PREVALENCE AND RISK FACTORS ASSOCIATED WITH VISCERAL LEISHMANIASIS IN WEST POKOT COUNTY, KENYA

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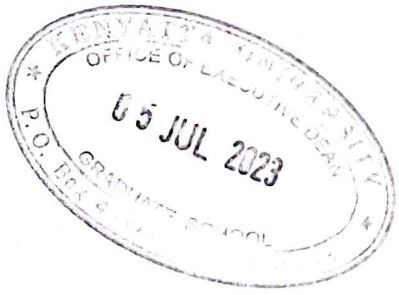

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DECLARATION

This thesis is my original work and has not been presented for a degree or other awards in any other University.

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ABSTRACT

Kala-azar is a vector-borne parasitic disease caused by *Leishmania* species and transmitted by sand fly to human. Epidemiologically, kala-azar remains disease of global public health importance with over hundred thousand reported cases annually and a growing endemicity of approximately hundred nations located mostly in the third-world. In Kenya, the disease is prevalent in the arid and semi-arid climatic zones that constitute approximately eighty percent of the country land mass. Current study aimed to establish the current disease prevalence in the area, as well as environmental, social economic and social cultural risk factors associated with visceral leishmaniasis in Pokot north constituency of West Pokot County, Kenya. A descriptive cross-sectional study design was utilized in carrying out the study. The study area was purposively selected considering the high number of cases registered in the hospital as well as disease endemicity. Cluster sampling of locations and villages and systematic sampling of households was undertaken. Semi-structured household questionnaire, observation checklist, key informant interviews and focus group discussions was used in gathering information from the field. Microsoft word template and Microsoft excel sheet was used in data entry. Statistical Package for the Social Science (SPSS) version 22 as well as Microsoft excel software was utilised in Quantitative data analysis while NVivo software was used in qualitative data analysis. Self reported household prevalence of visceral leishmaniasis in Pokot north sub-County was 21.48%. Significant risk factors in association with disease were social demographic factors like lack of formal education (X^2=16.218, df 3, $p<0.05$), large household size (X^2=9.435, df=4, $p<0.05$), herding and peasant farming occupation (X^2=76.341, df=5, $p<0.05$); Environmental factors: presences of seasonal water channels and rock piles (X^2=30.706, df=1, $p<0.05$), and presence of acacia tree in and around the compound was significantly associated with high risk of infection (X^2=21.40, df=1, $p<0.05$); Social economic factors: lower household monthly income (X^2=10.973, df=4, $p<0.05$), residing in mud house type (X^2=8.353, df=3, $p<0.05$), and dog ownership (X^2=15.209, df=1, $p<0.05$); Social cultural factors: practice of traditional night dances (X^2=4.718, df=1, $p<0.05$) as well as practicing nomadic tradition of moving houses to new temporary compounds (X^2=20.919, df=1, $p<0.05$). The prevalence of kala-azar remains high and environmental, social economic, as well as social cultural characteristics are important predictors of risk of infection. The study recommends community economic empowerment to reduce level of vulnerability and social mobilization targeting behaviour modification to achieve better disease prevention and control outcome.