

Combating Resistance in the Treatment of Infectious Diseases by Promoting Judicious/Rational Use of Anti-infective Drugs

CPA

Scientific Training and Collaborative Research on Optimal Use of Anti-Infectives

Duration

2016–2021

Budget

total approx. 1.1 million EUR

Partner countries

Malawi
Zambia
Zimbabwe

Challenges addressed by the project

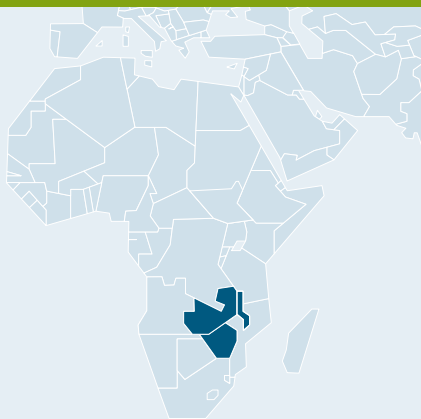
CPA promotes the training of early career researchers on the African continent, facilitating collaborative studies on the optimal use of anti-infective drugs as a means to combat and contain resistance. CPA PLUS further strengthens local regulatory competence and research within the fields of clinical pharmacology and pharmacogenetics. It nurtures and consolidates networks and structures for the advancement of knowledge on judicious use of drugs and the containment of resistance. Research projects under CPA aim to help fill gaps in knowledge about locally-relevant approaches by which scientific training on judicious drug use may assist healthcare professionals to optimise benefits for the individual patient alongside promoting public health.

Objectives

The project promotes regulatory research and cooperation by facilitating the transfer of knowledge and by promoting joint research towards optimising the use of anti-infectives in the treatment of disease. The projects and analyses planned will advance competence and awareness of cutting-edge diagnostic approaches applicable to the clinical context. With their help, it may be possible to identify/outline genetically relevant differences associated with increased resistance in countries in southern Africa. This is important as specific genetic polymorphisms related to drug response/metabolism may negatively affect drug exposure in patients thereby contributing to the increase in drug resistance. Altogether, CPA and CPA PLUS promote the establishment of long-lasting research partnerships, consolidate networks, and strengthen research capacities to support personalised pharmacotherapy as a means for counteracting the spread of disease and drug resistance.

Overview of activities

PhD students from Zimbabwe, Zambia and Malawi conduct research in the fields of drug safety, clinical pharmacology and pharmacogenetics, thus enabling the transfer of knowledge in the field of individualised therapy for the rational use of anti-infectives. The projects focus on enquiries into use, individual dosage and duration of therapy with anti-infectives in selected African hospitals.



Supported by:



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by the German Bundestag



African Institute of Biomedical Science and
Technology (AiBST), Zimbabwe



PhD students conduct research at AiBST,
Zimbabwe



Prof Masimirembwa speaks at the Symposium
on Personalized Medicine for Global Health,
Zimbabwe, 2019



Participants at the Symposium on Personalized
Medicine for Global Health, Zimbabwe, 2019

Regulatory research strengthens local regulatory competence and this is particularly useful if underpinned by studies into population/country-specific characteristics pertaining to the efficacy and safety of drug therapy regimens. Differences in the effectiveness and safety of drug therapies may be determined by individual or inter-population variations. Overall, the activities within the network will supplement current know-how with findings from individualized medicine. The project places further focus on international collaboration and enabling knowledge dissemination and transfer within the area of appropriate drug use. Keeping in mind relevant/potential resource constraints, an e-learning package will be tailored to guide healthcare professionals in training gain knowledge on the safe and appropriate use of anti-infective drugs towards improved patient safety. The educational teaching package could be further adapted to other healthcare settings.

Partner institutions

- » African Institute of Biomedical Science and Technology (AiBST), Zimbabwe
Prof Collen Masimirembwa
- » Universities of Zimbabwe, Zambia and Malawi
- » Institute for Clinical Pharmacology, University Hospital (RWTH), Germany
Prof Julia Stingl

Supporting institution in Germany/Contact

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