Abstract

## Background

An estimated 90% of HIV-infected people are likely to develop oral lesions in the course of HIV infection. Oro-pharyngeal candidiasis (OPC), an early marker for HIV-infection, can be diagnosed during an oral examination (OE). Primary healthcare (PHC) providers in Kenya are neither trained nor sufficiently equipped to perform this simple, cheap and non-invasive examination. The PHC system in Kenya offers an opportunity to integrate early recognition and management of oral lesions into general health care. This study aims to estimate the effect of a multifaceted intervention for PHC providers in training them to perform an OE. Specifically, our primary objective is to establish whether the intervention is effective in increasing: i) the frequency of early detection of HIV-related oral lesions; and ii) referral rates for HIV-testing.

## **Design and methods**

The study has been designed in two parts: a retrospective clinical data record study and a prospective cohort study with pre-post control group design, carried out in 2 administrative divisions in Nairobi East district. The intervention group will receive one day of training on recognition of HIV-related oral lesions and other common oral conditions. Reminder sessions will be held at individual health facilities. Routine tally sheets will be used to record all patients with HIV-related oral lesions, dental caries and periodontal disease. A convenience sample of all the PHC in a division will be used. It will not be possible to blind investigators or assessors. Expected impact of the study for Public Health. Early recognition and treatment of HIV infection influences long-term survival rates and will reduce healthcare expenditure.