

Letter to the Editor

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Resilient Hearts: Enhancing Healthcare Preparedness for Vulnerable Populations in the Aftermath of the Morocco Earthquake

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In the heart of the High Atlas Mountains, approximately 70 kilometers southwest of Marrakesh, Morocco, a significant earthquake (measuring 6.8 on the Richter scale) struck on September 8, 2023. This is a tragic loss of over 2800 lives, with thousands more left injured. As rescue and recovery operations continued, Morocco grappled with the aftermath of one of its most devastating earthquakes in recent history, an event that profoundly shook the nation.¹

Such tragic events have profound implications for Morocco's health care system, posing a dual challenge. First, hospitals and health clinics in the affected regions suffered damage, leading to a shortage of medical facilities for the injured and displaced. Second, disruptions to power, water, and communication systems have complicated health care response efforts. As events unfolded, an immense burden was placed on the health care workforce to provide care and manage the aftermath of such crisis. The added strain has exacerbated preexisting workforce shortages and burnout within Morocco's health care system, which may affect the outcomes of disadvantage populations, particularly impacting those with chronic illnesses who require regular care.²

Beyond the physical injuries and property damage, these earthquakes have inflicted a heavy psychological toll on the affected population. The sudden and traumatic nature of the disaster has left survivors and those who have lost loved ones grappling with elevated levels of stress, anxiety fear persisting over an extended period of time. For instance, studies conducted nearly five decades after the Agadir earthquake revealed a significant prevalence of post-traumatic stress disorder (PTSD) among survivors, illustrating the profound and lasting impact of these calamities on mental well-being.³ Displacement, the loss of homes and possessions, and an uncertain future have all contributed to the psychological distress experienced by affected communities, highlighting the need for effective mitigation strategies.

Morocco has a significant opportunity to learn from Turkey's extensive experiences with earthquakes, considering their shared location within a seismically active region. Earlier in the same year, Turkey and Syria endured a seismic catastrophe marked by a formidable 7.8-magnitude earthquake, followed by numerous aftershocks, and a subsequent major quake registering at 7.6 in magnitude.^{4–6} These distressing events serve as a stark reminder of the paramount importance of public awareness campaigns regarding aftershocks, along with comprehensive educational initiatives centered on earthquake safety. Furthermore, encouraging active participation from local communities in disaster preparedness efforts can play a pivotal role in bolstering Morocco's resilience against the potential repercussions of future seismic events.

To address the challenge of disaster preparedness and response, Morocco recognized the need for a comprehensive and well-coordinated strategy involving all relevant stakeholders. This included government agencies, health care providers, and local communities. Securing increased funding and resources for the health care system was identified as pivotal to ensuring its capacity to respond effectively to disasters. Investments are needed in infrastructure, equipment, personnel, and maintaining an adequate supply of medical resources. Enhancing communication and information systems within the health care sector is a priority to facilitate coordination and collaboration between health care providers and disaster responders.

The aftermath of the earthquake presented Morocco with significant challenges and necessitated urgent action, increased resources, and improved communication systems. The disaster underlined the importance of providing psychological support and interventions to help the affected population cope with the trauma. It also underscored the need for a holistic approach to disaster management, one that included not only physical rebuilding but also attending to the mental health and emotional well-being of the survivors.

In the wake of the earthquake, Morocco's response and recovery efforts focused on several key areas. Immediate actions included providing essential supplies to affected individuals, restoring power, and ensuring the functionality of critical infrastructure, particularly hospitals.

These measures aimed to minimize immediate health threats, such as exposure to extreme weather conditions, and the spread of waterborne and vector-borne diseases.

The long-term management of the disaster's impact involved training health care personnel in disaster management, even in areas less prone to earthquakes. This training was crucial for preparing health care workers to handle such emergencies effectively. The need for comprehensive disaster planning efforts was starkly highlighted, particularly considering the vulnerabilities exposed by the disaster, such as the fragility of electrical grids and the challenges of reaching isolated communities.

Morocco's experience with the earthquake was a poignant reminder of the societal impact of natural disasters. Beyond the immediate physical injuries and property damage, the disaster had far-reaching effects on the social fabric of affected communities. The trauma experienced by survivors often led to mental health issues such as post-traumatic stress disorder (PTSD) and depression, which required long-term care and support. These conditions affected individuals' ability to work, engage in community life, and maintain social relationships, further impacting the societal fabric.

In conclusion, the earthquake that struck Morocco in 2023 was a devastating event with far-reaching implications. It highlighted the urgent need for comprehensive disaster preparedness, effective health care response, and long-term psychological support for affected communities. Morocco's history of resilience served as a foundation for its recovery, emphasizing the strength of its people in the face of adversity. The nation's

response to this disaster set a precedent for future disaster management and preparedness, not just in Morocco but in other regions vulnerable to seismic activity.

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