Contraceptive use and receptiveness to integrating family planning services into HIV care and treatment, Nyanza Province, Kenya

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Background

- High HIV prevalence
- Many unintended pregnancies
- Large unmet need for contraception among HIV-infected women
- Prevention of unintended pregnancy has implications for:
  - Perinatal HIV transmission
  - Maternal/neonatal morbidity and mortality
Study Objective

• Describe current contraceptive use among HIV-infected women and men in care

• Assess their receptiveness to integrated FP/HIV services

• Inform cluster randomized trial\(^1\) comparing integrated to non-integrated services

1. ClinicalTrials.gov NCT01001507
Methods

- Face-to-face surveys in Luo on contraceptive knowledge, attitudes, practices, and receptiveness to FP/HIV integration
- HIV-infected men and women enrolled at 18 government-run HIV care and treatment clinics in Nyanza Province, Kenya
- Descriptive statistics, univariable and multivariable logistic regression
  - Generalized estimating equations (GEE)
<table>
<thead>
<tr>
<th>Demographic information</th>
<th>Female (n=489)</th>
<th>Male (n=487)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age in years (SD)</td>
<td>29.8 (6.3)</td>
<td>34.3 (6.7)</td>
</tr>
<tr>
<td>Primary school or less</td>
<td>85%</td>
<td>72%</td>
</tr>
<tr>
<td>Married or cohabitating</td>
<td>75%</td>
<td>85%</td>
</tr>
<tr>
<td>Works outside the home</td>
<td>51%</td>
<td>58%</td>
</tr>
<tr>
<td>Taking or about to start ARVs</td>
<td>78%</td>
<td>75%</td>
</tr>
<tr>
<td>Able to identify fertile period</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>Number of living children</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>10%</td>
<td>10%</td>
</tr>
<tr>
<td>1-3</td>
<td>57%</td>
<td>61%</td>
</tr>
<tr>
<td>&gt;4</td>
<td>33%</td>
<td>39%</td>
</tr>
<tr>
<td>≥1 HIV-infected child</td>
<td>26%</td>
<td>12%</td>
</tr>
</tbody>
</table>
### Self Reported Use of Contraception (self or partner)

<table>
<thead>
<tr>
<th>Method</th>
<th>Female n=450</th>
<th>Male n=483</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currently using more effective contraception*</td>
<td>26%</td>
<td>16%</td>
</tr>
<tr>
<td>Condoms only</td>
<td>39%</td>
<td>63%</td>
</tr>
<tr>
<td>Dual protection</td>
<td>7%</td>
<td>16%</td>
</tr>
<tr>
<td>DMPA</td>
<td>21%</td>
<td>9.5%</td>
</tr>
<tr>
<td>Oral contraceptives</td>
<td>2%</td>
<td>4%</td>
</tr>
<tr>
<td>Tubal ligation</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>Natural methods</td>
<td>2%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Implants, IUDs, and vasectomy were used by 1% or less of the participants.

*More effective methods (MEC): pills, injectables, implants, IUCD, tubal ligation, and vasectomy*
Fertility Desires Among Women
n=475

- 0-24 months: 18%
- >24 months: 10%
- no more children: 56%
- Other: 16%
Contraception Use Among Women by Fertility Desires, n=475

- No method reported
- Condoms, natural family planning methods
- Pills, injectables, implants, IUCD, sterilization

p=0.002
Fertility Desires Among Men
n=472

- 0-24 months: 24%
- >24 months: 15%
- No more children: 49%
- Other: 12%
Contraception Use Among Men by Fertility Desires, n=472

- No method reported
- Condoms, natural family planning methods
- Pills, injectables, implants, IUCD, sterilization

p<0.0001
## Correlates of Contraceptive Use among HIV-infected female clients (n=405)

<table>
<thead>
<tr>
<th>Covariates*</th>
<th>Adjusted OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age ≥ 35 years</td>
<td>0.40</td>
<td>0.20-0.79</td>
</tr>
<tr>
<td>Working outside the home</td>
<td>2.05</td>
<td>1.25-3.35</td>
</tr>
<tr>
<td>Desires fertility delay of &gt;2 years or no more children</td>
<td>3.22</td>
<td>2.00-5.26</td>
</tr>
<tr>
<td>Having a current partner</td>
<td>25.0</td>
<td>9.0-50.0</td>
</tr>
<tr>
<td>Unaware of partner’s HIV status</td>
<td>0.40</td>
<td>0.26-0.62</td>
</tr>
<tr>
<td>Taking or starting ARVs</td>
<td>1.72</td>
<td>1.09-2.70</td>
</tr>
</tbody>
</table>

*Additional variables included in final model: desired number of children, clinic setting (urban vs. rural)
## Correlates of More Effective Contraceptive Use* among HIV-infected female clients (n=292)

<table>
<thead>
<tr>
<th>Covariates**</th>
<th>Adjusted OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary school or greater</td>
<td>5.70</td>
<td>2.50-13.0</td>
</tr>
<tr>
<td>Desires fertility delay of &gt;2 years or no more children</td>
<td>3.22</td>
<td>1.75-5.88</td>
</tr>
<tr>
<td>Unaware of partner’s HIV status</td>
<td>0.36</td>
<td>0.18-0.75</td>
</tr>
<tr>
<td>FP decision-maker: Self</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>FP decision-maker: Partner</td>
<td>0.06</td>
<td>0.02-0.22</td>
</tr>
<tr>
<td>FP decision-maker: Joint decision</td>
<td>0.16</td>
<td>0.08-0.33</td>
</tr>
</tbody>
</table>

*Hormonal, intrauterine, or permanent methods

**Additional variables included in final model: cell phone status, ARV use, number of living children
Receptivity to Integration

People not using more effective contraception* were asked: “Do you think you (females)/ your partner (males) would be more likely to use a family planning method like birth control if it were available here at the PSC (HIV clinic)?”

* Hormonal, intrauterine, or permanent methods
** Partnered men
### Correlates of Receptiveness to Integration

#### Covariates* (Women, n=334) | Adjusted OR | 95% CI
---|---|---
Age ≥ 35 | 0.22 | 0.11 - 0.43
Owning a cell phone | 0.47 | 0.29 - 0.77
Having a current partner | 2.32 | 1.16 - 4.76
Infertility | 0.12 | 0.04 - 0.41
Not using FP | 2.55 | 1.25 - 5.24
Joint decision to use FP | 2.91 | 1.39 - 6.09

#### Covariates* (Men, n=322) | Adjusted OR** | 95% CI
---|---|---
Age ≥ 35 | 2.82 | 1.30 - 6.10
Not taking ARVs | 3.70 | 1.56 - 8.81

*Additional variables included in the final models: Women: number of living children, number of HIV+ children Men: current FP use, clinic setting (urban vs. rural)

**compares answer of “yes” vs. “don’t know”
Summary

- High unmet need for contraception
- Vast disparity between fertility desires and contraception use
- High receptiveness to integration
- Integrated FP/HIV services might decrease unmet need for contraception by focusing on:
  - Couple communication
  - Facilitation of joint decision-making
  - Facilitated disclosure of HIV status within couples
  - Male and community engagement
Limitations

- Cross-sectional study
- Self-reported data
- Individual level data
- Receptiveness to FP is theoretical concept
- Generalizability
Acknowledgements

- Study participants
- Research team
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INTEGRATION FOR IMPACT
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