

Comprehensive Cervical Cancer Prevention in Tanzania (CONCEPT)

Project description

Background: The natural history of Human papillomavirus (HPV) in sub-Saharan Africa is not yet fully understood. As persistent HPV infection is a necessary factor in development of cervical cancer – a major health problem in sub-Saharan Africa - information about how HIV together with other risk factors interacts with HPV acquisition and HPV persistence/clearance is warranted. Additionally, concern prevails about the quality of cervical cancer preventive strategies in sub-Saharan Africa.

Objectives: The project aims to provide a better understanding of the natural history of HPV with a view to HIV status, to measure the impact of a novel and simple screening method based on *CareHPV* testing and to assess how continuity of care among women who are tested HPV positive can be improved.

Methodology: The study will be linked up with the existing cervical cancer screening program at Ocean Road Cancer Institute (ORCI) and Kilimanjaro Christian Medical Centre (KCMC); and will include 4000 women who are attending screening service or HIV care and treatment. HPV acquisition and persistence/clearance patterns as well as the absolute risk of severe cervical precancerous lesions will be determined through a follow up study lasting 28 months. The test performance of *CareHPV* testing, liquid-based cytology and VIA will be described and the operating characteristics of the three screening methods will be assessed according to HIV status. Finally, the impact of a mobile phone intervention and a patient navigation model will be assessed and compared according to the proportion of HPV positive women who return for follow-up examinations. Additionally, the project will implement a research capacity building component focusing on transfer of knowledge and technology as well as training of PhD students. The activities will be carried out as five sub-studies: i) HPV acquisition pattern; ii) HPV persistence/clearance pattern; iii) Test performance of *CareHPV* testing, liquid-based cytology and VIA; iv) Continuity of care among screened positive women and v) research capacity building as well as transfer of knowledge and technology.