Contraception Continuation and Initiation by Newly Diagnosed HIV-Infected Women in Lilongwe, Malawi


University of North Carolina at Chapel Hill; University of North Carolina Project, Lilongwe, Malawi; Emory University; Johns Hopkins University
Introduction

- Malawi
  - HIV prevalence 11-18%
  - Unintended pregnancy 40%
Objectives

- In an urban population of newly diagnosed HIV+ women
  - To estimate probability of contraceptive continuation
  - To estimate the probability of contraceptive initiation
Methods

- Prospective clinical study 12/2003 – 1/2005
- Women of unknown HIV status recruited from
  - Family Planning Clinic
  - Sexually Transmitted Infections Clinic
  - HIV Clinic VCT Center
- Malawi National Health Sciences Research Committee and University of North Carolina Institutional Review Boards approved the study
Screening

- Pregnancy testing
- Family planning counseling
- Voluntary counseling and testing
  - 2 parallel rapid tests
  - If positive women offered enrollment
Enrollment and follow up visits

- Enrollment
- 5 follow-up visits at 1, 3, 6, 9 and 12 months
- Resources available
  - Family Planning and HIV counseling
- Information collected
  - Questionnaire
  - UPT
  - CD4 Testing
- Secondary data analysis of reported contraceptive use at each visit
Statistical analysis

- Chi square for categorical variables
- Student’s t-test for continuous variables
- Kaplan-Meier curves to estimate probabilities of contraceptive continuation and initiation
### Population characteristics
227 women enrolled

<table>
<thead>
<tr>
<th></th>
<th>Using Contraception</th>
<th>Not Using Contraception</th>
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<tbody>
<tr>
<td></td>
<td>N=119</td>
<td>N=108</td>
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<tr>
<td>Age (mean ±SD)</td>
<td>27 ± 0.5</td>
<td>26 ± 0.5</td>
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<tr>
<td>Has at least one living child</td>
<td>96%</td>
<td>74%</td>
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<tr>
<td>CD4 Count (median, IQR)</td>
<td>377 (194, 559)</td>
<td>246 (110, 387)</td>
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<tr>
<td>Recruitment site</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family Planning Clinic (n=96)</td>
<td>64%</td>
<td>36%</td>
</tr>
<tr>
<td>STI Clinic (n=85)</td>
<td>38%</td>
<td>62%</td>
</tr>
<tr>
<td>VCT Center (n=46)</td>
<td>15%</td>
<td>85%</td>
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## Contraceptive method at enrollment

<table>
<thead>
<tr>
<th>Method</th>
<th>N=119</th>
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<tr>
<td>Injectable</td>
<td>84 (37)</td>
</tr>
<tr>
<td>Oral contraceptives</td>
<td>15 (7)</td>
</tr>
<tr>
<td>Implant</td>
<td>4 (2)</td>
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<tr>
<td>Condoms</td>
<td>16 (7)</td>
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Probability of continuation

Probability of continuation for Injectable is 0.61 (0.50, 0.71)

Probability of continuation for Oral contraceptive pill is 0.00

Overall probability of continuation is 0.41 (0.22, 0.59)

Days since enrollment
Probability of continuing any contraceptive by site of enrollment

Days since enrollment

Probability

Family Planning Clinic 0.44 (0.21, 0.65)
VCT Clinic 0.37 (0.14, 0.61)
STI Clinic 0.26 (0.05, 0.55)
Probability of initiating a contraceptive by stated intent at enrollment

<table>
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<tr>
<th>Probability of initiating contraception</th>
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<tr>
<td>Overall (n=108)</td>
<td>0.46 (0.32, 0.61)</td>
</tr>
<tr>
<td>Intends to use (n=38)</td>
<td>0.68 (0.44, 0.89)</td>
</tr>
<tr>
<td>No intent (n=69)</td>
<td>0.30 (0.20, 0.43)</td>
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Conclusions

- Continuation poor
  - Rapid decline after three months
- Initiation encouraging
  - Family Planning Clinics
  - Intention to start
Summary

- **Gaps**
  - Between initiation and continuation
  - Between intent and initiation

- **29 pregnancies; 19 in women desired no more children**

- **17 deaths**

- **With the high maternal mortality rate in sub-Saharan Africa it is crucial to prevent unintended pregnancy**
Summary

- Family planning and HIV services overlap
  - Regular visits
  - Continued education
  - And often continued provision of medications

- Imperative to provide family planning to HIV+ women at convenient locations
Acknowledgements

- Women of Lilongwe who participated in the study
- Kamuzu Central Hospital Family Planning Clinic
- Kamuzu Central Hospital Sexually Transmitted Disease Clinic
- Lighthouse HIV Clinic Counseling and Testing Unit
- National Institutes of Health