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Are scorpion stings the new public health threat for southeast Turkey and northern Syria after the earthquakes? An emphasis on *Leiurus quinquestriatus*

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In tropical countries, scorpion sting is a significant cause of disease, leading to severe localized cutaneous reactions, neurologic impairments, and respiratory distress, as well as myocarditis[1]. The world's most poisonous scorpion species, *Leiurus quinquestriatus*, is found in southern Turkey and is a threat to the public's health in all of the provinces, particularly in Adiyaman and its surrounding areas, which were hit by the recent Turkey and Syria earthquake[1].

The scorpion species *Leiurus quinquestriatus* is unique to that region. As one of the world's most poisonous scorpions and one of the two dangerous scorpion species found in Turkey, its sting is fatal to people as its venom is twice as potent as that of the other dangerous species, such as *Androctonus crassicauda*[2]. The most concerning consequences of scorpion sting, pulmonary edema, and cardiogenic shock, are linked to cardiac involvement[3]. An antidote should be given in extreme situations, especially when children are involved. Children under 5 are among the most vulnerable populations associated with a higher risk for these illnesses, which is strongly associated with mortality and poor outcomes[4].

The devastating earthquake hammered southern Turkey and northern Syria on February 6, 2023, resulting in a severe humanitarian disaster. By March 20, 2023, there had been over 50000 reported deaths in Turkey and over 8000 in Syria[5]. The earthquake had forced Syria, which is already at war, and Turkey, which is already in an economic crisis and had been severely struck, into even worse situations. The inhabitants of these two countries would experience pernicious, long-term health consequences if this immediate catastrophe is not appropriately managed.

People must adapt to new living situations as a result of disasters like earthquakes. The vast majority of those impacted by the earthquake in Turkey and Syria had left their homes. In addition to being susceptible to the risk of potential outbreaks of post-disaster infectious diseases, the individuals who still reside in earthquake-

affected areas do so in tents and containers, exposing them to the outdoor environment and making them prone to insect bites. Most importantly, scorpion stings had been detected in Turkey and Syria, in areas where the earthquake inflicted the most damage[6]. The connection between the earthquake and cases of scorpion stings had not been reported yet since the earthquake took place in the winter. However, it is highly possible that as the weather gets warmer, the movement of stinging poisonous creatures will increase, making the locals a potential target of the risk[7].

In addition to using social and individual methods, policymakers have a lot of work to do to control the scorpion species *Leiurus quinquestriatus*. In this scenario, it is important to make appropriate use of primary healthcare services and to run efficient prevention and treatment programs to mitigate people's risk from scorpion stings[8].

Conflict of interest statement

The authors report no conflict of interest.

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