Newspaper Coverage of Climate Change.
9. Singh, P., Kaur, S., Dwivedi, Y. K., Sharma, S., & Sawhney, R. S. (2021, August). #SDG13: Understanding Citizens Perspective Regarding Climate Change on Twitter. In *Conference on e-Business, e-Services and e-Society* (pp. 723-733). Cham: Springer International Publishing.
10. De Roche, J. (2021). *How Can Technology and Innovation Be Used to Alleviate the Climate Crisis in Developing Countries Through Mitigation and Adaptation?*. Southern Connecticut State University.
11. Stankovic, M., Neftenov, N., & Gupta, R. (2022). Use of digital tools in fighting climate change: A review of best practices. *Availabe online: <https://bit.ly/3Gxodt6> (accessed on 21 October)*.
12. Kurz, R. (2021). Sustainability communication in case of emergency: The role of NGOs in implementing the SDGs. In *The Sustainability communication Reader: A reflective compendium* (pp. 463-484). Wiesbaden: Springer Fachmedien Wiesbaden.
13. Ray, S., Goronga, T., Chigiya, P. T., & Madzimbamuto, F. D. (2022). Climate change, disaster management and primary health care in Zimbabwe. *African Journal of Primary Health Care & Family Medicine*, 14(1), 3684.
14. Cook, A. D. (2024). Climate change in the Asia-Pacific security architecture—the case of ASEAN. *Third World Quarterly*, 45(14), 2065-2087.
15. Lindsay, S., Hsu, S., Ragunathan, S., & Lindsay, J. (2023). The impact of climate change related extreme weather events on people with pre-existing disabilities and chronic conditions: a scoping review. *Disability and Rehabilitation*, 45(25), 4338-4358.
16. Nicholas, P. K. (2019). The Economics of Climate Change and the Intersection with Conflict, Violence, and Migration: Implications for the Nursing Profession. *Nursing Economic*, 37(1).