Disaster Preparedness and Safety Curriculum for Early Childhood Education in Indonesia

Rizky Andana Pohan;^{1,2}^o Erfan Ramadhani;^{2,3}^o Marimbun Marimbun;¹ Wan Chalidaziah;¹ Nengsih Nengsih;¹ Marhaban Marhaban¹

1. Institut Agama Islam Negeri Langsa, Aceh, Indonesia

2. Universitas Negeri Malang, Malang, Indonesia

3. Universitas PGRI Palembang, Palembang, Indonesia

Correspondence:

Rizky Andana Pohan

Department of Islamic Guidance and Counseling

Jl. Meurandeh, Kota Langsa, Aceh, Indonesia E-mail: andanapohan@iainlangsa.ac.id

Conflicts of interest/funding: Beasiswa

Indonesia Bangkit, Ministry of Religious Affairs & Lembaga Pengelola Dana Pendidikan (LPDP), Ministry of Finance, Republic of Indonesia, ID number: BU04-231-0000093. The authors declare no conflicts of interest.

Keywords: earthquake; education; Indonesia; tsunami

Received: January 11, 2024 Accepted: January 31, 2024

doi:10.1017/S1049023X24000177

© The Author(s), 2024. Published by Cambridge University Press on behalf of World Association for Disaster and Emergency Medicine.

Abstract

Background: Indonesia is located within the Asia-Pacific Ring of Fire, so natural disasters such as earthquakes, tsunamis, volcanic eruptions, floods, and landslides are common. Preparedness is essential to prevent many casualties due to various disasters.

Problem: The Aceh, Indonesia earthquake and tsunami in 2004 was one of the most devastating disasters since the 1990s. Some of the victims were children. This is because there was no pattern of preparedness in dealing with disasters when the incident took place; even the word tsunami was not familiar in Indonesia at that time. Thus, the preparation of a disaster preparedness and safety curriculum began to be implemented in Indonesia after the Aceh earthquake and tsunami.

Conclusion: The disaster preparedness and safety curriculum in early childhood education is developed in accordance with the potential and characteristics of the school area. Basic disaster material provided concepts, characteristics and threats, maps, ways of overcoming, and disaster preparedness and security. Facilities and infrastructure supporting disaster preparedness learning used disaster puzzles, disaster posters, songs about disasters, and prayers asking God for help to be protected from disasters.

Pohan RA, Ramadhani E, Marimbun M, Chalidaziah W, Nengsih N, Marhaban M. Disaster preparedness and safety curriculum for early childhood education in Indonesia. *Prehosp Disaster Med.* 2024;39(2):228–229.

Dear Editor,

We are writing this correspondence in response to various articles published on disaster preparedness around the world, especially the article entitled "Disaster Preparedness and Hospital Safety in State Hospitals in Lima (Peru)."¹ This article describes disaster preparedness in Peru from the perspective of hospital health facilities. We discuss the situation in Peru with the similarity of Indonesia's geography, which is also within the Asia Pacific Ring of Fire, resulting in frequent natural disasters such as earthquakes, tsunamis, volcanic eruptions, floods, and landslides. We discuss from the perspective of mental preparedness starting from early childhood education implemented in Indonesia so that it will add insight into public health around the world.

The 2004 Aceh earthquake and tsunami disaster was the largest disaster faced by Indonesia, which claimed 227,898 lives and attracted the attention of all countries in the world to provide assistance.² Learning from various disasters in Indonesia, the Indonesian government, through the Ministry of Education and Culture, in collaboration with the National Disaster Management Agency, the Ministry of Health released a disaster education curriculum for early childhood education units. The disaster preparedness curriculum included the theme of natural phenomena and child safety and security standards, which included the availability of safety guidelines and practices in dealing with emergencies, including disasters.³ The disaster curriculum is prepared in accordance with the potential and characteristics of disasters in each region of Indonesia. Some basic disaster material given to early childhood units included: (1) the concept of disaster, (2) characteristics and threats, (3) a map of disasters in Indonesia, (4) how to cope, and (5) disaster preparedness.

Some of the materials in preparedness that are taught from an early age are: (1) understanding the dangers around them, (2) understanding early warning systems as well as evacuation and shelter routes, (3) practicing taking quick initiatives and protecting themselves, and (4) preparing necessary items such as water, food, medicine, lights, money, securities, and clothes for at least three days. Besides special training materials on disaster



preparedness, materials are also delivered in accordance with early childhood competencies; for example, aspects of religious and moral development such as praying to avoid disasters, showing gratitude for God's creation.⁴ On the social-emotional aspect of helping each other, the cognitive development aspect of understanding the concept of cause and effect. The language development aspect is being able to tell the conditions and consequences when a disaster occurs; the physical motor aspect is shown by being able to help themselves from disasters.

References

- Obando Zegarra R, Arévalo-Ipanaqué JM, Aliaga Sánchez RA, Cernuda Martínez JA, Delgado Echevarría JC, Arcos González P. Disaster preparedness and hospital safety in state hospitals in Lima (Peru). *Prehosp Disaster Med.* 2023;38(5):601–605.
- Rofi A, Doocy S, Robinson C. Tsunami mortality and displacement in Aceh province, Indonesia. *Disasters*. 2006;30(3):340–350.
- Proulx K, Aboud F. Disaster risk reduction in early childhood education: effects on preschool quality and child outcomes. *Int J Educ Dev.* 2019;66:1–7.

In addition, supporting facilities and infrastructure for disaster learning are also prepared in accordance with the plan, such as disaster puzzles, disaster posters, songs about disasters, and prayers asking God for help to be protected from disasters.⁵ Various games commonly used by teachers such as using paper, wood, buttons, straws, stones, picture cards, plasticine, yarn, and ropes are used to simulate tsunamis, earthquakes, landslides, volcanic eruptions, and floods.⁶ The evaluation stage is carried out by observation, checklist, anecdote notes, and children's work related to the theme of disaster.

- Gianisa A, Le De L. The role of religious beliefs and practices in disaster: the case study of 2009 earthquake in Padang city, Indonesia. *Disaster Prev Manag An Int J.* 2018;27(1):74–86.
- Ilyas SM. Islamic Psychotherapy In The Pandemic Of Covid-19. ENLIGHTEN. 2020;3(1):35–47.
 Michaelides M, Mastoras T, Grundy C, Arakawa T, Yamabe S, Suzuki T. Practice of
- Michaelides M, Mastoras T, Grundy C, Arakawa T, Yamabe S, Suzuki T. Practice of game development project-based learning classes for improving disaster management. *Educ Sci.* 2023;13(10):999.