MORTALITY RATE AND ASSOCIATED RISK FACTORS AMONG HIV-INFECTED ADULTS ON ART IN KENYA -1976

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Background

- Since the early 2000s, Kenya has scaled-up antiretroviral therapy (ART) for HIV-infected adults and children.
- However, significantly high HIV related deaths have been reported (approximately 36,000 deaths per year as at 2016).
- We investigated mortality rate and associated risk factors among HIV-infected adults on ART, in Kenya.

Methods

- We conducted a retrospective national survey of HIV infected patients aged 15 years and above, who initiated ART from October 2003 to September 2013 at a representative sample of health facilities in Kenya.
- We abstracted data from patient medical records, including documented deaths during the study period.
- Patients were censored at the end of the study if they were still active in care.
- Chi-square statistics were used to compare patient characteristics by non-adherence status.
- Statistical method of Cox Proportional Hazards was used to investigate factors associated with repeat non-adherence.
- Survey design parameters including weights, clustering and stratification were considered in all analyses.

Results

Patient characteristics:

- Of 2,517 adult patients initiated on ART, 1850 (74%) had documented outcomes at the end of the study period. Majority of whom were aged >= 24 years, n=1,713 (93%), were female, n=1,178 (64%) and had been on ART for < 5 years, n= 1,110 (60%).
- Median age at ART initiation was 35.1 years, (interquartile range [IQR]; 28.8 - 42.8), median follow-up time was 4.1 person-years (PY) (IQR 2.1 - 6.6).
- The total follow-up time was 8,172 PY and resulted in **n=156 (8.4%) deaths** and 1,694 censored patients.

The overall mortality rate was 1.9/100 PY.

	N (% deaths)	adjusted HR (95% CI)	p-value	Global p-value
Total	**1,850 (8)**			
Age category				
15 - < 24 years	138 (7)	ref		
>= 24 years	1,713 (9)	2.0 (0.4 - 9.3)	0.35	0.35
Sex				
Female	1,178 (7)	ref		
Male	673 (12)	2.0 (1.1 - 3.4)	0.01	0.01
Facility tier				
Dispensary/Health center	934 (11)	1.7 (0.9 - 3.1)	0.09	0.09
County/National hospital	917 (6)	ref		
WHO stage				
Stage 1 or 2	768 (2)	ref		
Stage 3 or 4	510 (12)	5.0 (2.5 - 9.9)	<.01	<.01
Duration on ART				
< 5 years	1,110 (13)	9.1 (4.0 - 20.6)	<.01	<.01
>= 5 years	740 (2)	ref		

Conclusions

- Despite accessibility of ART, HIV related deaths continue to be reported especially among men, adult patients initiating ART with advanced disease, and during early years of treatment.
- There is a need to improve strategies for HIV case identification and close monitoring of patients during early years of initiating ART.
- Male-targeted interventions are also needed.

Affiliates / Partners

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