

New research calls for rethink on approach to treating neglected tropical diseases in urban areas

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New research published today in *The Lancet Infectious Diseases*, suggests the effectiveness of large-scale distribution of medication (known as Mass Drug Administration or MDA) to treat lymphatic filariasis (LF) in urban areas needs to be re-examined.

The researchers from the Liverpool School of Tropical Medicine (LSTM), Sightsavers, Noguchi Memorial Institute for Medical Research at the University of Ghana, the Ghana Health Service, and the Ministries of Health of Burkina Faso and Cote d'Ivoire, have found that MDA for lymphatic filariasis, whilst highly successful in rural areas, is often challenging and costly to carry out in urban centres.

LF is transmitted to people via mosquito bite and is often categorised by the severe enlargement of body parts, causing pain, disability and stigma. It is one of a group of preventable and treatable conditions known as neglected tropical diseases (NTDs). 120 million people worldwide are infected with LF, classifying it as the world's leading cause of physical disability.

Currently, LF treatment programmes in both rural and <u>urban areas</u>, focus on the distribution of preventive drugs to people irrespective of their infection status. However the new research indicates that MDA in urban centres is more expensive and presents particular challenges. As a result, it is difficult to achieve the standard of reaching 65% of the population



with medication consistently—the coverage required to achieve elimination of LF transmission. This therefore poses a key challenge to the global goal of eliminating LF as public health problem by 2020.

Professor David Molyneux, a co-author of the research from the Liverpool School of Tropical Medicine, said: "This paper has policy implications for <u>lymphatic filariasis</u> programmes and raises questions about the need for mass drug distribution given the evidence that transmission is limited in urban settings in West Africa. The problems faced by the filariasis community in addressing these challenges reflects a wider problem of how to tackle urban neglected tropical diseases given the increased rate of rural- urban migration, resource limitations and population heterogeneity."

The research calls for more detailed studies into the effectiveness of MDA in densely populated towns and cities in Africa. It also argues that greater focus needs to be placed on vector control to minimise the risk of contracting LF from mosquito bites such as: long-lasting insecticidal nets, mosquito repellents and improved housing structures in African cities.

Simon Bush, a co-author from Sightsavers, said: "The research published today illustrates that we must continue to analyse our approach to treating neglected <u>tropical diseases</u>. Bringing together experts to review the issues identified, along with the resulting consequences for national programmes, is essential."

More information: Benjamin G Koudou et al. Elimination of lymphatic filariasis in west African urban areas: is implementation of mass drug administration necessary?, *The Lancet Infectious Diseases* (2018). DOI: 10.1016/S1473-3099(18)30069-0



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