

Extension for Dr. Themba Mzilahowa: Vector competence and filariasis transmission in Malawi: understanding the low LF parasite prevalence

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After four or more rounds of mass drug administration (MDA) with albendazole and ivermectin, the incidence of *Wuchereria bancrofti* microfilaria! worms the causative agent of Lymphatic filariasis seem to have been significantly reduced to levels of no major public health importance. Investigating whether the reported low level microfilariamia would not lead to transmission of worms into mosquito vectors is important. Using stored specimens collected from a number of study districts across the country, we propose to analyze them for L3 stage parasites to ascertain transmission disruption. Further, field studies will be carried out in currently identified sites with reservoirs of filarial worms using more sensitive mosquito collection techniques and the high throughput and more sensitive RT-PCR to investigate *Anopheles* species-specific current transmission *W. bancrofti* worms. This study if successfully implemented will provide data on disruption of LF transmission in Malawi and therefore inform the National LF Elimination Programme. In addition to programmatic significance there is an important scientific question of whether certain *Anopheles* species are responsible for the maintaining local pockets of transmission.

Projektbeteiligte

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