WOMEN’S AUTONOMY, CONTRACEPTIVE USE, AND SEXUAL ACTIVITY IN SUB-SAHARAN AFRICA: A MULTI-COUNTRY ANALYSIS

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Background

- **Contraceptive prevalence rate** in Sub-Saharan Africa remains low but varies substantially by country.
- Research on **women’s empowerment** and reproductive health outcomes have shown mixed results.
- **Coital frequency** is often overlooked in studies on contraception and women’s empowerment.
  - Arranged vs. romantic marriages
  - Relationship quality, pleasure and sexual intercourse
Research Questions

- Is contraceptive use associated with the timing of most recent sexual intercourse?

- Is women’s empowerment associated with the timing of recent sexual intercourse?
Demographic and Health Survey Data and Sample Size

<table>
<thead>
<tr>
<th>Country</th>
<th>Dates of Fieldwork</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana</td>
<td>Sept 2008 – Nov 2008</td>
<td>1938</td>
</tr>
<tr>
<td>Malawi</td>
<td>Nov 2004 – Jan 2005</td>
<td>5532</td>
</tr>
<tr>
<td>Mali</td>
<td>May 2006 - Dec 2006</td>
<td>5317</td>
</tr>
<tr>
<td>Rwanda</td>
<td>Feb 2005 - July 2005</td>
<td>3927</td>
</tr>
<tr>
<td>Uganda</td>
<td>April 2006 - Oct 2006</td>
<td>2812</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>Aug 2005 - Feb 2006</td>
<td>3594</td>
</tr>
</tbody>
</table>

- Exclusions: single, divorced, widowed, polygynous union, and pregnant at the time of the survey
Key Variables Used in Analyses:

- **Outcome Variable**: Timing of recent sexual intercourse with spouse/partner
  - Survey question: When was the last time you had sexual intercourse with X partner?
  - Continuous variable by week

- **Key Independent Variables**:
  - Current contraceptive use (none, traditional and modern)
  - Household Decision-Making (wife, husband and joint in health care, large purchases, daily purchases and visits to family and friends)
Statistical Analysis

- Outcome of interest: Time to most recent sex (by week)
  - Time-to-event analysis (Cox Proportional Hazard Models)
    - Unadjusted analysis
    - Adjusted analysis with block modeling
      - Full model: contraceptive use, household decision-making, urban/rural residence, respondent’s education, partner’s education, respondent’s age, age difference, wealth, husband’s residence, marital duration, parity, and fertility preference
## Results: Respondent Characteristics

Mean values and percent distributions of respondents

<table>
<thead>
<tr>
<th></th>
<th>Ghana</th>
<th>Malawi</th>
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<th>Rwanda</th>
<th>Uganda</th>
<th>Zim</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex: past 4 wks (%)</strong></td>
<td>61</td>
<td>75</td>
<td>80</td>
<td>88</td>
<td>81</td>
<td>80</td>
</tr>
<tr>
<td><strong>Time to sex (Mean Weeks)</strong></td>
<td>15</td>
<td>8</td>
<td>7</td>
<td>12</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td><strong>Contraceptive Use (%)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional Use</td>
<td>9</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Modern Use</td>
<td>20</td>
<td>35</td>
<td>8</td>
<td>13</td>
<td>22</td>
<td>68</td>
</tr>
<tr>
<td><strong>Decision-Making Score 0–4 (mean)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wife Only</td>
<td>1.1</td>
<td>0.6</td>
<td>0.7</td>
<td>1.0</td>
<td>0.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Husband Only</td>
<td>1.0</td>
<td>2.6</td>
<td>2.9</td>
<td>1.4</td>
<td>1.5</td>
<td>0.4</td>
</tr>
<tr>
<td>Joint</td>
<td>1.9</td>
<td>0.8</td>
<td>0.4</td>
<td>1.7</td>
<td>1.7</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>Sample Size</strong></td>
<td>1938</td>
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</tr>
</tbody>
</table>
## Results: Contraceptive Use and Recent Sex

Adjusted hazard ratios of time to most recent sex in weeks by contraceptive use¹

<table>
<thead>
<tr>
<th>Contraceptive Use (Ref = No Use)</th>
<th>Ghana</th>
<th>Malawi</th>
<th>Mali</th>
<th>Rwanda</th>
<th>Uganda</th>
<th>Zim.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional Use</td>
<td>1.66***</td>
<td>1.35***</td>
<td>1.08</td>
<td>0.99</td>
<td>1.29***</td>
<td>1.52***</td>
</tr>
<tr>
<td>Modern Use</td>
<td>1.71***</td>
<td>1.49***</td>
<td>1.20***</td>
<td>1.13***</td>
<td>1.35***</td>
<td>1.45***</td>
</tr>
</tbody>
</table>

* p<0.05, ** p<0.01, *** p<0.001

¹Adjusted for urban/rural residence, respondent’s education, partner’s education, respondent’s age, age difference, wealth, husband’s residence, marital duration, parity, fertility preference, and household decision-making
Results: Women’s Autonomy and Recent Sex

Timing of most recent sexual intercourse by the number of household decisions where the woman has final say: Malawi

- **Last month**
- **1-3 months**
- **More than 3 months**

Percentage of women who report sex

Number of Decisions where wife has final say

0 | 1 | 2 | 3 | 4
---|---|---|---|---
0 | 10 | 10 | 10 | 10
10 | 30 | 30 | 30 | 30
20 | 50 | 50 | 50 | 50
30 | 70 | 70 | 70 | 70
40 | 90 | 90 | 90 | 90
50 | 100 | 100 | 100 | 100
60 | 80 | 80 | 80 | 80
70 | 70 | 70 | 70 | 70
80 | 60 | 60 | 60 | 60
90 | 50 | 50 | 50 | 50
100 | 40 | 40 | 40 | 40
Summary of Results

- Contraceptive use is highly correlated with the timing of most recent sexual intercourse with current users reporting more recent sexual activity.
- High degree of association between women’s autonomy and recent sexual intercourse
- No consistent pattern was found between the socio-demographic variables and recent sexual activity across countries.
Limitations

- Cross-sectional data that limits our ability to determine the timing of events
- Limited to the questions asked in the demographic and health surveys (example: recent sex vs. sexual frequency)
- Only six countries were included, however, the countries represent different regions of Sub-Saharan Africa
- Results are not generalizable to unmarried women or women in polygynous unions
Implications

- Despite limitations, this is one of the first studies to utilize the DHS data on timing of most recent sex.
- Understanding why more autonomous women delay sex may speak to the nature of sexual relationships. Further data are needed on the quality of relationships in sub-Saharan Africa.
- With contraceptive users (especially modern method users) reporting more recent sexual activity, these data may provide another avenue for promoting contraceptive use.
THANK YOU!