

## Editorial

## An earthquake that took away lives, an unpreparedness that shattered dreams: Orthopedic science calls for data

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Türkiye and Syria awoke on 6<sup>th</sup> of February, 2023 to a catastrophe. Devastating earthquakes with magnitudes of 7.7M(w) and 7.6M(w) struck Kahramanmaraş, Hatay, Adıyaman, Malatya, Adana, Gaziantep, Kilis, Diyarbakır, Şanlıurfa and Osmaniye at 4:17 and later at 13:24 on February 6th 2023. More than 54,000 structures including homes, hospitals, schools and government facilities, were destroyed resulting in the untimely death of 45,089 people and 108,368 injuries.<sup>1</sup> These earthquakes were the deadliest since 1999, when a similar magnitude earthquake had hit eastern Marmara region, killing 18,373. The vast destruction of buildings and infrastructure has left many injured, homeless, and 1,971,589 have been compelled to relocate to nearby cities due to the extensive devastation of buildings and infrastructure. It is estimated that 528,146 of them were evacuated by official institutions.<sup>2</sup>

Earthquakes are unpreventable natural disasters thus some harm is inevitable. Preparedness is essential to minimize loss of life and maximize early recovery. However, sadly it became evident that lessons to be learned from eastern Marmara or other recent deadly earthquakes had not been effectively implemented as it is also mentioned by the editors of T. Journal of Pediatrics.<sup>3</sup>

The earthquakes have had a major effect on Türkiye's health-care system, causing damage to hospitals and health clinics in the affected areas, resulting in a shortage of medical facilities for injured and displaced people. Local and international search and rescue teams accompanied by medical teams both official or voluntary flew to the area yet it was difficult to reach the area due to the damaged roads and airports. They were never "enough" facing the vastness of the area that earthquake stroke. There is no room for despair in the hard-working medical rescue teams, they had to be organized. Along with the hospitals and health institutions, which were destroyed in many locations medical supply were also left under the ruins. Despite all these unfavorable conditions, the necessary first treatments were carried out

in field hospitals and the injured were transferred to neighboring provinces.

I must admit, selfless, courageous work performed by orthopedic and trauma surgeons in a team of emergency medicine specialists, neurosurgeons, thoracic surgeons and of course internists including pediatricians needs to be applauded. At this point, I must mention about the incredible efforts of The Turkish Association of Orthopaedics and Traumatology (TOTDER) and The Turkish Society of Orthopaedics and Traumatology (TOTBID) which AOTT is their official journal, in the earthquake-affected region. TOTDER and TOTBID must get a standing ovation for sending container homes under difficult logistical conditions to the earthquake victim orthopedic physicians in the region who had to rush to the aid of the injured.

From a scientific point of view, as the editor of Acta Orthopaedica et Traumatologica Turcica it was my duty to call for data collection for further investigation of the actions taken on site or at the hospitals in the vicinity. It is certainly our duty as Orthopedic surgeons, to transfer such valuable information and experience to scientific papers. Kirsh and Hsu has expressed their view in an invited editorial with the following words: "A major barrier to improvement of health care response following disasters is the difficulty of collecting accurate data. In the immediate aftermath of an event, implementing a practical study design and collection of accurate data is no simple task, affected in large part by factors ranging from the frenzied environment and highly mobile populations to unclear denominators and lack of universally accepted indicators. This often limits our ability to generalize findings and determine effectiveness of health-related interventions".<sup>4</sup> Yet, I couldn't agree more to the following sentence again by Kirsh and Hsu. "Rather than continuously developing new epidemiological tools with disparate methods of data collection used in each disaster, a comprehensive approach to systematic data collection and reporting should be revisited".<sup>4</sup>



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In the coming issues you will be reading some review articles by experts in an “earthquake” special issue and hopefully clinical studies related to earthquake.

As I wrap up, I express my hope for the day when we will no longer experience these excruciating pains, learn from our mistakes, and become more prepared. I want to send my condolences to the 448 medical professionals who perished in the earthquake, and I also want to remember our colleagues Drs. Süleyman Alpaslan, Vissam El Assad, Emre Aşkar, Ahmet Kaptanoğlu, Ali Faruk Müftüoğlu, and Sefa Koray Tosun, who were also among the victims.

## References

1. <https://www.afad.gov.tr/kahramanmarasta-meydanagelen-depremler-hk-36>.
2. Reliefweb. *Turkey-Earthquake: Emergency Situation* [report] Accessed 28.02.2023. <https://reliefweb.int/report/turkiye/turkey-earthquake-emergency-situation-report-28022023>; 2023.
3. Düzova A, Akgül S, Utine GE, Yıldız Y. The Türkiye-Syria Earthquake: a response from the editors of the Turkish Journal of pediatrics. *Turk J Pediatr*. 2023;65(1):1-2. [\[CrossRef\]](#).
4. Kirsch TD, Hsu EB. Disaster medicine: what is the reality? *Disaster Med Public Health Prep*. 2008;2(1):11-12. [\[CrossRef\]](#).