

Prevention and clinical management of hospital acquired infections at Asella Teaching Hospital in Central Ethiopia

Düsseldorf University Hospital and Asella Teaching Hospital, Ethiopia



**HOSPITAL
PARTNERSHIPS**

The challenge

With a population of about 102 million, Ethiopia is the second largest country in sub-Saharan Africa. Despite progress toward eliminating extreme poverty, Ethiopia remains one of the world's poorest countries. Although infant, child and maternal mortality have fallen over the past decade, the figures are still among the highest in the world.

One of the major challenges for the country's health system is the lack of trained medical personnel. The World Health Organization (WHO) reports the density of doctors, nurses and midwives in Ethiopia as among the lowest of the world, at three per 10.000 citizens. The mortality rate among under-fives also remains high (65/10.000), with a large proportion of deaths being caused by infectious diseases. According to hospital statistics, neonatal sepsis is the main cause, and meningitis, AIDS-related complications, pneumonia and tuberculosis are among the top ten.

No data on the prevalence / incidence of hospital-acquired infections (HAIs) and associated mortality is available from Asella Teaching Hospital, but data from two teaching hospitals in Ethiopia indicate a high prevalence of HAIs (15%). In addition, studies show a high rate of antibiotic usage in Ethiopian hospitals (72% of hospitalised patients were treated with antibiotics). The prevalence of antimicrobial resistant bacteria is increasing as a result.

Hospital hygiene and the prevention of HAIs are largely dependent on trained personnel, and this partnership project therefore focuses on capacity building activities.

Partnership activities

The partnership project will implement various measures to prevent HAIs and improve the quality of care for patients with severe infections, thereby contributing to patient safety at Asella Teaching Hospital (ATH).

Initially, all HAIs will be recorded to gain an overview of the significance of HAIs at ATH. Risk factors will be identified as the basis for adapting plans for the activities concerned. At the same time, methods for early diagnosis of HAIs will be developed and adapted to local conditions. The capacity of the existing microbiology laboratory to identify the bacterial spectrum and resistance pattern will be strengthened, enabling targeted use of antibiotics.

'The aims of the partnership are to create awareness for hospital acquired infections and associated complications. By implementing comprehensive infection control measures and training programs, patient safety and quality of care shall be improved sustainably.'

Dr Torsten Feldt, Düsseldorf University Hospital

The project will promote the rational use of antimicrobial substances by implementing antibiotic stewardship.

In addition, several further capacity building measures focusing on hospital hygiene will be conducted, including multiple workshops (two of these jointly with other ESTHER partners), ongoing training on site, and exchange visits to Ethiopia and Germany.

In order to ensure that the partnership's achievements are sustainable, the capacity building measures will frequently be based on the principle of training the trainers.



Federal Ministry
for Economic Cooperation
and Development





Round table discussion during previous ESTHER workshop on hospital hygiene and infection control © GIZ / Torsten Feldt

Financing

The funding program University and Hospital Partnerships in Africa makes part of the Hospital partnerships Initiative – Partners strengthen health. The Initiative is funded by the Federal Minister of Economic Cooperation and Development and Else Kröner-Fresenius Foundation and is a member of the ESTHER Alliance.

Results

- The existing hospital hygiene programme will be implemented in all relevant services and the existing ‘infection control team’ will be strengthened and trained.
- Microbiological diagnostic methods (culture facilities) are to be established and quality control carried out. In patients with severe systemic infections, bacterial pathogens will be specified and resistance testing performed.
- Data on the prevalence and risk factors for HAIs will be collated and made available, enabling targeted measures for the prevention and treatment of nosocomial infections.

The partners

The two hospitals have already carried out a number of joint projects in the past, including the ESTHER partnership project ‘Improved mother and child health at ATH through better prevention, diagnosis and management of infectious disease and scaled up PMTCT services’.

Institution in Ethiopia

Asella Teaching Hospital (ATH) is part of the newly founded Arsi University and its College of Health Sciences. It serves as a referral hospital for the Arsi Zone with 310 beds for more than 3.5 million inhabitants. According to the hospital statistics, infectious diseases are one of the leading causes of mortality. An intensive care unit has recently been established to treat, among others, septic patients with severe infections.

Institution in Germany

The Department of Gastroenterology, Hepatology and Infectious Diseases at Düsseldorf University Hospital is one of the leading institutes for infectious diseases and tropical medicine in North Rhine-Westphalia.

The Hirsch Institute of Tropical Medicine was inaugurated in Ethiopia in 2013 to complement the Department’s work and pursues two-way transfer of expertise, the qualification of specialists for tropical medicine, and joint research projects on infectious diseases in close cooperation with the partners from ATH and Arsi University.

Overview

Name	Prevention and clinical management of hospital acquired infections in Asella Teaching Hospital	
Impact	To reduce the incidence of nosocomial infections through the implementation of hospital hygiene activities and to improve the outcome of severe infectious diseases, e.g. sepsis, through clinical training and microbiological diagnostics	
Countries	Ethiopia	Germany
Cities	Asella	Düsseldorf
Institutions	Asella Teaching Hospital	Düsseldorf University Hospital
Term	July 2017 – April 2019	
Budget	110.000 EURO	

Contact person for the partnership

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