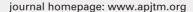


## IF: 1.634

## Asian Pacific Journal of Tropical Medicine





doi: 10.4103/1995-7645.243083

©2018 by the Asian Pacific Journal of Tropical Medicine. All rights reserved

## An overview of progress towards Neglected Tropical Disease Control in Sierra Leone

Yakuba M. Bah<sup>1</sup>, Mary H. Hodges<sup>2</sup>, Mustapha Sonnie<sup>2</sup>, Abdulai Conteh<sup>1</sup>, Jusufu Paye<sup>2</sup>, Mohamed S. Bah<sup>2</sup>, Amy Veinoglou<sup>3</sup>, Yao-bi Zhang<sup>4</sup>

**ABSTRACT** Synergy exists between infectious diseases that target the poor and perpetuate poverty. Common strategies of mass drug administration (MDA) have enabled the control and possible elimination of the five previously neglected tropical diseases (NTDs) to help alleviate poverty.

Mapping of five NTDs from 2003-2009 in Sierra Leone found lymphatic filariasis (LF) endemic in all 14 districts, soil transmitted helminthiasis (STH) endemic in all 14 districts with moderate or high prevalence, onchocerciasis endemic in 12 districts and schistosomiasis in 7 (non-coastal) districts, while trachoma was below public health intervention significance (<5%).

Coordinating with MDA, a national integrated NTD program began in 2008 with funding from United States Agency for International Development and donated or procured medicines. The goal was to eliminate LF and control STH, schistosomiasis and onchocerciasis by year 2020. The program reached full geographic coverage in 2010 with effective programme coverage for all four NTDs each year. By 2016-2018, despite one round of MDA missing due to the Ebola outbreak, LF transmission had been interrupted in 9 districts as shown by LF transmission assessment surveys (TAS), STH and schistosomiasis prevalence had decreased to low or moderate levels in all endemic districts with prevalence of moderate/heavy infection of below 1% and 2% respectively. The burden of onchocerciasis had also decreased significantly, *i.e.* at baseline the microfilaridermia prevalence (in population of 1 year old and above) using the skin snip biopsy was 53%, while a recent impact assessment using OV16 rapid diagnostic tests showed an antibody prevalence of 2% in children of 5-9 years of age using the LF TAS sampling methodology.

Despite the health sectors in Sierra Leone having been severely damaged during the war (1991-2002), with adequate and consistent funding, technical support and drug supplies, Sierra Leone has made remarkable progress towards the control/elimination of four targeted NTDs.

**Keywords:** Lymphatic filariasis; Soil transmitted helminthiasis onchocerciasis; Schistosomiasis; Mass drug administration; Sierra Leone

Article history:

Received 10 September 2018 Received in revised form 18 September 2018 Accepted 25 September 2018 Available online 15 October 2018

First author: Yakuba M. Bah, National Neglected Tropical Disease Program, New England, Freetown, Sierra Leone.

Corresponding author: Mary H. Hodges, Helen Keller International, 22 Signal Hill road, Congo Cross, Freetown, Sierra Leone.

E-mail: mhodges@hki.org

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-Share Alike 3.0 License, which allows others to remix, tweak and buid upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

©2018 Asian Pacific Journal of Tropical Medicine Produced by Wolters Kluwer- Medknow

How to cite this article: Bah YM, Hodges MH, Sonnie M, Conteh A, Paye J, Bah MS, et al. An overview of progress towards Neglected Tropical Disease Control in Sierra Leone. Asian Pac J Trop Med 2018; 11(10 suppl):18.

<sup>&</sup>lt;sup>1</sup>National Neglected Tropical Disease Program, New England, Freetown, Sierra Leone

<sup>&</sup>lt;sup>2</sup>Helen Keller International, 22 Signal Hill road, Congo Cross, Freetown, Sierra Leone

<sup>&</sup>lt;sup>3</sup>Helen Keller International, Headquarters, New York, United States

<sup>&</sup>lt;sup>4</sup>Helen Keller International, Regional Office for Africa, Dakar, Senegal