



Impact Evaluation of Community-Led Total Sanitation Programme in West African Communities: Two-Year Assessment on Diarrhea Morbidity Reduction

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Abstract

Community-led total sanitation (CLTS) is a participatory approach aimed at improving access to safe sanitation facilities in rural and peri-urban areas of West Africa. This intervention has been shown to reduce open defecation, thereby potentially lowering the incidence of waterborne diseases such as diarrhea. A mixed-method approach was employed, combining quantitative data from health records and qualitative insights through interviews with community members. Data were collected at baseline (pre-intervention), mid-term (18 months post-intervention) and post-intervention (24 months post-intervention). Implementation rates of CLTS facilities varied significantly across communities, ranging from 60% to 95%. A two-year follow-up revealed a 30% reduction in diarrhea cases compared to pre-intervention levels. However, there was considerable variance in the effectiveness of different implementation strategies. While CLTS has shown promise in improving sanitation access and reducing open defecation, its impact on diarrheal morbidity is not uniform across all communities. Future research should focus on understanding factors influencing programme outcomes to enhance effectiveness. Communities with lower implementation rates of CLTS facilities should be prioritised for additional support to achieve greater health benefits. Additionally, further research into the most effective strategies and community engagement methods could inform future interventions. Community-led total sanitation, diarrhea reduction, implementation rate, mixed-methods approach Treatment effect was estimated with $\text{text}\{\logit\}(\pi) = \beta_0 + \beta_1 X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *Sub-Saharan, sanitation, intervention, morbidity, qualitative assessment*

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