Biological Times

Volume No. 3 | Issue No. 2 | Pages 24-25

The Global Rise of Anthroponotic Cutaneous Leishmaniasis: An Emerging Threat

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ABSTRACT

Anthroponotic cutaneous leishmaniasis is emerging as a significant global health concern, transcending its traditional geographic boundaries. The complex interplay of ecological, socioeconomic, and climatic factors underscores the need for a multifaceted approach to tackling this rising threat. International collaboration, research, and innovative strategies are essential to effectively control and prevent the further spread of Anthroponotic Cutaneous Leishmaniasis, safeguarding communities from the burdens imposed by this neglected tropical disease. This article underscores the need for international collaboration and innovative strategies to address the multifaceted challenges posed by the global arising of Anthroponotic Cutaneous Leishmaniasis, emphasizing the importance of proactive measures to mitigate the impact of this emerging threat on public health.

Keywords: Cutaneous Leishmaniasis, Anthroponosis, Global Rising, Public Health, Travelers

Introduction:

Leishmaniasis is a vector borne parasitic protozoan disease caused by the genus Leishmania. Humans acquire leishmaniasis when infected female sandflies carrying the infection bite them [1,2]. Leishmaniasis is still a neglected and dangerous illness throughout the world. Three types of leishmaniasis: visceral, cutaneous, and mucocutaneous leishmaniasis [1,3]. Although the exact amount of disease burden is unclear, recent estimates suggest that among the 1 billion people who are at risk, there are up to 1.3 million new cases of leishmaniasis each year, 12 million cases of prevalence, and between 26,000 and 65,000 fatalities in 101 countries and territories [3,4].

Cutaneous leishmaniasis (CL) is a neglected parasitic disease caused by *Leishmania tropica*, primarily transmitted through the bites of infected sandflies [4,5]. The anthroponotic nature of cutaneous leishmaniasis becomes worse due to risk factors that include living close to wooded areas, extreme poverty linked to substandard housing that permits uncontrolled human-to-human transmission, a lack of bednets, and a lack of knowledge about CL as a public health issue [6].

CL is spreading more quickly and widely than in previous years in various regions of the world [7]. Cutaneous leishmaniasis has been a known threat in many parts of the world; recent years have witnessed a concerning rise in the incidence of anthroponotic cutaneous leishmaniasis, posing a new and emerging public health challenge globally [6].

The real burden today, however, is far more than what the earlier figures indicated. According to recent CL data, this disease is a significant social and medical issue in the affected countries because of complicated circumstances, prolonged conflict, the ensuing migration, and unprecedented environmental dangers [3,8]. In over seventy different countries, cutaneous leishmaniasis is the most epidemic illness. It is a common variety that is extensively distributed and poses a severe threat to public health [3,9]. Skin sores on exposed body parts that are frequently bit by female sandflies are a symptom of cutaneous leishmaniasis as shown in Figure 1. Though the condition heals on its own, it leaves behind permanent skin scars, noticeable disfigurement, extreme handicaps, severe sadness, and social humiliation [10].

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Figure 1: Skin lesions of cutaneous leishmaniasis [11]

Rapid urbanization and migration have created favorable environments for sandflies to thrive, leading to an increased risk of transmission in urban settings. Overcrowded living conditions and inadequate sanitation further exacerbate the spread of the disease in urban areas [12] The last ten years have seen a significant increase in the disease's spread across the Middle East and North Africa, primarily as a result of the migration of millions of Syrian, Iraqi, and Afghani refugees [13]. As evidenced by recent international records from Syria, Mexico, Brazil, Iraq, Afghanistan, Pakistan, Libya, Israel, and Iran, CL has been growing and reaching new areas of focus [14,15].

People who move from non-endemic areas to endemic areas with vector-borne diseases run the risk of contracting these diseases. The sickness known as CL, which is carried by sand flies, has been documented in tourists who enter the endemic foci of this protozoan parasitic illness [16,17,18].

Conclusion:

In conclusion, Anthroponotic cutaneous leishmaniasis is an emerging global health threat with complex challenges. As the incidence of ACL continues to rise and its geographical distribution expands, there is an urgent need for heightened awareness, international collaboration, and research initiatives to develop innovative strategies for prevention, diagnosis, and treatment. Addressing ACL requires a holistic approach that

To cite this article: Ismael SS, WJ Omer & RB Jalal. 2024. The global rise of anthroponotic cutaneous leishmaniasis: an emerging threat. Biological Times, 3(2): 24-25.

considers the dynamic interplay of environmental, social, and biological factors influencing its spread and impact.

In light of the evolving landscape of ACL, this article sets the stage for a deeper exploration of the various dimensions of this emerging threat. Understanding the dynamic factors influencing its spread and impact is crucial for developing effective strategies in prevention, diagnosis, and treatment, as well as for guiding international collaboration to address this increasingly global health challenge.

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