Publication

Age-related comorbidities and mortality in people living with HIV in rural Tanzania

Author(s) Albrecht, Sascha; Franzeck, Fabian C.; Mapesi, Herry; Hatz, Christoph; Kalinjuma, Aneth Vedastus; Glass, Tracy R.; Mnzava, Dorcas; Letang, Emili; Paris, Daniel H.; Battegay, Manuel; Weisser, Maja; Kiularco Study Group,

Author(s) at UniBasel Mapesi, Herry ; Hatz, Christoph ; Glass, Tracy ; Letang Jimenez de Anta, Emilio Angel ; Paris, Daniel Henry ; Weisser, Maja ;

Causes of morbidity and mortality of people living with HIV are changing with access to antiretroviral therapy and increased life expectancy. Age-related data on comorbidities and their impact on mortality in sub-Saharan Africa are scarce.; This prospective analysis evaluated comorbidities, assessed by means of International Classification of Diseases and Related Health problems 10th revision codes and clinical variables, derived from data collected from the Kilombero & Ulanga antiretroviral cohort of people living with HIV in rural Tanzania.; We calculated prevalences and incidences of comorbidities in patients enrolled from 2013 to 2017 and evaluated their association with a combined endpoint of death and loss to follow-up (LTFU) in various age groups (15-29, 30-49 and ≥50 years) using Cox regression analysis.; Of 1622 patients [65% females, median age 38 years (interquartile range 31-46)], 11% were at least 50 years. During a median follow-up of 22.1 months (interquartile range 10.6-37.3), 48 (2.9%) patients died and 306 (18.9%) were LTFU. Anaemia was the most prevalent comorbidity (66.3%) irrespective of age and was associated with increased mortality/LTFU [hazard ratios 2.02 (95% confidence interval (CI) 1.57-2.60); P <0.001]. In patients aged at least 50 years, arterial hypertension was highly prevalent (43.8%), but not associated with mortality/LTFU [hazard ratios 1.04 (95% CI 0.56-1.93), P = 0.9]. Undernutrition ranged from 25.5% in the youngest to 29.1% in the oldest age group and contributed to mortality/LTFU [hazard ratios 2.24 (95% CI 1.65-3.04); P <0.001]. Prevalence of tuberculosis was 21.4% with hazard ratios of 2.54 (95% CI 1.72-3.75, P <0.001) for mortality/LTFU.; We show that anaemia, arterial hypertension and undernutrition are the most relevant comorbidities with different age-associated frequencies and impact on death/LTFU in this population.