

Assessing the feasibility and acceptability of community-based delivery and administration of SARS-CoV-2 Antigen Rapid Diagnostic tests (Ag-RDT) in Lilongwe and Blantyre districts in Malawi.

Authors: Chavula C¹, Makondesha J¹, Mwenifumbo T¹, Chitanda F¹, Mtaula J¹, Gambanga F¹ Peter T¹, Khan S¹, Gunda A¹ Bitilinyu-Bangoh J²

¹Clinton Health Access Initiative, ² Ministry of Health Malawi - Diagnostics

Background: COVID-19 testing in Malawi has been largely limited to facility-based settings, targeted high-risk populations, and averaged to about 500 samples a day: far below the WHO recommendation of 1 test per 1,000 per week. The primary objective of the study was to assess the feasibility and acceptability of community-based delivery and administration of SARS-CoV-2 antigen rapid tests in marketplaces.

Methods: This was a cross-sectional mixed methods study. The study population was all adults accessing four markets in Lilongwe and Blantyre districts over a 74-day testing period. Participants voluntarily underwent a COVID-19 test using Panbio Nasal Swab Ag-RDT kits. Questionnaires were administered to randomly selected participants and healthcare workers (HCWs) to explore accessibility, feasibility, and challenges. Positive cases were followed-up with after the isolation period to assess experience with self-isolation.

Results: 2,348 people (69% female) were tested, with a median age of 37 years, representing 21% of total national tests. 78 people tested positive (3.3% positivity rate). 22% of screened individuals were symptomatic. Of 1,158 people interviewed, 92% found the testing process acceptable, and 99% reported that they would recommend community testing to family/friends. All 51 HCWs indicated that the community testing process is easy to implement with the main challenge being community misconceptions about COVID-19 and low positivity rate leading to low demand for testing. Of 43 positive cases followed, 81% self-isolated for at least 6 days and 28% reported finding isolation challenging as it affected their income-generating activities.

Conclusion: COVID-19 testing using a community testing model is feasible and acceptable to both clients and HCWs and contributed a significant percentage to national testing volumes between July and September 2022. Public awareness and community sensitization are key in increasing the uptake of community testing as communities have different myths about COVID-19.

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