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## **Prevalence of HIV-1 subtypes and mutations with known association to antiretroviral therapy resistance among individuals aged 14 years and above in Northern Tanzania**

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The HIV-1 epidemic in African countries is mainly due to HIV-1 Subtype C compared to USA and Europe where is mainly subtype B. Patterns and frequency of antiretroviral drug resistance mutations observed in developing world may differ from HIV-1 subtype B predominates prevalent in developed world. The development of drug resistance among patients on antiretroviral therapy (ART) remains an important challenge in the management of HIV disease.

Patterns of drug resistance mutations in response to antiretroviral drugs and their impact on ART management have been extensively studied in patients with HIV-1 subtype B in the developed world, but limited information is available in patients from resource-limited settings who bear a disproportionate burden of the AIDS epidemic with diverse pool of non-B HIV-1 subtype.

The information obtained from this study will provide us with knowledge on the patterns and frequency of mutations associated with antiretroviral drug resistance among individual infected by different HIV-1 subtypes in Northern Tanzania. Furthermore, the study will show us on how different HIV-1 subtypes exposed to different antiretroviral regimes respond and enable us make good choice of antiretroviral regimens.

### **Biography**

Elichilia Robert Shao is a Tanzanian trained medical doctor who is working at Kilimanjaro Christian Medical Centre (KCMC), a teaching and referral hospital in Northern Tanzania. He is also Fogarty fellow, who did his one year fellowship (May 2009-June 2010) at Harvard University Boston, MA USA in the department of immunology and infectious diseases. He is the holder of Msc Medical microbiology, immunology with Molecular Biology of Kilimanjaro Christian Medical University College. He has been working in HIV for the past four years; he is interested in HIV-1 diversity, Vaccine and antiretroviral resistance mutations among infected individuals. He has presented papers in international conferences in USA, Canada, Zambia, Uganda, Kenya and Tanzania. He is also a chief editor of TanZamBo (Tanzania, Zambia and Botswana) HIV-research consortia news letter. He has worked in Botswana for six months at Botswana Harvard HIV research Laboratory in Gaborone. He is the general manager and founder of Imagedoctors internal, he is also the general secretary and founder of Better Human Health Foundation (BHMF) Tanzania.

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