conferenceseries.com 17TH GLOBAL DIABETES CONFERENCE & NURSING CARE

March 08-09, 2018 | Paris, France

Combination antiretroviral therapy regimens and the recipients' survival to the development of diabetes mellitus-related comorbidities in Botswana

Tshikuka Jose Gaby^{1, 3}, Rankgoane-Pono Goabaone¹, Masupe Tiny¹, Molefi Mooketsi¹, Tlhakanelo Thato John¹, Hamda Shimeles¹, Vincent Setlhare¹, Mgaywa Gilbert Mjungu Damas Magafu² and Nsikungu-Kalukul Maurice³

¹University of Botswana, Botswana

²University of Washington, USA

³University of Kinshasa, Republic of Congo

Background: Botswana has been administering free combination antiretroviral therapy (cART) for more than 15 years. cART is not without side effects. Diabetes-related comorbidities (DRCs) are a major group of cART untoward effects worldwide. cART regimens that are highly associated with DRCs and the extent by which they prolong the life of recipients in Botswana are unknown. In addition, biomedical and demographic predictors for DRCs among cART recipients in Botswana are still not well understood.

Objective: To investigate the association between cART and DRCs among cART recipients at two HIV clinics in Gaborone, identify underlying biomedical and demographic risk factors for DRCs and investigate survival of patients from initiation on different cART regimens to the development of DRCs.

Method: Data from two major HIV clinics in Botswana were reviewed. Associations between different cART regimens and DRCs were investigated among 531 recipients. Recipients' DRC risk factors were identified. Cox regression model was run. Unadjusted and adjusted hazard ratios were computed and hazard and survival functions for different cART regimens were plotted.

Result: HIV patients on second and third-line cART were less likely to develop DRCs than those on first-line cART. Patients with CD4 count \leq 200 cells/mm³ before cART initiation were more likely to develop DRCs than those who had CD4 count>200 cells/mm3. Overweight patients at cART initiation had a higher risk of developing DRCs compared with those who had normal body mass index (BMI). Males had a lower risk of DRCs than females and recipients younger than 35 years had a lower risk of DRCs than those aged 35 years or older. The shortest survival was among patients on the first-line cART whereas the longest survival was among patients on the second-line or third-line cART regimen.

Biography

Tshikuka Jose Gaby is currently the Acting Head of Public Health Medicine Unit at the Faculty of Medicine, University of Botswana. He is also an Associate Professor of Epidemiology and Nutritional Epidemiology at the National Pedagogic University of DRC. He has received his PhD in Epidemiology of Infectious Diseases (with concentration in Epidemiology, Parasitology, Biostatistics and Nutrition) from McGill University, Canada. He has extensive experience working with international health organizations including WHO, UNICEF, American Rescue Committee, American Refugee Committee, Health Action in Crisis/WHO, PSI and Action against Hunger. He has worked/conducted research in various parts of the world. He has published 52 publications: 28 journal articles, 12 published conference proceedings and 12 consultancy reports.

Josegaby.tshikuka@mopipi.ub.bw

Notes: