## Mawuli Gohoho

Jasikan Municipal Health Directorate, Ghana Health Service, Ghana

Mawuli Gohoho is a public health officer focusing on Disease Control at the Jasikan Municipal Health Directorate in the Jasikan Municipality of Oti Region, Ghana. Serving as the TB focal person and research focal person at the Directorate, he is excited about the research grant opportunity offered by the International Society for Infectious Diseases (ISID), generously funded by the Bill and Melinda Gates Foundation (BMGF).

He holds a Bachelor of Public Health (Disease Control) and a Master of Philosophy in Applied Epidemiology from the Fred Newton Binka School of Public Health at the University of Health and Allied Sciences in Ghana. Throughout his academic journey, Mawuli underwent rigorous coursework in quantitative and qualitative research methodologies, advanced epidemiology and biostatistics, public health surveillance, Geographic Information Systems, neglected tropical diseases, and scientific communication and report writing. As a frontline professional, he also completed the Field Epidemiology and Laboratory Competency-based training program in Ghana.

As part of his MPhil. in applied Epidemiology project work, he explored the spatial distribution and risk factors associated with Buruli Ulcer Disease in four endemic districts of Ghana. This involved retrospective spatial analysis and a community-based matched case-control design, earning recognition as the 2nd position recipient for the best scientific/public health innovation award at the 8th AFENET 2023 Scientific Conference in Kenya.

Despite efforts to strengthen the TB sample transportation system and provide regular feedback to health facilities within the municipality since 2021, the TB case notification rate in Jasikan Municipality has remained persistently low over the past 5 years. However, this research grant presents a genuine opportunity to comprehensively address this issue and contribute towards strengthening the TB surveillance system - minimizing morbidity and mortality while improving overall community health.

Mawuli is committed to actively contributing to achieving the national TB strategic plan's objectives. He is confident that this grant serves as an exceptional opportunity to create a meaningful, evidence-based impact in combatting the TB epidemic.

## Project

## Optimizing TB Case Notification Through Capacity Building: An Assessment of the Accuracy and Efficiency of the Revised TB Symptom-based Screening Tool roll-out in Jasikan Municipality of Ghana

**Background:** Tuberculosis (TB) remains a public health challenge in Ghana, despite recent progress. The National TB Control Programme (NTP) has historically utilized the Symptom-Based Screening (SBS) tool for active TB case finding. However, in 2021, less than 30% of estimated TB cases were detected and notified through Ghana's TB surveillance system. In response, NTP introduced a revised TB SBS tool in 2023 with previous limitations addressed to enhance national TB case notification.

**Objective:** This study aims to assess the performance of the revised TB-SBS tool in TB case notification, identify factors contributing to TB case notification, and develop an intervention to enhance TB case notification in the Jasikan Municipality of Ghana.

**Methods:** A mixed-method approach combining quantitative and qualitative designs will be performed. The quantitative assessment will use a quasi-experimental design with preintervention (baseline) and post-intervention (endline) surveys. Baseline data will inform the development of an intervention focusing on capacity building and supportive supervision. A phenomenological design will explore experiences with the revised TB-SBS tool in the qualitative exploration. Individual and facility-level data will be collected at both baseline and endline. Quantitative data will be summarized using descriptive and inferential statistics, and findings will be presented in tables and charts. The intervention's impact on TB case notification will be measured using Difference-in-Differences (DID) analysis, and logistic regression will examine factors associated with TB case notification. Qualitative data will be analyzed using thematic content analysis and presented as codes, sub-themes, and themes.

**Expected Outcome:** The expectation of this study is to provide insights into the performance of the revised TB-SBS tool, outline key contributory factors to TB case notification, and devise targeted intervention strategies to address identified gaps in Jasikan Municipality, Ghana. Findings will be disseminated to inform policies and practices involving key stakeholders to enhance TB case notification.