

Pre-ART Mortality and its Determinants in a Tanzania Public Driven HIV Care Program

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Objective

The aim of this write up was to assess the level of mortality and its determinants among HIV infected adults prior to ART initiation.

Introduction

Limited information is available on mortality experience of HIV infected patients prior to the start of antiretroviral therapy (ART), as monitoring of HIV care services has mainly focused on ART initiation and subsequent patient survival. By 2013, Tanzania 1,209 health facilities with HIV services, and 800,000 patients accessing ART

Methods

A retrospective cohort study of 526,059 HIV infected adults (≥ 15 years) enrolled in care prior to ART initiation from November 2004 to December 2011 in 348 health facilities was conducted. The data was used to analyze mortality and its determinants in pre-ART phase, TB events and CD4 testing.

Results

Sixty seven percent of patients were female. Among the enrolled 429,476 patients had follow-up data and 10,362 deaths. The majority (85%) had working status, 82% - CD4 count test done in three months and 91% were screened for TB at first visit. Of the 7.2 million visits 93% had TB screening documented and of 397,288 CD4 tests done in the pre ART phase 71% (282,936 tests) were done in the first month. The overall mortality rate was 37.6 deaths per 1000 person years (95% CI 36.9 - 38.3). Independent predictors of pre-ART mortality were: WHO stage 3 (AHR=2.37; 95% CI 1.94-2.90), WHO Stage 4 (AHR=4.53; 95% CI 3.64-5.64), female sex (AHR=0.62; 95% CI 0.56 -0.70), CD4 count ≥ 200 (AHR=0.17; 95% CI 0.15-0.20) and weighing more than 45kg at CTC enrolment (AHR=0.53; 95% CI 0.46-0.62) was significantly associated with a lower hazard of death.

Conclusions

Routinely collected data suggest high mortality among patients in the pre-ART phase especially among those with low CD4 counts, TB confirmed, and WHO stage 3 and 4. From findings TB screening and CD tests are largely done as per national guidelines. There is need to establish effective interventions targeting patients in the pre ART phase for patient and program improvement

Keywords

Pre-ART; Mortality; Adults

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