

Senior Fellowship for Dr. Eduardo Samo Gudo: Epidemiological and Entomological Investigation of Dengue and other Arbovirus in 11 districts in Mozambique

Initiative: Wissen für morgen – Kooperative Forschungsvorhaben im subsaharischen Afrika (beendet)

Ausschreibung: Postdoc-Fellowship-Programm "Neglected Communicable Diseases and Related Public

Health Research"

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Laufzeit: 3 Jahre

Projekt-Website: http://www.ins.gov.mz

Arboviruses are spreading rapidly worldwide. The most important arboviruses are: Dengue (DENV), Chikungunya (CHIKV), Rift Valley Fever Virus (RVFV) and West Nile Virus (WNV). Data on their occurrence in Mozambique are scarce. Epidemiological investigation conducted by our group in Maputo city and Caia district showed that DENV, CHIKV, RVFV and WNV are common causes of fever in these places. Due to the recent establishment of laboratory capacity for serological investigation of Dengue, a recent outbreak of Dengue was confirmed in 2014 in Pemba and Nampula provinces, situated in northern Mozambique. An entomological investigation conducted during this outbreak showed that Aedes aegypti mosquitos were present at high density in three cities in northern Mozambique (Pemba, Nampula and Nacala cities) and Maputo city in southern Mozambigue. A recent case of concomitant infection by Dengue, Chikungunya and Malaria was recently reported in Pemba. Altogether, findings from our recent studies suggest that Dengue and other arbovirus are more frequent than previously though. However, no data exist for the majority of the country. This study will be conducted with the aim to: i) Investigate the occurrence of Aedes mosquitoes in 11 districts in Mozambique, ii) Determine the frequency of arbovirus among febrile patients in 11 districts in Mozambique. For this purpose, the applicant will recruit an estimated 360 febrile patients in each of the 11 districts and test their serum for arbovirus. Mosquitoes will be collected from the same districts for morphological and molecular characterization.

Projektbeteiligte

Prof. Dr. Bernhard Fleischer Bernhard-Nocht-Institut für Tropenmedizin (BNITM) Hamburg

Dr. Eduardo Samo Gudo Ministry of Health National Institute of Health Maputo Mosambik (Mocambique)



Open Access-Publikationen

Dengue Virus Serotype 2 Established in Northern Mozambique (2015-2016). Distribution and breeding sites of Aedes aegypti and Aedes albopictus in 32 urban/peri-urban districts of Mozambique: implication for assessing the risk of arbovirus outbreaks Seroepidemiology of Chikungunya Virus Among Febrile Patients in Eight Health Facilities in Central and Northern Mozambique.

Evidence for chikungunya and dengue transmission in Quelimane, Mozambique: Results from an investigation of a potential outbreak of chikungunya virus.

<u>Retrospective investigation of antibodies against chikungunya virus (CHIKV) in serum from febrile</u> patients in Mozambique, 2009-2015: Implications for its prevention and control.