

# Improving neglected tropical diseases services and integrating into primary health care in Southern Nations, Nationalities, and People's Region, Ethiopia

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## Introduction

Ethiopia bears one of the highest neglected tropical disease (NTD) burdens in sub-Saharan Africa. Previous NTD control has focused on large-scale treatment of affected populations, mainly through mass drug administration. However, the World Health Organization's (WHO) 2021–2030 roadmap calls for greater integration of NTDs into national health systems. Additionally, Ethiopia's 2021–2025 NTD Master Plan lists NTD services as a strategic objective. This study aimed to develop and pilot an intervention to strengthen and integrate NTD detection, management, recording and reporting into primary healthcare (PHC) in Ethiopia.

## Methods

- Study conducted in selected primary health care facilities in Damot Gale district, Wolaita zone, SNNPR (December 2019 – November 2021), targeting trachoma, schistosomiasis and lymphatic filariasis.
- **Formative phase** involved development, validation and pre-testing of intervention to identify/address gaps in the Ethiopian PHC for implementation of integrated NTD services:
  - national NTD guidelines and manuals mapped/reviewed
  - health system capacity assessment (HSCA) conducted to identify capacity gaps in training, human resources and service delivery (one primary hospital, one health centre and five health posts)
  - key informant interviews (KIIs) held — 22 at community level and four at stakeholder level — to determine awareness/perceptions of NTDs and identify system requirements for integration
  - key stakeholders and 12 potential end users consulted to validate and pre-test proposed materials and process.
- **Intervention phase:**
  - introduced among 60 health workers and 14 health extension workers (HEWs) over six months
  - acceptability, feasibility and incremental cost evaluated through HSCA, observational visits, review of supervision logs, KIIs and cost analysis.
- **Quantitative** data analysed with Excel and qualitative data analysed using thematic analysis in MAXQDA.

## Results

- Prior to the intervention, a lack of essential drugs, medical supplies, and improved detection tools and regular in-service training for health workers/HEWs affected detection, treatment, management, recording and reporting for the three targeted NTDs.
- After training, we observed that health workers appropriately applied intervention procedures to 71.1 percent of suspected NTD cases for detection of NTDs, diagnosed 80 percent of NTD cases correctly and provided the appropriate recommendation for 66.7 percent of cases.
- In the six months prior to the intervention, the positivity rate for intestinal schistosomiasis cases with stool microscopy was 0.1 percent; this increased to 35.5 percent with circulating cathodic antigen (CCA) urine tests after the six-month intervention period (Figure 1).

# Integrating NTD services into primary healthcare in Ethiopia is feasible, acceptable and increases care-seeking behaviours



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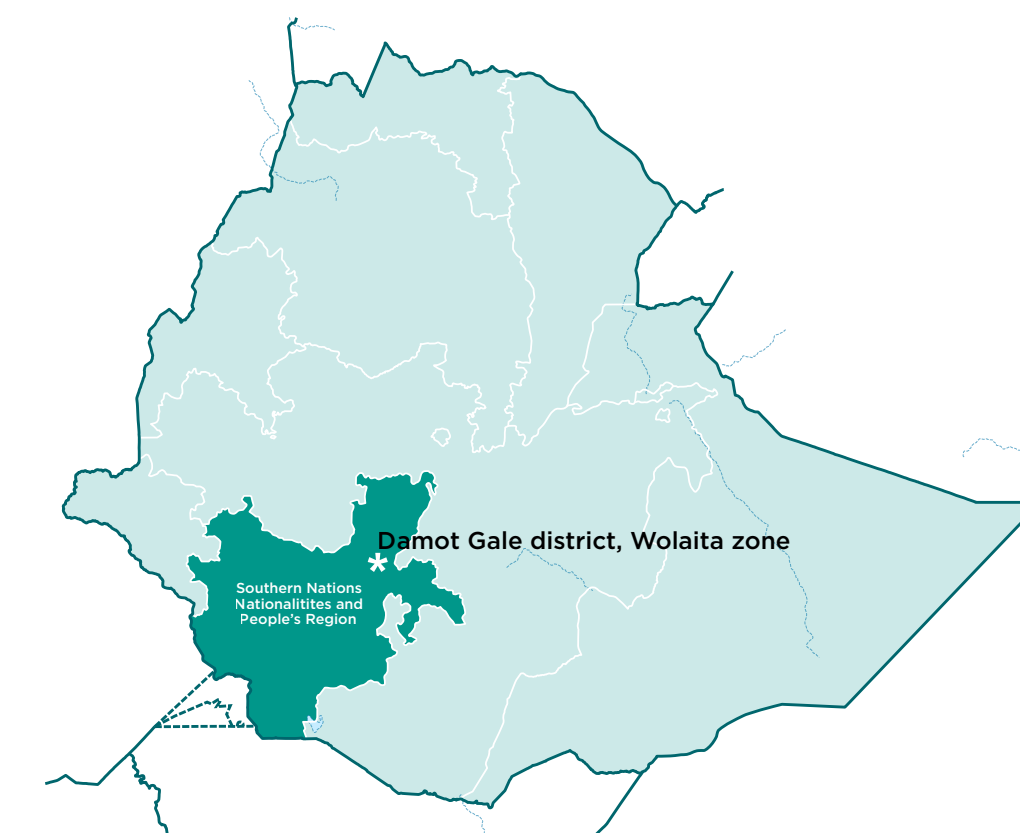
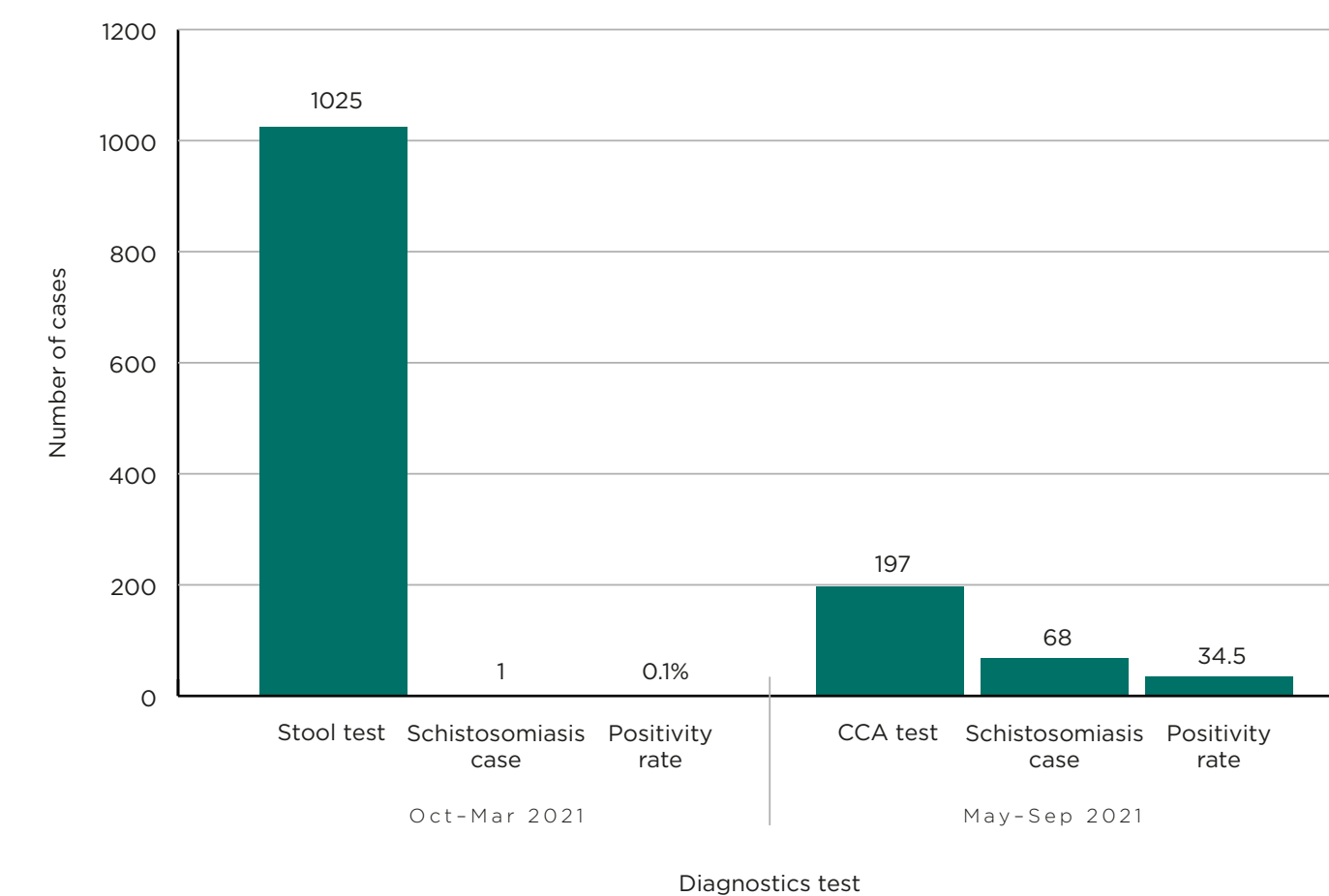
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## Conclusion

Results so far indicate that the intervention, which aimed to fill critical gaps, can feasibly integrate the detection, management, recording and reporting of schistosomiasis, trachoma and lymphatic filariasis within the Ethiopian PHC system. The intervention also appears to be acceptable to health workers and HEWs. CCA urine tests have so far led to a significant improvement in detection and management of intestinal schistosomiasis in routine healthcare delivery.

## Supplementary visuals

Figure 1: Positivity rate of intestinal schistosomiasis with stool microscopy test (preintervention) compared to CCA urine test (end of intervention)



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