

Significant impact of an integrated podoconiosis and lymphatic filariasis morbidity management and disability prevention programme in Ethiopia

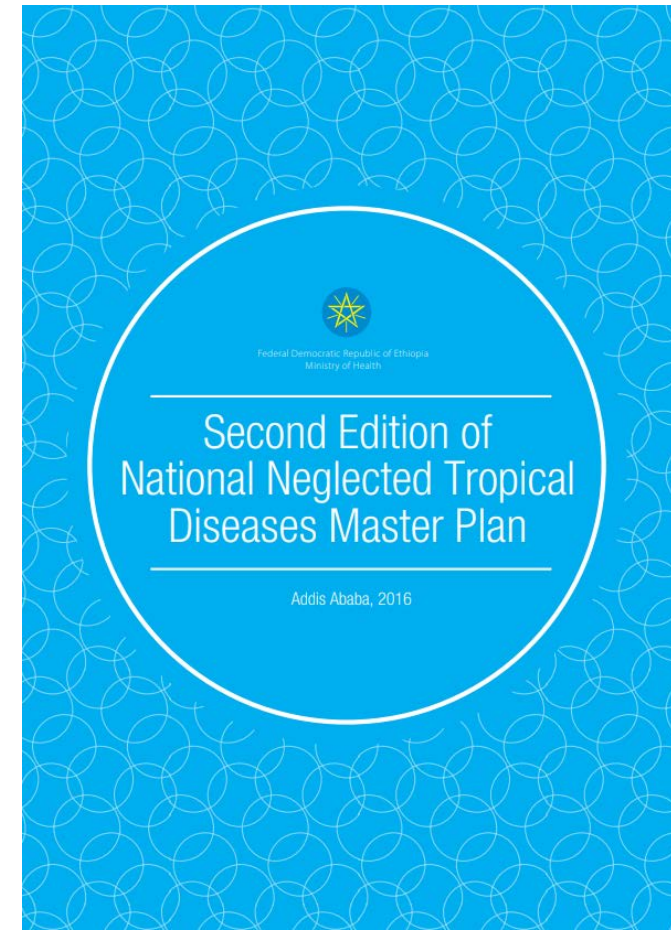
Asrat Mengiste, Nebiyu Negussu, Dereje Assefa, Fikre H/Kiros, Biruk Kebede, Mossie Tamiru, Mark Taylor, Hannah Betts, Sarah Martindale, Louise Kelly-Hope

National Podoconiosis Action Network (NaPAN)



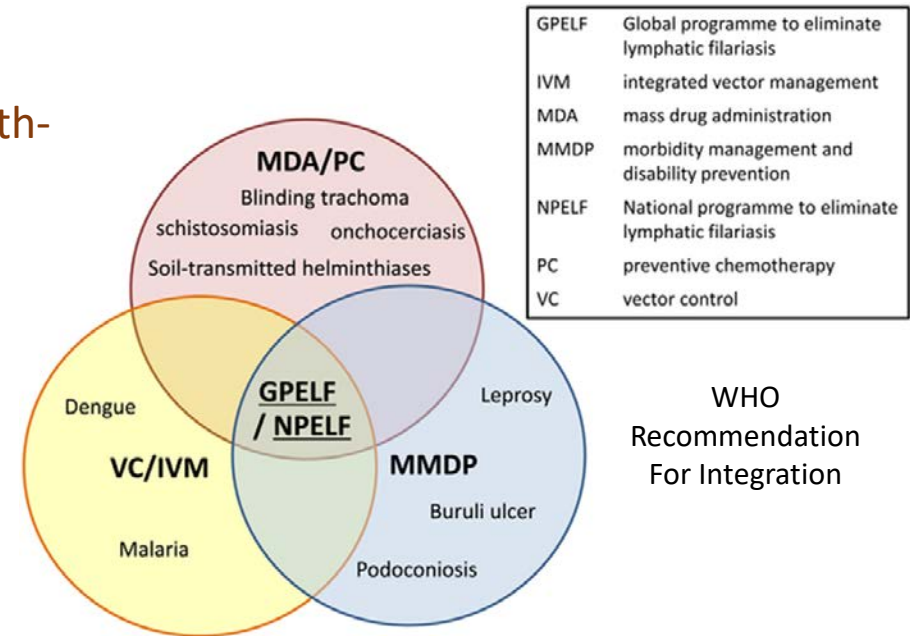
BACKGROUND

- Lymphoedema (LF and podoconiosis) can lead to permanent, long-term disability with serious psychological and economic consequences
 - Direct economic costs – managing acute and chronic manifestations for both patients and health system
 - In-direct economic costs – diminished productivity
- Federal Ministry of Health NTD Master Plan:
 - Elimination – LF by 2020 & Podo by 2030
 - 100% access to lymphoedema morbidity management
 - 70% regular shoe wearing and proper foot hygiene



RATIONALE FOR INTEGRATION

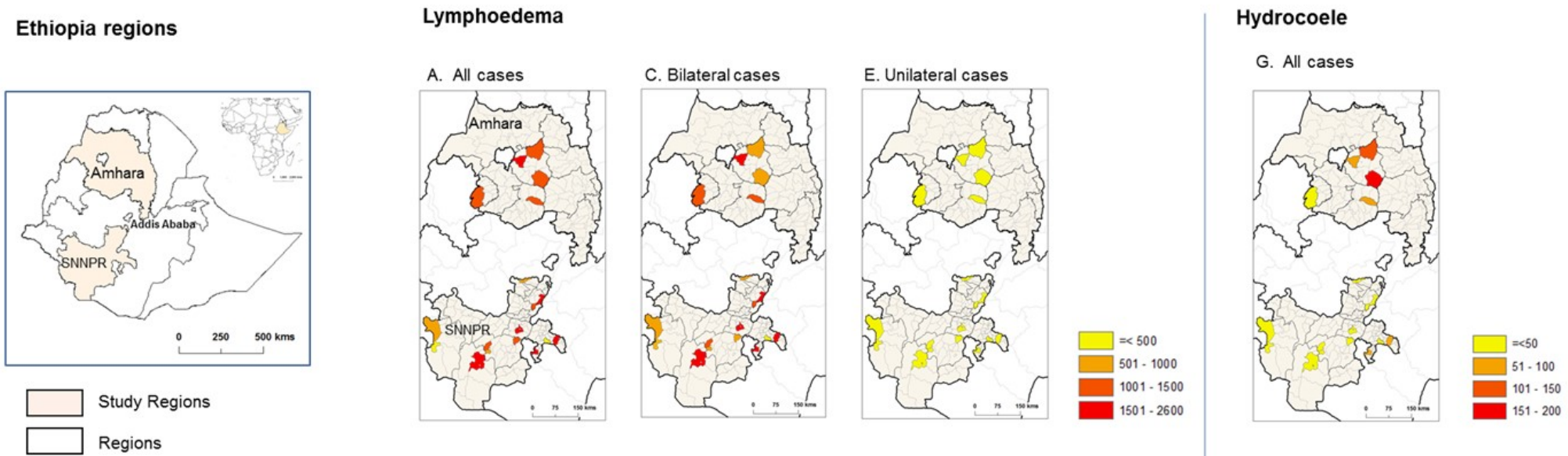
- Both diseases identified as priority NTDs in Ethiopia
- Have similar clinical features (lymphoedema)
- Not feasible to differentiate between the two diseases at primary health-care level
- Occur in the same target age group (> 15 years)
- Diseases are co-endemic in 30 districts
- Cost-effective and resources shared
- No duplication of activities
- Wider impact
- Lessons learnt and experiences shared from previous Podo work (NaPAN)



INTEGRATED MORBIDITY MAPPING

In 2015 NaPAN, FMOH & CNTD, LSTM conducted an integrated LF and Podo burden assessment in 20 districts of Southern Nations, Nationalities, and Peoples' Region (SNNPR) & Amhara Region

- ❖ 24,619 (94.2%) leg lymphoedema only
- ❖ 751 (2.9%) hydrocele only
- ❖ 677 (2.6%) both leg lymphoedema & hydrocele
- ❖ 76 (0.3%) breast lymphoedema






IMPLEMENTING AN INTEGRATED PROGRAMME

Following the burden assessment, an integrated LF & Podo MMDP services was piloted in three co-endemic districts (Yergachefe, Bensa and Lanfuro Weredas) that had no previous access to MMDP services in SNNPR.

The project was designed to:

- Train health professionals at each health facility;
- Cascade training of health extension workers (HEWs) and health development army (HDA);
- Patient mobilisation and recruitment;
- Provision of supplies and training on lymphoedema care for patients;
- Referral of hydrocele patients to hospitals for surgery and;
- Patient prospective monitoring with key progress indicators such as severity of condition, wounds/infection present and frequency of acute attacks at each HF visit (at least 3 visits recommended)



**All services
integrated into
the health
system**

PROGRAMME PERFORMANCE

- 501 mid-level government employed health workers trained on integrated MMDP
- 186 HEWs & 2,683 HEWs trained on patient identification & referral
- All 22 HCs in the three districts started the MMDP service
- All 22 HCs included lymphoedema management & hydrocele referral indicators to their routine checklist
- **Over 5,000** lymphoedema patients have accessed the services (16% recorded as having severe disease)
- **Over 100** hydrocele cases identified and referred for surgery
- **62** hydrocele cases received surgical treatment



PROGRAMME PERFORMANCE

To further assess the impact of the intervention, case data (for each patient visit to the HF) was collected from four health facilities in two districts on:

- the number of wounds, infections, acute attacks
- the severity of leg lymphoedema (mild, moderate, severe)
- A total of 2,895 visits by 938 patients (64% female) were recorded
- Of these patients, 816 reporting visiting the HF on at least three occasions
- Almost all patients had bilateral lymphoedema (93%)
- The mean age of patients was 39.9 years
(Female = 37.1 years; Male = 45.6 years)



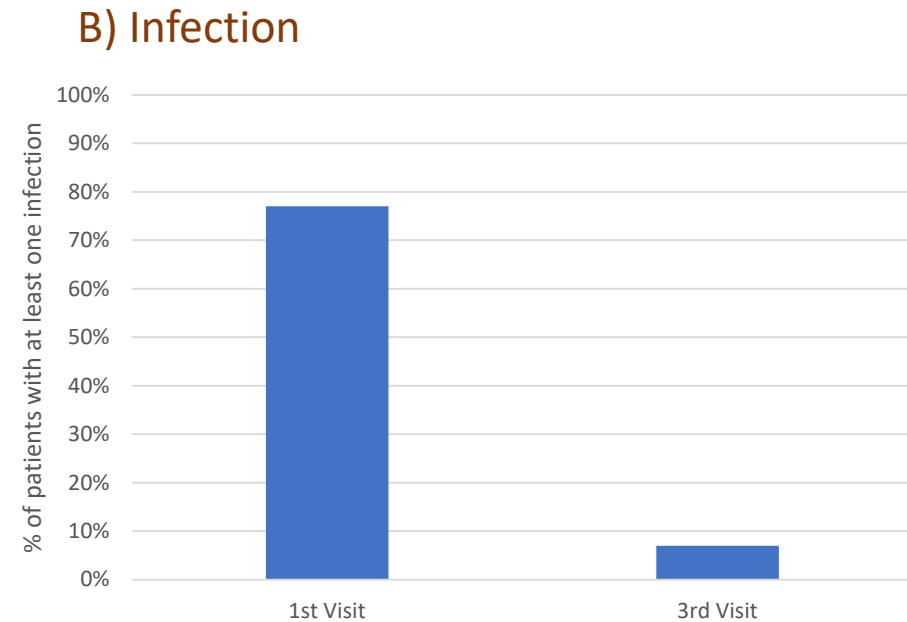
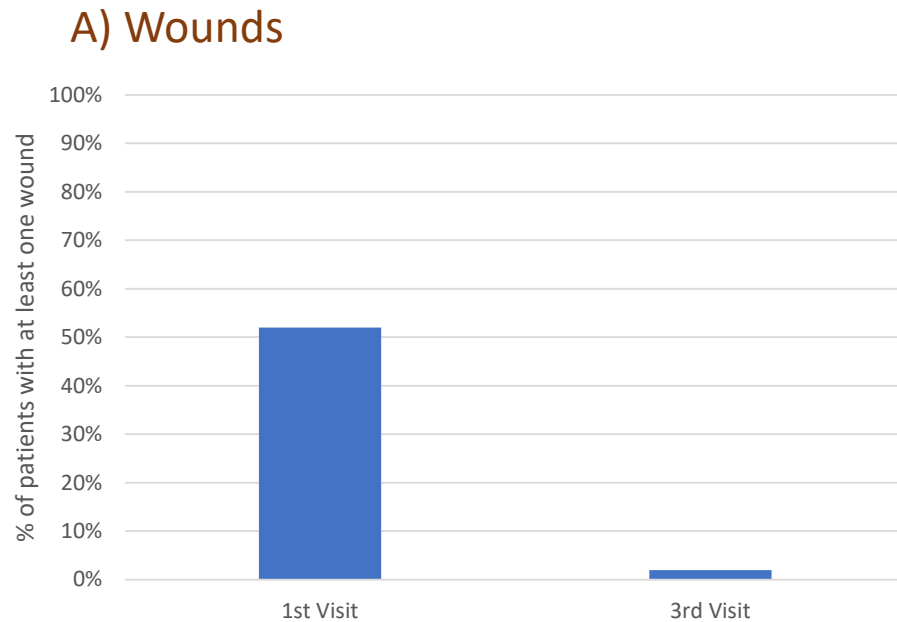


- **Objective of the study was** to assess the lymphedema morbidity management (LMM) service outcome on patients that were managed under the project
- Record from four health centres was entered to a computer using Access data base
- The data was transformed to SPSS for analysis.



PROGRAMME PERFORMANCE

- The number of wounds, infections and acute attacks declined dramatically between the first and third visit:



- The mean number of acute attacks reduced from 1.65 to 0.85
- The mean severity score reduced from 2.02 to 1.27 (1= mild; 2=moderate; 3=severe)



WAY FORWARD

- These results indicate the clear value of the lymphoedema care programme and the speed at which improvements can be observed
- There is overall promise for integration of services into the existing health structure, which is to be scaled up across Ethiopia
- Challenges included the high turnover of trained health professionals at HFs

First
International
Podoconiosis
Conference

23 September 2018

Addis Ababa
Ethiopia

Implementation was supported by the Ethiopian Federal Ministry of Health, CNTD/LSTM (funded by the Department for International Development), and implemented by NaPAN and its partner APIDO

Many thanks to the SNNP Regional Health Bureau and all health workers who have contributed to the success of this programme

