

Leishmaniasis Outbreak in Pakistan: Dire Need of Intervention for Cure and Prevention

Sir,

Leishmaniasis is a parasitic disease, caused by the obligate intracellular protozoan, from the genus *Leishmania*, with approximately 20 different species causing the disease. It is transmitted through the bite of the female phlebotomine sandfly. It can present as a cutaneous or a visceral disease. The cutaneous lesions are characterised by small papules to nodular plaques, which may eventually transform into open sores with raised borders, and furthermore into scars.¹

Cutaneous leishmaniasis has had an epidemic outbreak in Pakistan's Khyber-Pakhtunkhwa province, as reported in February 2019. Data from the Ministry of Health, Khyber-Pakhtunkhwa shows more than 21,000 cases have been reported in the province, with 9,378 cases reported from Peshawar, 5,373 from Mohmand, 2,802 from Bajaur, and 1,017 from Karak.²

This disease has been much underreported for years, as it is only mandatory to report in 32 of the 88 countries endemic for disease and the stigma associated with the infection's disfiguring nature compels the affected people to hide it.³

In Pakistan, there is a lack of record-keeping and outbreak reports to health authorities. Due to the region's safety concerns, there is a lack of research by national and international researchers alike. Moreover, climate that encourages the vector's growth and migration of the infected people from an endemic region to a non-endemic region has aggravated the disease burden.⁴

With the recent outbreak, it has become a matter of utmost importance to prevent further spread of the disease, and to manage it accordingly. A vertical analysis about possible interventions that can be undertaken for the management and prevention of leishmaniasis, include, vector control by use of long lasting insecticide, bed-netting laced with insecticide, and a basic education about the disease has proven to be affective in the long term. Furthermore, early diagnosis by the use of microscopes and skilled personnel, new medication protocols for the disease and encouraging communication between medical personnel, government officials and the community members have also proven to be beneficial for the containment of the infection.⁵

Henceforth, Pakistan has to increase its resources for the prevention of this infection, as its spread has social implications as well. There is a need for a reassessment

of the local burden of cutaneous leishmaniasis because current figures are based on poor notification data and do not include social impact (disability) caused by scarring of lesions. There should also be an investigation regarding associations between disease distribution, socio-demographic, and environmental risk factors at both smaller and larger levels so that realistic prevention and control strategies can be developed. There should be continued support for field studies to investigate sandfly ecology, because they are of utmost importance for the development of putative prevention and control strategies. Community education programs should be instated and a community based approach should be implemented so that we get rid of this disease once and for all.

CONFLICT OF INTEREST:

Authors declared no conflict of interest.

AUTHORS' CONTRIBUTION:

SH: Wrote the article and performed extensive literature review.

SMT: Suggested the topic of discussion, revised the article before submission.

SH: Reviewed the article before final submission, arranged and formatted the layout.

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