Towards planning morbidity management programmes: characterising patient needs and estimating lymphedema and hydrocele burden in Nigeria

Find out more:



Dr Obiora Eneanya, Imperial College London

What is the research?

The global programme to eliminate lymphatic filariasis (LF) aims to interrupt transmission, manage morbidity and alleviate suffering among people already infected. Interrupting transmission by treating eligible populations in endemic communities through mass drug administration (MDA), has been the emphasis of LF control programmes. However, insufficient attention has been given to morbidity management and there is currently no standard protocol for estimating patient numbers. This research contributes to the literature by providing a structure for patient reporting and characterising the psychosocial and economic impacts of LF to better prioritise requirements for morbidity management programmes.

Accurate estimates of disease burden are essential for planning morbidity management programmes. To identify LF patients, researchers used an established MDA infrastructure of community directed-distributors, health care workers, community leaders and a network of local informants to recruit LF patients in two implementation units in Nigeria. These patients were interviewed and the researchers characterised the physical and socioeconomic impacts due to LF. Matching disease-free controls (matched by age, sex and residential location) were interviewed to provide a basis for comparison.



An elephantiasis patient in Anambra State, Nigeria. Photo credit: Obiora Eneanya

Why is this research necessary?

Morbidity reduces the ability of individuals to perform basic daily activities independently, hindering employment opportunities and impeding mobility and the ability for self-care.

Health care costs are also significantly higher for LF patients, often depleting family income, which can lead to patients to being considered financial burdens by their families. The relationship between chronic LF and mental health is often neglected and insufficiently studied. This work highlights evidence of possible precursors to mental health illness, namely; abandonment, stigma, isolation, sleep problems, cognitive impairment, anxiety, and reduced concentration. It is therefore imperative to develop appropriate interventions to respond to these problems. The patient reporting system used in this work was effective in estimating disease burden within both implementation units.

What is the research impact?

The patient reporting system described in this work forms a basis for further patient identification, taking advantage of the already well established MDA programmes for LF and other neglected tropical diseases. For patients with lymphedema and hydrocele, simple hygiene measures, such as basic skin care, should be encouraged to prevent disease progression and secondary bacterial infection. Hydrocelectomy surgeries are also effective in treating hydrocele patients. For more complicated morbidity, a standard referral system, whereby patients are directed to appropriate health services, should be established. To address the mental health concerns raised, the researchers have suggested a task-shifting approach where community health workers are trained to provide mental health care within the communities, while acting as a stop-gap for inadequate mental health facilities in most of these LF endemic areas.

