



CLEAR

COVID-Like Illness and Respiratory Pathogens Diagnostic Response in Ghana

Duration

2021 – 2023

Budget

approx. 445,000 EUR

Partner countries

Ghana

Challenges addressed by the project

Respiratory infections represent a huge burden to the health systems in low- and middle income countries (LMICs). In the light of the COVID-19 pandemic, differential diagnosis of respiratory pathogens acquires a key relevance for the public health response. Pathogen-based diagnostics are particularly challenging in rural hospitals due to a lack of resources for an accurate and timely detection of different respiratory pathogens. The lack of knowledge makes it challenging to decide about necessary patient isolation and distinct them from COVID-19-like illnesses and further leads to inadequate use of broad-spectrum antibiotics. Additionally, little is known about post-acute COVID-19 condition in LMICs.

Objectives

Service-related goals

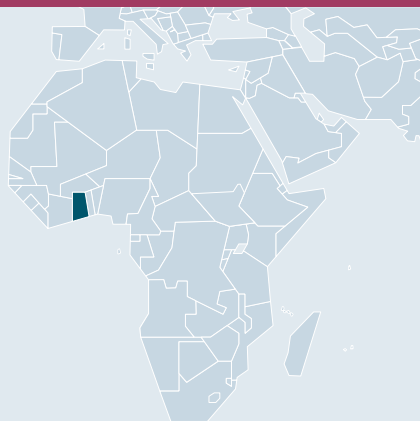
- » To establish molecular and improve existing microbiological diagnostics for respiratory pathogens including SARS-CoV-2 at the laboratories of one rural hospital at Assin Foso
- » To train laboratory personal on molecular diagnostics for respiratory pathogens including SARS-CoV-2 in order to strengthen the COVID-19 response and public health policy
- » To integrate data generated on diagnostics of respiratory pathogens with an ongoing GHPP funded project as well as with the national microbiology surveillance programme

Research-related goals

- » To determine differential diagnosis, risk factors and clinical presentation associated with COVID-19-like illnesses during the pandemic in order to assist decision-making for the pandemic response
- » To characterize and determine risk factors associated with developing the post-acute COVID-19 condition in the population attending to the reference hospital of Assin Foso

Overview of activities

CLEAR comprises two pillars: The first pillar is the establishment of molecular laboratory capacities for the detection of respiratory pathogens including SARS-CoV-2 to support the pandemic response at one district hospital of the Central Region, Ghana. This will be done by provision of laboratory equipment for molecular diagnostics, training of laboratory personal on molecular diagnostics (including viral and bacterial pathogens), microbiological methods and antibiotic susceptibility



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testing. CLEAR will also be integrated into the Stand-AMR project: 'Development of a standardized AMR laboratory for resource limited settings' (ongoing GHPP funded project). The second pillar is the conduction of research about differential diagnosis, risk factors and clinical presentation of confirmed COVID-19 vs. COVID-19-like illnesses to generate information for the public health response. The CLEAR project will follow up patients diagnosed with SARS-CoV-2 infection with a confirmatory PCR-test in order to investigate clinical, sociodemographic and biological factors determining the occurrence of the post-acute COVID-19 condition.

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