

**UPDATE ON THE IANPHI SUPPORTED MEDIUM
TERM PROJECT AT THE NIGERIAN INSTITUTE
OF MEDICAL RESEARCH, LAGOS, NIGERIA**

BY

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AT

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BACKGROUND – NIMR – LAGOS

- The oldest health Research Institute in Nigeria: Antecedents back to 1920
 - West African Council of Medical Research
 - Medical Research Council of Nigeria
 - NIMR- 1977 NST Act
- A parastatal in FMOH
- Broad Mandate: Research into communicable and non-communicable diseases.
- 5 Research Divisions, 3 non Research Divisions and 6 specialized units
- Main Areas of Research Focus: HIV/AIDS TB, Malaria, Ocho cerciasis, Schistosomiasis, Helicobacter pylori, Salmonella typhi, Cancers, Sickle Cell anaemia and Diabetes

MAJOR PUBLIC HEALTH CHALLENGES

- High Burden of HIV/AIDs, TB and Malaria
- Weak health care systems
- Inadequate laboratory capacity for prompt and accurate diagnosis of disease conditions
- Inadequate capacity for emergency response to disease outbreaks
- Lack of adequate national health data
- Inadequate funding for health

SUMMARY OF PROJECT GOALS AND ACTIVITIES

Main Goal

- Establish Capacity in NIMR to serve as a National Reference Laboratory for TB and Drug susceptibility testing.
- Initially a 2-year grant but extend to year 3 with the following yearly activities
- Year 1 – Development of Human and Infrastructural Capacities at NIMR to serve as the National Reference Laboratory.
- Year 2 – Expand Capacity at the NIMR Laboratory to provide support for TB diagnostic services for other public and private health facilities in the country. Also facilitate the transfer of DST capacity to other laboratories in the country

- Year 3 – Consolidate capacity at the NIMR lab through establishment of the liquid culture technique for TB Diagnosis and DST. Also conduct training programmes for zonal and state TB Laboratory staff on new diagnostic tests, DST, Strain Characterization and the line probe assays

Partnership

- Within the 3 years of the project, the NIMR Laboratory has been able to establish several linkages and partnerships with the following
 - Harvard School of Public Health
 - APIN PEPFAR Project
 - Global Fund (Sub recipient)
 - CDC
 - FHI-Ghain
 - Partec, Germany
 - Hain Lifesciences
 - United States Embassy
 - Supranational TB Laboratory in Milan Italy

OUTCOMES TO DATE

- Year 1

- Established capacity for the manual Hain assay technique at NIMR
- Trained NIMR staff on Molecular Biology techniques for TB diagnosis and Epidemiology
- Trained 6 NIMR staff on solid culture techniques for TB diagnosis and DST
- Developed SOPs on various laboratory procedures
- Trained NIMR staff on infection control strategies, GCLP, QC, QA
- Commenced surveillance for MDR-TB in the country; working with other laboratories in Lagos and its environ

- Year 2

- Upgraded the Hain Assay technique from manual to automated to be able to run more samples per day. (from 60 to 200 test per day)
- Facilitate the development of capacity for the Hain Assay in three other laboratories in the country
- Worked as sub-recipient to the Global Fund to develop six zonal TB laboratories in the country
- Trained staff of these zonal labs new diagnostic techniques for TB as well as DST

- Generated data from surveillance on MDR-TB to facilitate Nigeria's application to the GLC for second line anti-TB drugs
- Commenced the first ever National MDR-TB survey in the country
- Expanded support for TB diagnostic services to health facilities in the other geo-political zones of the country.
- Conducted proficiency testing on the Hain assay with the CDC Atlanta
- Commenced DST on solid medium

- Year 3

- Established capacity for liquid culture technique for diagnosis and DST.
- Established adequate linkages and networking between the other PEPFAR TB Laboratories and the six TB zonal laboratories for GCLP, QA, QC.
- Commenced expansion of the present BSL2 facility in NIMR to BSL3 facility
- Four abstracts accepted for presentation at the upcoming World TB conference in Berlin

- Commenced a working relationship between NIMR and the USA Embassy for TB testing.
- Four abstracts accepted for presentation at the upcoming World TB conference in Berlin
- Published two scientific papers on MDR-TB in Nigeria in two international peer-reviewed journals
- Commenced Proficiency testing for solid and liquid culture techniques with the supranational TB laboratory in Milan
- providing laboratory services for the PH.D dissertation of 3 PH.D students (Harvard School of Public Health, Northwestern University Chicago and University of Calabar

LONG TERM POTENTIAL AND IMPACT ON PUBLIC HEALTH CHALLENGES

- Overall establishment of capacity for TB diagnosis and DST in the country.
- Facilitated the setting up of special wards for treatment of MDR-TB with second line drugs
- DR and MDR-TB cases can now be promptly diagnosed in the country. Early diagnosis and effective treatment of drug susceptible and drug resistant TB cases will reduce transmission within communities and progressively reduce the TB burden in Nigeria. Presently Nigeria ranks 4th amongst the 22 High TB Burden countries. With the present structures on ground Nigeria will surely improve on its ranking in the next couple of years.

DATA ON THE FIRST SURVEILLANCE STUDY CONDUCTED

- Total No of Samples received – 396
- Total screened for MDR-TB – 396
- Total Resistant to INH – 45 (11%)
- Total Resistant to Rif – 72 (18%)
- Total Resistant to INH+RIF – 23 (5.8%)

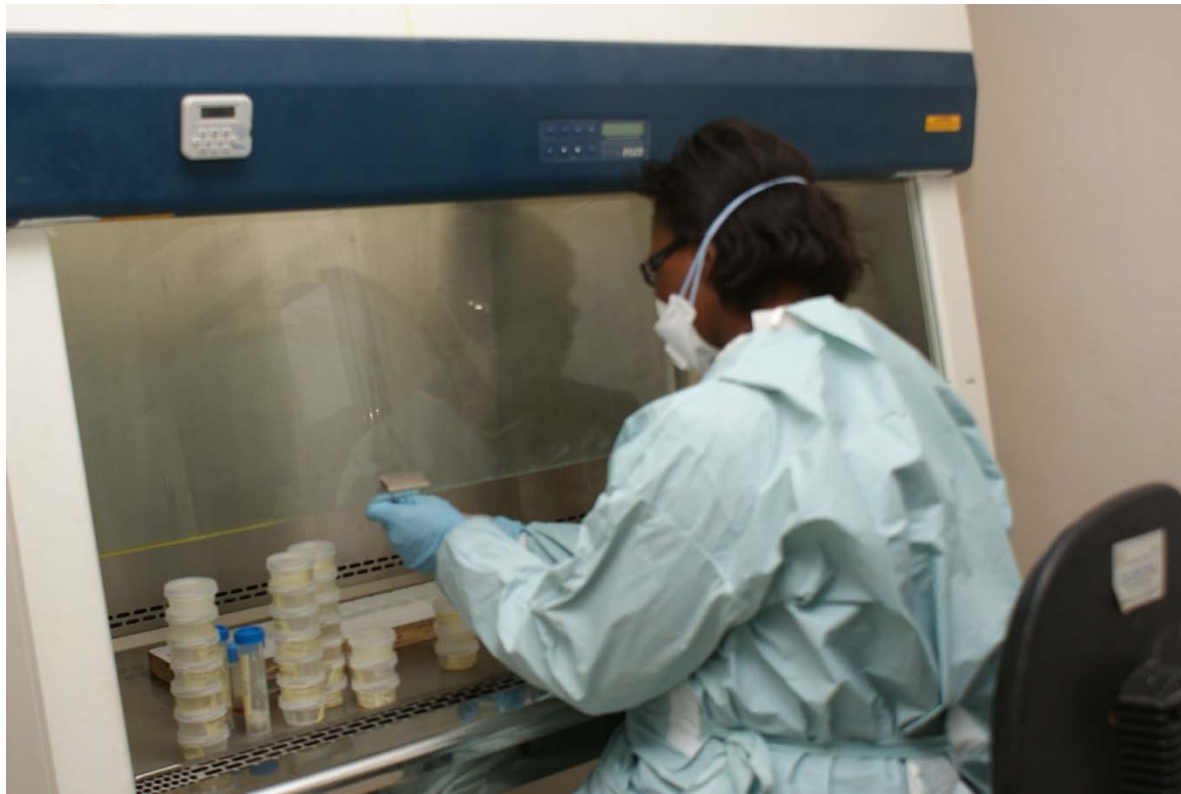






















THANKS