

Information Sheet on the NIHR Global Health Research Unit on Lung Health & TB in Africa

Background

Globally, it is estimated that 1 billion people suffer from acute and chronic respiratory conditions, making them major causes of illness and death. Although there is a relative lack of data and evidence on lung diseases beyond tuberculosis (TB) in Sub-Saharan Africa (SSA), their estimated regional burden is large and growing. In addition, there is a poorly understood relationship between infections, such as TB, and non-infectious causes of lung health problems. The problem in lung diseases in SSA is exacerbated by many factors, including under-prioritisation, under-treatment and weak preventative measures.

The Big Five

Asthma: The global prevalence has been growing over the past 3 decades, accounting for 383,000 deaths in 2015 alone. Asthma is particularly burdensome among children from low and middle income countries (LMICs), including much of SSA, and has been attributed to air pollution.

Chronic Obstructive Pulmonary Disease (COPD): 90% of global deaths occurred in LMICs. The biggest factor leading to COPD is tobacco smoking.

Tuberculosis (TB): TB is the world's leading infectious killer, accounting for more deaths globally than HIV and malaria combined. SSA accounts for one quarter of all TB cases and deaths. Despite major gains in TB control, half of all TB patients in SSA are still not diagnosed and therefore do not receive treatment. Post-TB lung

dysfunction often also goes unrecognised, despite its relatively high prevalence.

Lung Cancer: The most common cancer in the world, with an estimated 1.8 million new cases in 2012 - most (58%) of which occurred in LMICs. Tobacco smoke causes most cases of lung cancer with air pollution also thought to be a factor.

Acute Respiratory Infections: Lower respiratory tract infections and pneumonia alone cause more than 4 million fatalities annually, particularly in LMICs. More than 90% of deaths from respiratory syncytial virus (RSV) infection in children occur in LMICs. New respiratory pathogens, like severe acute respiratory syndrome (SARS), which are quickly transmitted are major threats especially in LMICs where there are weak infection control measures.

IMPALA's Approach

The International Multidisciplinary Partnership to Address Lung Health and TB in Africa (IMPALA) is a four-year collaborative programme launched in 2017 in 10 countries of SSA to generate knowledge and implementable solutions for high burden, under-funded and under-researched health problems where lung health and TB belong. IMPALA's comprehensive approach to improving Africans' lung health involves multidisciplinary collaborative work encompassing a range of clinical, social, health systems, health economics, policy, and implementation scientists from Africa and the United Kingdom (UK).

IMPALA operates in 10 countries of Sub-Saharan Africa: the Sudan Republic, Ethiopia, Kenya, Malawi, Ghana, Tanzania, Uganda, South Africa, Cameroon, and Nigeria.

IMPALA Partners

IMPALA is a Global Health Research Unit funded by the National Institute for Health Research (NIHR). Hosted by the Liverpool School of Tropical Medicine (LSTM). It is comprised of international partners and over 15 organisations across 10 African countries. LSTM's Professor Bertie Squire is the Principal Investigator, accompanied by an expert team representing the spectrum of applied health research disciplines.

The African Institute for Development Policy (AFIDEP), a regional non-profit research and policy think tank, is leading IMPALA's Pathways to Impact component. The objective of AFIDEP's work is to situate lung health as a priority health issue in Africa and promote evidence-based policies and programmes to improve regional lung health.



To do this, AFIDEP's activities include conducting a regional policy analysis, developing and implementing a regional policy engagement strategy, and training IMPALA PhD and Postdoctoral Research Assistants (PDRAs) researchers in policy engagement and evidence uptake.

IMPALA Research

At the center of IMPALA is ongoing research conducted by five African PhD students and five PDRAs on novel multidisciplinary lung health and TB issues. AFIDEP's capacity strengthening training and mentorship for these researchers ensures that they engage policy makers and processes in their work to effectively translate their research findings into policy and practice.

IMPALA's Impact

IMPALA is strategically positioned to advance lung health in Africa. The meaningful and timely evidence generated will drive national and regional lung health agendas by being effectively communicated to people and bodies able to implement policy-level change for improved lung health.