MOAB0203 - Mortality during the first year of potent antiretroviral therapy in HIV-1-infected patients from 5 treatment centers in the Caribbean and Latin America

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Background: Approximately 2.1 million people are HIV positive in Latin America and the Caribbean. No multi-cohort study has studied comparative mortality rates and risk factors after HAART initiation in this region.

Methods: Antiretroviral-naïve patients aged ≥ 18 years who started HAART between March 1996 and April 2007 from sites in Argentina, Brazil, Chile, Haiti, and Peru were included. Association between independent variables and outcome was assessed by Cox regression models. Data were censored at the earliest of death, latest follow-up visit, or 365 days.

Results: Of 4503 HIV-infected patients initiating HAART, 37% were female, and the median age was 37 yrs (interquartile range [IQR], 31-44). The median baseline CD4 count was 109 cells/mm3 (IQR, 80-204) and varied between sites (163, 162, 116, 102, and 79 for Argentina, Brazil, Chile, Haiti, and Peru, respectively). The 1-year probability of death for the combined cohort was 8.2% (95%CI 7.4-9.1%) and varied across sites: 2.4% for Argentina; 3.7% for Brazil, 6.0% for Chile, 12% for Haiti, and 9.8% for Peru. Multivariable analysis adjusting for sex, age, clinical stage, calendar year, and type of regimen showed that hazard of death was associated with lower CD4 count at HAART initiation [HRs compared to CD4=50 cells/mm3: 0.7 (95%CI 0.62-0.85) for CD4=100; 0.49 (95%CI 0.29-0.71) for CD4=200; and 0.28 (95%CI 0.15-0.69) for CD4=350], AIDS at HAART initiation (HR 3.2; 95%CI 1.8-5.7), and older age (HR=1.13 per 10 years; 95% CI 0.99-1.29).

Conclusion: The overall one-year mortality rate and risk factors for death observed in this region were similar to that reported for lower income countries. Possible explanations for the high variability observed across sites are different stages of disease at HAART initiation because of late presentation, different criteria for HAART eligibility, differing rates of loss to follow up, age of ARV program, and background co-morbid conditions.

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