

Life expectancy of HIV-infected men and women initiating HAART in resource-constrained settings: insights from the ART-LINC collaboration



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Background

• Considerable effort is being undertaken to increase the number of people initiating antiretroviral therapy in resource-constrained settings.

• Little evidence is available of the impact of antiretroviral therapy on mortality patterns at a population level.

Objective

• The objective of this study was to characterize life expectancy among HIV-infected adults initiating HAART in the Antiretroviral Therapy in Lower Income Countries (ART-LINC) Collaboration.

Methods

Study Population: The ART-LINC Collaboration

• The Antiretroviral Therapy in Lower Income Countries (ART-LINC) Collaboration is a collaborative network of clinics providing antiretroviral treatment in resource-constrained settings¹.

• For the present analysis, 18 centres in 16 countries in Africa, Brazil, India, and Thailand contributed data. Patients who missed appointments were actively traced in 14 centres by telephone or home visits (active follow up); 4 centres relied on word of mouth (passive follow up).

Eligibility criteria

• Eligible participants were previously treatment naïve HIV-infected men and women aged >20 years who initiated HAART, defined as ≥ 3 ART drugs.

Outcome Measures and Life Table Construction

• The endpoint was all cause mortality limited to centres with active follow-up.

• Abridged life tables were constructed to compare age-specific mortality rates and life expectancies at exact age 20 years.

• These tables describe the mortality experience that hypothetical cohorts of HIV-positive individuals would have had if they were subjected to the mortality rates in the observed populations over the study period.

• The expectation of life at an exact age measures the average number of years that will be lived by a person after that age according to mortality rates for all causes combined in the study period.

Comparator group

• The comparator group was HIV-infected persons ≥ 20 years who were also on ≥ 3 ART drugs in British Columbia (BC), Canada between 2002-2004, using data from the BC Centre for Excellence in HIV/AIDS HIV/AIDS Drug Treatment Programme, the only source of free antiretroviral treatment in the province.

Results

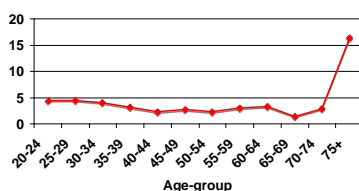
Population and crude mortality rate

• A total of 8240 persons were eligible in ART-LINC. As of 31 December, 2003, a total of 401 deaths were recorded, yielding a crude mortality rate of 4.9% over the median follow-up period of 1 year (IQR: 3 months, 2.1 years).

Age-specific mortality rates

• Age specific mortality rates in ART-LINC ranged from 1.5 to 16.4 per 100 person years (see figure 1).

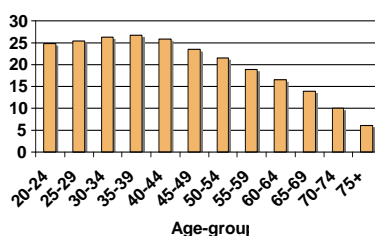
Figure 1



Age-specific mortality rates

• Life expectancy at exact age 20 years was 24.8 years and declined to 6.1 years at age 75 years and over (see Figure 2).

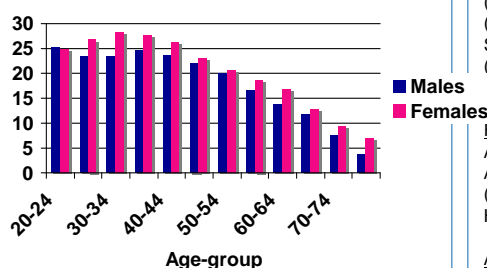
Figure 2



Gender differences

• Life expectancy at most ages is higher for women than men (see Figure 3).

Figure 3



Results (continued)

Comparison group

• In BC, life expectancy at exact age 20 years was 30.8 years (refer to abstract MOPE0289) in 2002-2004 or approximately 5 years higher than that found in ART-LINC during a similar time period.

Discussion & Conclusions

• These data suggest that in spite of HAART use, life expectancy appears lower in these resource-constrained settings compared to HIV-infected adults receiving HAART in Canada.

• This may be related to factors not related to HAART use

• Future research needs to refine these estimates and explore changes in life expectancy over time.

ART-LINC: The Antiretroviral Therapy in Lower Income Countries Collaboration

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