SUBTHEME 6: Health Sciences- Climate Change and Public Health; Response and Impact of environmental changes on Health.

PRECONFERENCE PAPERS

119. Potential of multi-sectoral collaboration in eliminating *Visceral leishmaniasis* (Kala-azar) transmission in Isiolo county, Kenya : a climate change challenge

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Abstract

Background: Leishmaniasis is one of the vector-borne diseases (VBDs) caused by disparate species of Leishmania parasites. Global climate change affects Leishmaniasis like other climate sensitive VBDs. The effects of climate change on these diseases is multi-faceted and complex. Drought and aridity brought on by climate change significantly affect population mobility which is beneficial to sandfly vectors and increase the possibility of human infection by Leishmania parasites. The aim of this study was to evaluate the transmission dynamics of a climate change induced vector-borne disease (VBD) Visceral Leishmaniasis (Kala-azar) which is endemic in Isiolo County to determine challenges and specific recommendations to combat this disease. **Methodology**: This was a descriptive cross-sectional study design that utilized mixed methods for data collection. Quantitative data were collected using Participatory Epidemiology methods in purposively selected study villages. Qualitative data were collected through key informant interviews and semi-structured interviews. **Key Findings/Results**: Climate and environmental changes were determined as the major risk factors for Kala-azar in Isiolo County. Study results demonstrated lack of policies and strategies that promote multi-disciplinary Leishmaniasis outbreak response. Stakeholders' analysis revealed inadequate multi-sectoral coordination platforms for a more comprehensive approach to control in the County. Discussion: As a vector-borne disease, Visceral Leishmaniasis is a consequence of a complex web of vector-parasite-host interplays. In Isiolo, the challenges of Visceral Leishmaniasis prevention and control are multi-sectoral and exacerbated by ever-expanding human population, interaction of human with animals, climate and environmental changes. **Application:** Sustainable development goals advocate for multi-sectoral approach for health and development including for management of vector-borne diseases in accordance with the 2017–2030 Global Vector Control Plan of the World Health Organization. **Conclusions**: The study area's increasing Kala-azar burden is influenced by the effects of environmental factors and seasonal weather pattern variability brought on by climate change. Given that Kala-azar is a disease of poverty and neglect, inter-sectoral coordination is critical to achieving and maintaining the eradication levels. **Recommendations:** Integration of prevention and control strategies through multi-sectoral collaboration for ownership with strengthened surveillance while adhering to environmental conservation to lessen the effects of climate change on Kala-azar.

Keywords: *Climate Change, Elimination, Integrated, Multi-Sectoral, Vector-Borne Diseases, Visceral Leishmaniasis*