**Abstract Details**

***Evidence-based Priority Setting for NTDs****:*

*How Return on Investment Analysis Supports Sustainability of Lymphatic Filariasis programme in Ghana.*

**Background:** Lymphatic filariasis (LF) is a disease found in the tropical and subtropical regions of the world, where it is a major public health problem. It is caused by the helminth parasites *Wuchereria Bancroft*, *Brugia malayi*, and *B. timori*, and is transmitted by mosquitoes. The Ghana LF programme has made significant progress towards the 2020 elimination goal. However, the end of the programme requires financial resources to sustain the gains and even support surveys and studies that are needed to demonstrate elimination.

**Aims & Objectives:** The objective of the study was to estimate the return on investment of LF elimination program in Ghana over the period 2001 -2017.

**Methods:** This study adopted an economic evaluation to retrospectively estimate the return on investment of LF intervention in the 83 districts that have interrupted transmission in Ghana. Data used were gathered from secondary sources.

The returns associated with disease prevention was analyzed from two perspectives – direct costs averted and indirect costs averted. Direct costs averted were estimated using direct economic costs of seeking care (medicines and consultations). Indirect costs averted were estimated as the time (in hours) of productive time lost to LF clinical patients multiplied by the daily wage of informal workers. Programme cost was estimated using the WHO-Tool for Integrated Planning and Costing (TIPAC) and published studies in 2002.

**Key Findings:** The study estimated that for every US $1 invested in LF treatment there is an economic return of US$9. The total programme costs for implementation was estimated at US$13,832,084. It has also been estimated that individuals in the benefit cohort would avoid losing GHS 2,693,821,978.80 (USD63,627,585.74), mainly from prevented patient medical expenses, health system costs savings and potential income loss. Approximately 98% of the projected total economic benefit was attributed to the prevention of reduced productivity and subsequent income loss. The total direct cost was US$10, 992,612.14.

**Main Conclusion:** This study has provided economic returns data relevant for advocating continued investment in Ghana's LF programme, improving sustainability.

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