Disaster Medicine and Public Health Preparedness

www.cambridge.org/dmp

Letter to the Editor

Cite this article: Ayhan Başer D and Gümüştakim RŞ. Addressing the urgent concerns of disaster-related hypertension after the 2023 Turkey earthquake: Letter to editor. Disaster Med Public Health Prep. 18(e51), 1. doi: https://doi.org/10.1017/dmp.2024.51.

Keywords:

community health planning; crush syndrome; disaster medicine; disease outbreaks; earthquake; hypertension

Corresponding author:

Duygu Ayhan Başer; Email: duyguayhan@outlook.com

© The Author(s), 2024. Published by Cambridge University Press on behalf of Society for Disaster Medicine and Public Health, Inc.



Addressing the Urgent Concerns of Disaster-Related Hypertension After the 2023 Turkey Earthquake: Letter to Editor

Duygu Ayhan Başer MD¹ and Raziye Şule Gümüştakim MD²

¹Hacettepe, University, Faculty of Medicine, Department of Family Medicine, Ankara, Turkey and ²Sütcü Imam University Faculty of Medicine Department of Family Medicine, Maras, Turkey

Dear Editor,

Bringing attention to a critical public health issue post the devastating earthquake in Turkey in 2023 is crucial. Beyond the initial impact covered extensively, it is vital to shed light on the potential long-term health repercussions for survivors and affected communities.

According to recent reports from the Ministry of Health in Turkey, the 2023 earthquake resulted in the displacement of over 100,000 people and caused significant damage to infrastructure, leaving countless individuals in a state of distress and uncertainty. The emotional and psychological toll of such an event cannot be underestimated, and these factors can have a profound impact on physical health as well.

Research conducted after previous earthquakes, such as the 1999 Izmit earthquake in Turkey and the 2011 Tohoku earthquake in Japan, has shown a marked increase in the incidence of hypertension among survivors. Studies have indicated that the prevalence of disaster related hypertension can rise in the months following a major seismic event, as reported by Cañizares Fuentes al. in the *Journal of Disaster Medicine and Public Health Preparedness*. Similarly, it was observed in the 2023 Turkey earthquake that many people, with or without a history of hypertension, applied to the emergency units of hospitals due to high blood pressure. According to the preliminary results of a study conducted by Gümüştakim et al., 40.3% of the emergency service applicants (N = 253) who were found to have high blood pressure in the first week after the 2023 Turkish earthquake had no history of hypertension.

Furthermore, a study by Narita et al. highlighted that disaster-related hypertension is not only a short-term concern but can also have lasting effects.⁴ Their research found that individuals who experienced disaster-related hypertension were at a significantly higher risk of developing chronic hypertension in the years following the event.⁴

In the case of the 2023 Turkey earthquake, it is imperative to take a proactive stance in tackling the potential surge in hypertension cases among survivors. Early intervention and proper management are crucial to prevent long-term health complications. Community-wide initiatives should be established to provide accessible mental health services, counseling, and education about stress management techniques. Additionally, health screenings and monitoring for hypertension should be implemented in the affected areas, as recommended by the World Health Organization's guidelines on postdisaster health assessments.

Ensuring that the well-being of the survivors remains a top priority is a collective responsibility.⁵ Addressing the potential impact of disaster-related hypertension now contributes to building a healthier and more resilient society in the years to come.

Acknowledgment. None.

Competing interests. The author declared no potential conflict of interest with respect to the research, authorship, and/or publication of this study.

References

- Ministry of Health Earthquake Information Platform 2021. Accessed August 11, 2023. https://deprem.saglik.gov.tr/
- The Association of Public Health Specialists. 6 February 2023 Earthquakes Third Month Field Report. May 12, 2023, Ankara. Accessed August 11, 2023. https://hasuder.org/Dokumanlar/EkIndir/fd603927-a389-a219-d620-3a0b3590822b
- Fuentes R, Barquet Abi Hanna G, Santana Véliz C, et al. Effects of the pedernales earthquake on Ecuador's health care system. Disaster Med Public Health Prep. 2022;16(2):531-540. doi: 10.1017/dmp.2020.286
- 4. Narita K, Hoshide S, Kario K. Time course of disaster-related cardiovascular disease and blood pressure elevation. *Hypertens Res.* 2021;44(11):1534-1539. doi: 10.1038/s41440-021-00698-y
- 5. **El-Barazi AS.** Psychological support for earthquake survivors in Turkey and Syria. *J Emerg Trauma Shock*. 2023;16(4):171-176. doi: 10.4103/jets.jets_46_23