

A Review of Problems and Challenges in Leishmaniasis Control in Sri Lanka

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Leishmaniasis is an insect-transmitted disease caused by a protozoan parasite. It has a worldwide distribution. It may be an emerging zoonosis in Sri Lanka. *Leishmania* spp. infections cause a broad spectrum of clinical signs, ranging from skin lesions to fatal visceral disease. Three different types of leishmaniasis are identified in the north, western and central parts of Sri Lanka, namely, visceral leishmaniasis (VL), cutaneous leishmaniasis (CL), muco-cutaneous leishmaniasis (MCL). The vector, reservoir, host and transmission of this parasite in Sri Lanka has not been understood yet. This review aims to describe the current problems and challenges of leishmaniasis control in Sri Lanka such as difficulties encountered in drug and insecticide resistance, vector complex formation, inadequate vector control measures, poverty, malnutrition, migration of refugees and insufficient diagnosis tools and unavailable and unaffordable drugs. This review revealed that advances in the field of targeted drugs, vector control measures and genetically modified vectors and causative agents can be more efficient strategies for solving the problems and challenges of the leishmaniasis in the future.

Keywords: Leishmaniasis, Zoonosis, Vector complex, Insecticide resistance, Vector control, Genetically modified vector