



Happy Feet: Initiating and integrating low-cost podoconiosis and lymphoedema management services in primary healthcare

Lessons learnt from Ethiopia

Key learning

- Integrating podoconiosis/lymphoedema morbidity management and disability prevention (LMMDP) services into primary healthcare is a low-cost but high-impact intervention to ensure equitable access to healthcare for podoconiosis patients.
- Offering services at the health post level can help to overcome financial and geographical barriers to accessing podoconiosis/LMMDP services, ensuring a more comprehensive service offer to patients.
- Integrating LMMDP services into routine healthcare is critical for programme sustainability.



Background

Podoconiosis is a non-parasitic, non-infectious disease characterised by disfiguring and disabling swelling of the lower leg — a condition known as lymphoedema. This condition disproportionately affects marginalised people and those with limited economic resources. These groups typically do not use footwear, leaving their feet exposed to long-term contact with irritant red clay soils of volcanic origin. Of the estimated 4 million people affected by the disease globally, Ethiopia bears more than 1.5 million cases.^[1] Additionally, approximately 35 million people living in 345 districts across the country are at risk of contracting the disease.^[1]

Lymphoedema from podoconiosis is more common among women than men, with a male to female ratio of 0.7:1, as gender inequities may influence access to resources, including shoes and socks.^[2] The risk of developing podoconiosis also increases with age.^[3]

Patients with podoconiosis have a significantly lower quality of life than healthy people, with lower mean scores in all measured domains: physical health, psychological wellbeing, social relationships and relationship to the environment.^[2] They experience high levels of stigma in both personal and civic life,^[2] often subject to mistreatment in the workplace, exclusion from social and community events, or feelings of isolation. An additional consequence is that family members may have difficulty in marrying due to the associated stigma.

Ethiopia's Third National Neglected Tropical Diseases Strategic Plan has identified lymphoedema morbidity management and disability prevention (LMMDP) as a key strategy to control podoconiosis.^[4] The World Health Organization also recommends lymphoedema morbidity management for the treatment and care of patients with podoconiosis.^[5]

Project activities

Malaria Consortium is implementing Happy Feet: Strengthening Community-based Podoconiosis Prevention and Control in Ethiopia. This three-year project began in October 2022 and is being carried out in Sodo Zuria and Offa districts of Wolaita zone in Southern Ethiopia (formerly known as the Southern Nations, Nationalities, and Peoples' Region, or SNNPR). A key project objective is to improve access to quality LMMDP services in primary healthcare.

The delivery of a low-cost lymphoedema management programme based on limb washing and topical medication for infection has been shown to reduce the number of acute attacks and to increase the economic productivity of patients.^[6] Following a health system capacity assessment conducted by Malaria Consortium in March 2023 at primary healthcare facilities in the project districts, we observed that access to these services is limited due to a lack of training and of basic medical supplies and drugs in health facilities.

In collaboration with the Federal Ministry of Health, the former SNNP Regional Health Bureau, Wolaita Zone Health Department and National Podoconiosis Action Network (NaPAN), we provided standard training on LMMDP to 36 health workers in 10 health centres, and trained 52 health extension workers (HEWs) to detect and refer cases and provide follow-up on home-based management. We also procured essential medical supplies and materials to fill existing gaps for LMMDP at primary health centres.

Lessons learnt

Training, coupled with the provision of basic essential medical supplies and drugs, is a low-cost but high-impact intervention that is helping to embed podoconiosis/LMMDP services in primary healthcare. Before the project, inadequate knowledge and training among health workers and HEWs and a lack of essential medicines and supplies were major bottlenecks that impacted on the availability of health services to podoconiosis patients. Moreover, LMMDP services were simply not available at health centres previously. Thanks to Malaria Consortium's intervention, 10 health centres in Sodo Zuria and Offa have now started to integrate LMMDP services into their healthcare offer.

The training provided to health workers has significantly enhanced their knowledge, skills and confidence in managing cases. They are also more motivated to initiate these services, as they recognise the high impact of these relatively simple measures.

“I used to treat [people with podoconiosis] as any infection when they came with swelling legs and fever, without understanding it is due to lymphoedema ... I felt I neglected them as we have not been giving the necessary care and treatment due to lack of knowledge and skill. After the training, I became motivated to manage and care for lymphoedema cases ... Since we have initiated the service, we managed a total of 41 male and 66 female cases.”

Clinical nurse, Wareza Lasho Health Centre

The training of HEWs has been instrumental in enabling them to recognise podoconiosis cases and refer these to the health centres with greater accuracy. Furthermore, the training has helped HEWs to recognise that their support to podoconiosis patients has value beyond case referrals. They are more motivated and equipped to support and supervise home-based management, including regular limb washing, exercises and elevating of the feet. Overall, their training has strengthened the link between health centres and health posts at the community level, which has been crucial for providing a comprehensive service to podoconiosis patients.

“Before the training ... I didn't know the cause, prevention and management of cases. In addition, I didn't realise that I have responsibility in supporting podoconiosis cases apart from referring to the health centre ... However, after the training, my knowledge and skills to support podoconiosis patients increased. [We] mobilised community members and sensitised them on podoconiosis, and informed them that management service is available in Mure Health Centre. ... I managed to detect and refer 36 patients.”

HEW, Mecha Health Post

Under the national guidelines, HEWs are tasked with the detection and referral of cases, and with supporting home-based management of podoconiosis patients. However, they do not offer LMMDP services, which are the remit of health centres. We observed that many podoconiosis patients live far from health centres, which limits their access to services. Due to the disability caused by lymphoedema, many patients cannot physically cover long distances, causing them to remain at home untreated. Patients' low income also exacerbates the situation as individuals are unable to cover transport costs to reach services. Given that HEWs are close to communities, there is scope to expand their current responsibilities to address this gap.

The training provided to HEWs has significantly increased patient flow to health facilities. Following the training, HEWs conducted a rapid assessment of cases and referred the identified cases to the nearest health centres. Prior to this, individuals affected by podoconiosis rarely sought treatment, largely because communities had limited information on podoconiosis/lymphoedema and did not realise that the disease is treatable.

Initiating LMMDP services at health centres and conducting social mobilisation at the community level have created a high demand for LMMDP services. However, stocks of basic medical supplies and drugs are sometimes insufficient to meet the created demand, resulting in services being interrupted. When this happens, podoconiosis patients lose confidence in health centres, which can reduce their motivation to seek treatment.

The integration of LMMDP services into routine health services at the facility level is vital for sustainability. Through the training offered by Malaria Consortium as part of Happy Feet, these services will have a lifespan beyond the project, as there is a pool of trained health workers who are able to continue morbidity management and disability prevention.

We observed that, during supportive supervision, there were some issues with case management, recording and reporting of data, and linkages between health centres and health posts. Regular supportive supervision and mentoring of health workers is important to ensure the quality of LMMDP services. This will enable us to identify strengths, gaps and challenges and provide feedback for improving the service.

The government's community-based health insurance (CBHI) scheme does not provide full coverage to podoconiosis patients. Due to extremely limited financial resources, many podoconiosis patients cannot afford to pay the yearly CBHI premium, which has created a barrier to accessing services at health centres. The majority of podoconiosis patients require additional support from HEWs and from the local administration to receive sufficient coverage under the scheme.

Recommendations

- 1. Scale up LMMDP services in podoconiosis-endemic areas.** Podoconiosis/LMMDP services can easily be integrated in health centres with low-cost inputs. Inputs include training of health workers and HEWs, making basic medical supplies and drugs available, and employing regular mentoring and supportive supervision to ensure high-quality services.
- 2. Increase advocacy and awareness-raising activities to support the scale-up of podoconiosis/LMMDP services.** Coverage of these services is currently limited due to lack of priority given to podoconiosis compared with other neglected tropical diseases (NTDs) and low awareness of services at the community level. Given the positive impact of services on podoconiosis patients, advocacy and social mobilisation activities must be ongoing to initiate the service at scale.
- 3. Integrate LMMDP services into the primary healthcare system.** Integrating health programmes into the healthcare system is vital for programme sustainability. Integration of services will also strengthen the link between health centres and health posts, ensuring a more comprehensive service to patients with podoconiosis.
- 4. Conduct studies to determine the feasibility and acceptability of offering LMMDP services at the health post level, through HEWs.** Given that HEWs have existing relationships with their communities, and LMMDP services are relatively straightforward to deliver, there is scope to expand the role of HEWs in case management. This will facilitate access to services where physical and geographical barriers exist.
- 5. Allocate appropriate budget for the procurement of medical supplies and drugs for LMMDP.** It will be necessary to continue to advocate to district health offices and health centres to include supplies for LMMDP in their regular drug purchasing lists to avoid stockouts and maintain availability of services. This will, in turn, strengthen communities' trust in the ability of health centres to address their needs.
- 6. Advocate for podoconiosis services to be fully covered under the CBHI scheme.** This will help to break down existing financial barriers that currently limit podoconiosis patients' access to LMMDP services.

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Cover image: Abrash is a public health officer in Sodo Zuria, Ethiopia

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