Published online 2022 April.

The Role of Schools in Creating Disaster-resilient Communities

Ameneh Marzban^{1*}, PhD Candidate;^D Golzar Pourmoghaddam², BSc Student; Mohsen Dowlati¹, PhD

¹Department of Health in Disasters and Emergencies, School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran ²Department of Environmental Health Engineering, Sirjan School of Medical Sciences, Sirjan, Iran

*Corresponding author: Ameneh Marzban, PhD Candidate; School of Health Management and Information Sciences, Iran University of Medical Sciences, Tehran, Iran. Tel: +98 9172458896; Email: amenemarzban@yahoo.com

Received December 08, 2021; Revised December 30, 2021; Accepted January 10, 2022

Keywords: School, Disaster, Community, Student, Resilient

How to Cite: Marzban A, Pourmoghaddam G, Dowlati M. The Role of Schools in Creating Disaster-resilient Communities. Int. J. School. Health. 2022;9(2):132-133. doi: 10.30476/INTJSH.2022.95180.1223.

Dear Editor

Disasters can occur at any time and place and affect the physical, psychological, and social aspects of human life in different ways. Iran is on the list of top 10 countries worldwide with numerous disasters; out of about 40 known natural and violent disasters in the world, about 30 disasters occur in Iran. In addition to its geographical, environmental, and natural resource benefits, this land could be involved in perilous issues that must be combated so that a good life could be fulfilled. Although the risk cannot be utterly eliminated, its level can be minimized. Crisis management is an approach in which crisis prevention, intervention, and response are essential since it can reduce the destructive impact of crises, especially in schools, and save students and ultimately the next generation (1). According to the World Health Organization, at least 35 million people are displaced annually by disasters, at least half of whom are children. Children with special needs account for more than seven million of this population while millions of more people in this group are children with disabilities. These children are still largely ignored. The American Children's Association defines children with special needs as those who have or have had chronic physical, developmental, behavioral, or emotional risk factors. Evidence suggests that this segment of population is not yet involved in emergency component planning. It is important to make sure of the readiness of people with specific needs in terms of disasters since they constitute a large proportion of the population (2).

The impact of disasters on children is greater than that on other people in a society. Children spend a third of their daily time learning at schools (3). Schools are a good place to effectively transfer information, knowledge, and skills to the community and they can provide opportunities to help children develop the knowledge and skills needed to stay safe in case of disasters. Therefore, developing strategies to support schools in the field of creating a culture of disaster prevention and raising public awareness is of particular necessity (1).

The importance of this segment of a society is such that the 10 principles of the United Nations Global Strategy for Disaster Reduction, as well as the seven goals of the new international framework, address this issue and assess school safety and curriculum development. Reducing the risk of disaster, promoting and incorporating knowledge to minimize this risks, and effects of disasters in school curricula at all levels have been remarkably emphasized (4).

The best and most appropriate target community for making changes in teaching style and attitudes towards safety issues are children and students. Certainly, educating and preparing students will have a tremendous impact on the future safety of any community. The role of children in creating resilience and raising public awareness about disasters is pivotal because children keep the lessons they learn in school in their minds and pass them on to their families (5).

The best way to prepare children for disaster is through teachers. Children, especially those with physical and mental disabilities, are more vulnerable to disasters. Support for this vulnerable group in schools should be given serious consideration by policymakers and officials (6).

Planning for the ongoing implementation of disaster preparedness and risk-reducing programs, as a part of school curriculum, helps to increase the awareness of children, teachers, and their families about the

Copyright[©] 2022, International Journal of School Health. This is an open-access article distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/) which permits copy and redistribute the material just in noncommercial usages, provided the original work is properly cited.

potential dangers of the environment. The concept of disaster management should be taught from an early age so that youngsters understand the concepts of safety education (7).

Structural and non-structural safety of educational spaces is of great importance. Examining the current situation and finding solutions to prevent crises and increase school safety should be given serious attention. Schools that implement comprehensive safety management, as well as a safety assessment system that supports disaster management in schools, will be able to increase school resilience and effectively reduce the risk of injury, death, and financial loss in the event of a disaster (8).

Schools are vulnerable to disasters; children easily panic if they are not trained concerning evacuation drills, and they are difficult to manage in emergencies and are at risk of death or injury. On the other hand, children are less skilled in taking immediate action to deal with fires and firefighting. Planning for training in these cases should be done continuously (9).

Encouraging schools to promote and implement risk-reducing programs and activities and developing strategies for conducting risk assessments locally in schools can minimize the impact of risks. Therefore, regular school safety assessments will be achieved if all partner organizations and stakeholders are involved in bringing about innovative changes and activities in schools. Hence, it is necessary to plan to assess the threats to schools and take effective measures to sustain them. Schools can be safe shelters suitable for disaster survivors, in which case disaster-resistant schools can increase community preparedness for appropriate responses.

Conflict of interest: None declared.

References

1. Hosseini KA, Izadkhah YO. From "Earthquake and safety" school drills to "safe school-resilient

communities": A continuous attempt for promoting community-based disaster risk management in Iran. International Journal of Disaster Risk Reduction. 2020;45:101512.

- Boon HJ, Pagliano PJ. Disaster education in Australian schools. Australian Journal of Environmental Education. 2014;30(2):187-97. doi: 10.1017/aee.2015.8.
- 3. Nawangsari D, editor The preparedness of schools in dealing tsunami disaster threat in pacitan coastal bay, pacitan regency. IOP Conference Series: Earth and Environmental Science; 2021: IOP Publishing. doi: 10.1088/1755-1315/683/1/012073.
- 4. Effhymis L. Disaster Data Centre—an innovative educational tool for disaster reduction through education in schools. Journal of Power and Energy Engineering. 2014;2. Doi: 10.4236/jpee.2014.29006
- 5. Mutch C. The role of schools in helping communities copes with earthquake disasters: the case of the 2010–2011 New Zealand earthquakes. Environmental Hazards. 2018;17(4):331-51. doi: 10.1080/17477891.
- 6. Oktari RS, Shiwaku K, Munadi K, Shaw R. Enhancing community resilience towards disaster: The contributing factors of school-community collaborative network in the tsunami affected area in Aceh. International Journal of Disaster Risk Reduction. 2018;29:3-12. doi: 10.1016/j.ijdrr.2017.07.009.
- Sakurai A, Bisri M, Oda T, Oktari R, Murayama Y, Nizammudin, et al. Exploring minimum essentials for sustainable school disaster preparedness: A case of elementary schools in Banda Aceh City, Indonesia. International Journal of Disaster Risk Reduction. 2018;29:73-83. doi: 10.1016/j.ijdrr.2017.08.005.
- Widana IDKK, Asmaniati F, Djati SP, Ingkadijaya R. Analysis of Disaster Safe School Level in West Coast of Pandeglang Regency, Indonesia. Technium Social Sciences Journal. 2021;20(1):961-969. doi: 10.47577/ tssj.v20i1.3510.
- 9. Torani S, Majd PM, Maroufi SS, Dowlati M, Sheikhi RA. The importance of education on disasters and emergencies: A review article. J Educ Health Promot. 2019;8:85. doi: 10.4103/jehp.jehp_262_18. PubMed PMID: 31143802; PubMed Central PMCID: PMC6512217.