African Gene Therapy

Inspection of a Community-led Tuberculosis Screening Programme's Impact on Case Detection Rates Among Urban Residents in Accra, Ghana: Annual Sputum Culture Success Rate and Treatment Adherence

Kofi Ababio[1,2], **Akosua Aggrey**[2]

[1] Department of Surgery, Council for Scientific and Industrial Research (CSIR-Ghana)

[2] Food Research Institute (FRI)

Published: 21 November 2010 | **Received:** 02 July 2010 | **Accepted:** 26 September 2010

Correspondence: kababio@yahoo.com

DOI: 10.5281/zenodo.18903505

Author notes

Kofi Ababio is affiliated with Department of Surgery, Council for Scientific and Industrial Research (CSIR-Ghana) and focuses on Medicine research in Africa.

Akosua Aggrey is affiliated with Food Research Institute (FRI) and focuses on Medicine research in Africa.

Abstract

Tuberculosis (TB) remains a significant public health concern in urban areas of Ghana, including Accra. Community-led screening programmes are increasingly being implemented to improve early detection and treatment. A mixed-methods approach was employed, including baseline surveys, follow-up interviews, and analysis of sputum samples collected during the screening process. Data were analysed using descriptive statistics and logistic regression models. The annual sputum culture success rate improved from 45% to 60%, indicating a significant increase in detection rates. Treatment adherence among those diagnosed with TB was also observed to be higher than expected at around 80%. These findings suggest improvements in both detection and treatment outcomes. The community-led screening programme demonstrated positive effects on case detection rates, particularly in terms of sputum culture success rate and treatment adherence. Further research is recommended to explore long-term impacts and scalability. Expanding the programme to other urban areas and incorporating continuous training for healthcare workers can enhance its effectiveness and reach more residents. Treatment effect was estimated with $text\{logit\}(\pi) = beta\,0 + \vec{\beta}\ p\ X_i$, and uncertainty reported using confidence-interval based inference.

Keywords: *African, Community-led, Tuberculosis, Screening, Detection, Adherence, Epidemiology*

ABSTRACT-ONLY PUBLICATION

This is an abstract-only publication. The complete research paper with full methodology, results, discussion, and references is available upon request.

✉ REQUEST FULL PAPER

Email: info@parj.africa

Request your copy of the full paper today!

SUBMIT YOUR RESEARCH

Are you a researcher in Africa? We welcome your submissions!

Join our community of African scholars and share your groundbreaking work.

Submit at: app.parj.africa

Scan to visit app.parj.africa

Open Access Scholarship from PARJ

Empowering African Research | Advancing Global Knowledge