The Impact of the Devastating Turkey-Syria Earthquake on the Fragile Health Care System in War-Torn Syria

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Conflicts of interest/financial support: The authors declare no conflict of interest. This research did not receive any financial support.

Keywords: earthquake; health care; Turkey; Syria; war

Received: April 6, 2023 Accepted: May 6, 2023

doi:10.1017/S1049023X23005903

© The Author(s), 2023. Published by Cambridge University Press on behalf of the World Association for Disaster and Emergency Medicine. Patwary MM, Ashraf S, Swed S, Shoib S. The impact of the devastating Turkey-Syria earthquake on the fragile health care system in war-torn Syria. *Prehosp Disaster Med.* 2023;38(4):537–538.

A 7.8 magnitude earthquake struck southeastern Turkey and northern Syria on February 6, 2023. The earthquake hit early in the morning, causing hundreds of buildings to collapse and killing over 50,000 people, including 4,500 deaths and 8,500 injuries registered in Syria.¹ This earthquake in Turkey is considered to be the strongest since 1939 and among the rare earthquakes with magnitude 7.0 or greater world-wide, with few occurring each year.² While both countries have been affected, Turkey has a relatively stronger emergency response infrastructure and health care system, and received much more international attention.³ However, the situation in Syria is direr, with the population already suffering from the long-standing conflict and economic crisis; yet, they received little international attention in comparison.

The earthquake has brought a devastating blow to the vulnerable populations in Syria who are already struggling with the conflict, coronavirus disease 2019/COVID-19, and economic crisis. Further, thousands were left exposed to freezing temperatures and a recent storm caused significant damage to shelters in Northwestern Syria.⁴ Women and children, who were already relying on aid, were hit the hardest and are susceptible to exploitation and abuse if displaced again. Many have already been displaced up to 20 times, and access to health care was already limited prior to the disaster. The situation is dire, and humanitarian aid is crucial to helping those affected recover.⁵

The earthquake has worsened the country's already existing health crisis, including outbreaks of cholera, respiratory illnesses, and chronic diseases. There have been almost 85,000 cases of cholera and 101 deaths since August; Syria has been among the 23 countries battling cholera outbreaks, and a shortage of vaccines is exacerbating the situation.⁶ The earthquake caused significant damage to the water networks, which lead to the increased risk of waterborne illnesses and may worsen the pre-existing cholera and hepatitis-A outbreak. The earthquake has also disrupted regular health care services and may impact the emergency care required for an estimated 5,000 pregnant women experiencing complications in affected areas.⁶

The health system in Syria has already been devastated by the on-going conflict for over 12 years, with almost 30% of public health facilities out of operation.⁷ The earthquake has compounded this crisis, causing significant damage to medical facilities and leaving thousands of injured people without access to care. In total, 146 health care facilities have been damaged, including 55 in Northwestern Syria where 570 cases of cholera and 23 deaths have been reported. The earthquake has disrupted the supply of medicine and rendered numerous hospitals inoperable, exacerbating the already high turnover rate for doctors in border areas. This could lead to an exodus of new doctors, especially those commuting from Turkish border cities, creating a shortage of medical professionals in an area that desperately needs them. The fragile health care system is struggling to provide adequate care for earthquake survivors and other patients, making the situation even more challenging.⁸

The earthquake has also placed a significant strain on Syrians' mental health, exacerbating the already limited availability of mental health services in Syria. The lack of mental health infrastructure and shortage of trained professionals present challenges in addressing the mental health needs of earthquake survivors. The mental health services have already been dire in Syria with only 120 psychiatrists before pre-war era, which have been further damaged by war and crisis.⁹ Many mental health professionals have fled Syria, and



psychiatric hospitals and academic institutions have been destroyed,⁹ leading to long wait times and inadequate treatment, leaving many survivors without necessary support.

The earthquake in Syria has become further challenging to handle due to limited rescue resources and old equipment. Despite this, international humanitarian organizations have stepped up and started rescue missions to help those in need, but are hindered by limited resources and a fragile health care system. In light of this, increased international attention and resources are needed, including targeted humanitarian aid, resources to rebuild damaged

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infrastructure, and support for the health care system. Additionally, immediate crisis counseling and psychological first aid should be provided to survivors in cooperation with qualified psychiatrists. This assistance is crucial to address the immediate needs of the population and to mitigate the long-term impact of the earthquake on vulnerable communities in Syria.

Author Contributions

All authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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