Patient retention from HIV diagnosis through one year on antiretroviral therapy at a primary health care clinic in Johannesburg, South Africa

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BACKGROUND

• South Africa has more people living with HIV/AIDS than any other country and the world’s largest antiretroviral (ART) program with 1.8 million people enrolled
• Retention in HIV care is a documented challenge throughout sub-Saharan Africa
• Patients who drop out of care are at high risk of drug resistance, OIs and death

• Most research on retention focuses on loss to follow-up after ART initiation; more recent literature highlights isolated pre-ART time points, such as CD4 staging or ART initiation
• We report retention from HIV diagnosis through 12 months on ART in order to compare attrition by stage and report cumulative retention

METHODS

• Study population:
  842 non-pregnant adults testing positive for the first time from January-June 2010
  44.9% female, median (IQR) age: 34 (28-40) years, 41.5% born outside of South Africa
  Median (IQR) CD4 at HIV testing: 211.5 (92-350) cells/µl

• Study site:
  Witkoppen Health and Welfare Centre, high-volume NGO-operated primary care clinic in Johannesburg, South Africa

• Data collection:
  Data collected via retrospective file review through ≥12 months after HIV testing, or a ≥12 months after ART initiation for those immediately ART-eligible (CD4 ≤ 350 cells/µl)

• Methods:
  Pre-ART attrition defined using proposed definitions (Fox MP. TMH 2012 in press) see panel
  Identified predictors of loss with multivariable log-binomial regression models

RESULTS

Completion of key stages of early HIV care

Cumulative retention among ART-eligible patients (n=544)

- 68.9% retained (n=375)
- 49.3% retained (n=268)
- 38.8% retained (n=211)
- 36.9% retained (n=201)

Cumulative retention among ART-ineligible patients (n=207)

- 74.3% retained (n=155)
- 43.0% retained (n=91)

• Retention by pre-ART stage: 68.9% in pre-ART stage 1, 57.4% in pre-ART stage 2, 73.5% in pre-ART stage 3
• Retention by post-ART stage: 82.0% from 0-6 months on ART and 95.3% from 6-12 months

CONCLUSIONS

• Patient attrition in the first year following HIV diagnosis was substantial and greatest prior to ART initiation: over 25% at each of the three pre-ART stages
• The highest attrition in a single stage is at pre-ART stage 2: ART-ineligible patients returning for a repeat CD4 within one year (42.6%, 95%CI: 35.50-50.5)
• Cumulative retention from HIV testing through one year on ART was less than 40% among ART-eligible patients
• As countries expand their HIV testing and ART programs, success will depend on linkage to care, especially prior to ART eligibility and initiation

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