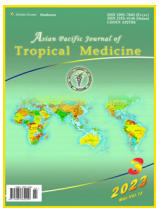

Perspective

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A minor emphasis on the outbreak of cutaneous leishmaniasis after devastating earthquakes in Turkey

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Leishmaniasis is a serious parasitic disease caused by *Leishmania* species transmitted by the bite of sandflies. This disease is also an important public health problem. Clinical manifestations can be classified as cutaneous, mucocutaneous, and visceral leishmaniasis, depending on the species of parasite and the host's immune status. Although the cutaneous form is not fatal, it often causes disfiguring scars on the skin[1].

Even the disease is preventable and treatable, there is no currently licensed vaccine or ideal therapeutic drug against any form of leishmaniasis. The therapeutic response is affected by many factors, mainly dependent on the parasite species[1,2]. It is of vital importance to know the epidemiology of *Leishmania* species and the clinical features of the disease to determine the appropriate treatment approaches for the disease[3].

Following the conflict in Syria, which began in 2011, a marked increase in the number of cutaneous leishmaniasis (CL) cases in Turkey was observed (Figure 1)[4]. One of the most important reasons for this may be the migration of the population, more than 3 million, from Syria to Turkey due to the conflicts in Syria. Due to the variation in the species of vectors carrying the parasite, the most common causative agents of CL are *Leishmania (L.) tropica* (the vector is *Phlebotomus sergenti*) and *L. major* (the vector is *Phlebotomus papatasi*) in Turkey and Syria, respectively[5]. Not only *L. tropica*, but also *L. major*, can become endemic parasitic species that cause the disease in Turkey due to migration of the population mentioned above.

Natural disasters, such as earthquakes, often force people to relocate and live in crowded conditions and low hygiene standards. In areas where vector-borne diseases are endemic, the displacement of thousands of people can significantly cause human exposure to vectors, resulting in a dramatically increased incidence of human infection and changes in the distribution of pathogen species[6].

On 6 February 2023, a major earthquake struck southeast of Turkey, near the Syrian border. According to official data, more than 50 000 people died and many more were injured, and about 10 000 aftershocks occurred in the first 20 days of this earthquake. In Turkey, the earthquake affected more than 13.5 million people and more than 500 000 people were evacuated from the earthquake zone. The public was warned about the risk of various epidemics.

Crucially, the region where the earthquake caused the greatest damage is the endemic CL region, where 96% of CL cases were detected in Turkey[7]. The region in Syria, where the earthquake caused substantial damage, is also endemic.

Earthquakes have dramatic effects on both serious damage to healthcare infrastructure and on the epidemiology of many diseases, including CL[6]. However, at least for now, leishmaniasis associated with the earthquake was not mentioned. This may be because the earthquake happened in winter and the sandfly vectors responsible for the spread of CL disease prefer warm temperatures and are most active from late spring to early autumn. Therefore, careful planning is required for post-earthquake disease control and surveillance.

Individual and community-based approaches are of great importance in preventing and treating leishmaniasis[2]. In this context, comprehensive treatment and preventive research on this disease and highlighting up-to-date information play an important role. Therefore, we read with great enthusiasm the article by Dinc, which highlights up-to-date information on treatment[8].

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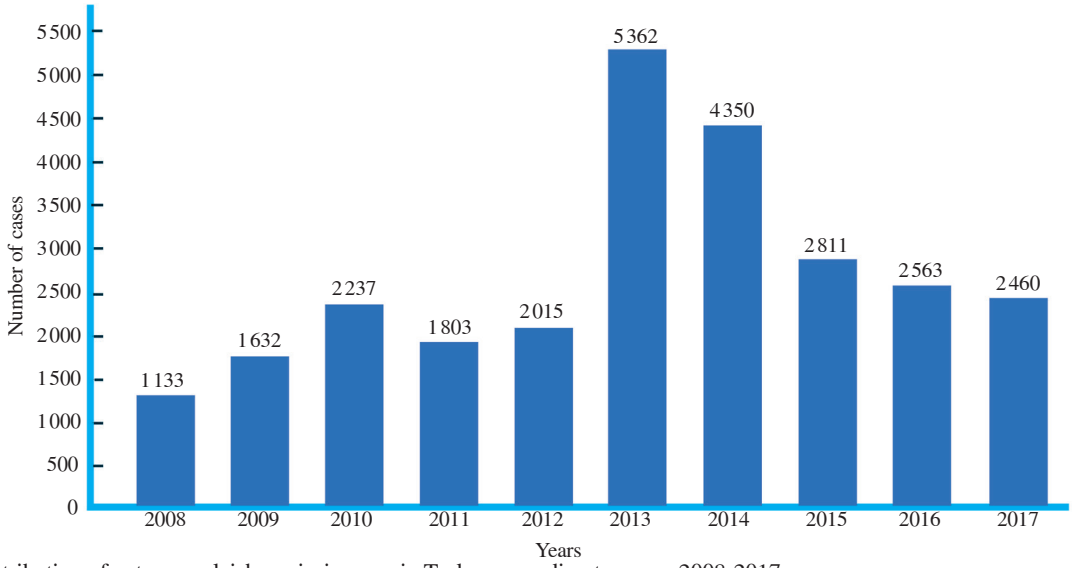

Figure 1. Distribution of cutaneous leishmaniasis cases in Turkey according to years, 2008-2017.

Conflict of interest statement

We declare that there is no conflict of interest.

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Authors' contributions

NA conceptualized the manuscript. INA searched the literature and drafted the manuscript. NA edited and supervised the manuscript. All authors have read and agreed to the final version of the manuscript.

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