Knowledge and use of methods to avoid pregnancy at first sex: the influence of family and school factors among school going youth in Mukono, Uganda

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Ugandan Youth in Action
Rationale

- Youth in many African countries represent a significant proportion of total population;
- In many countries, use of family planning methods among youth is relatively low.
- Research on contraceptive use among young people has grown.
- Research on the role that the family and school environment still is growing but still limited.
Hypotheses

- **Hypothesis 1:** Young people whose parents/guardians communicate more on issues of sex and HIV, and those with a higher level of parent monitoring are more likely to know more methods and are more likely to report using a method at first sex;

- **Hypothesis 2:** Young people with a lower level of parent permissiveness are more likely to know more pregnancy prevention methods and are more likely to report using a method at first sex;

- **Hypothesis 3:** Youth attending schools with more sources of health information as well as those in better performing schools are more likely to know more methods of pregnancy prevention and are more likely to report use of a method at first sex;

- **Hypothesis 4:** Unmeasured aspects of the school environment influence number of methods known and use of a method at first sex.
STUDY SETTING & CONTEXT
Ugandan Context

- 56% of population is below 18 yrs
- Country has one of the highest population growth rates
- Only 5.2% of 15-19 year old and 17.2% of women 20-24 reported using a modern method
- Significant unmet need among adults and youth
- High birth rates-152 births per 1,000 Ugandan young women aged 15-19 years

Sources: Uganda Bureau of Statistics. 2002 Uganda population and housing census: Main report


Study Setting

Mukono District
- Fifth most populated district with 1,152,926 residents
- Predominantly agricultural

Mukono Township
- One of four townships in the district
- Houses the district’s headquarters
- 21 km from Kampala, the capital
- Semi-urban with surrounding rural villages
- Retail business and agriculture are the main sources of income
SAMPLE AND METHODS
Study Sample and Methods

Cross-sectional school-based study

- 10 randomly selected schools in Mukono town council
- 1500 students between Form 3 and Form 6

Data was collected between November 2007 and March 2008
For the school-aged children, a self-administered survey was used:
- 764 males and 736 females

In addition, head teachers from 10 schools were interviewed.
Outcome Measures

Number of pregnancy prevention methods known
- Have you ever heard of a method to protect a woman from pregnancy?
- What method have you heard of?

Use of a method at first sex
- Did you or your partner use a method to protect against pregnancy the first time you had sex?
- What method(s) did you use?
Independent Variables

**Family Factors**
- Parent-child communication on sex/ HIV;
- Parent monitoring;
- Parent permissiveness;

**School Factors**
- Number of school sources of health information
- School performance
- Includes a random intercept on school
Analytic Techniques

- **Number of family planning methods known**
  - Univariate and bivariate analysis
  - Linear random intercept modeling

- **Use of a family planning method at first sex**
  - Univariate and bivariate analysis
  - Logistic random intercept modeling
Results
## Distribution of Sample on Selected Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Males Percent (n)</th>
<th>Females Percent (n)</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (Mean, (Range))</td>
<td>18.8 (14-29)</td>
<td>18.2 (14-29)</td>
<td>0.0001</td>
</tr>
<tr>
<td>Ever had sex</td>
<td>42.4 (262)</td>
<td>33.5 (206)</td>
<td>0.001</td>
</tr>
<tr>
<td>Age at first sex (Median, Range)</td>
<td>16.0 (5-22)</td>
<td>16.5 (5-22)</td>
<td>0.60</td>
</tr>
<tr>
<td>&gt; than one sexual partner in past year</td>
<td>16.8 (104)</td>
<td>13.0 (80)</td>
<td>0.06</td>
</tr>
<tr>
<td>First sexual partner was five years or more</td>
<td>5.4 (12)</td>
<td>12.9 (21)</td>
<td>0.10</td>
</tr>
<tr>
<td>Did not use a condom at first sex</td>
<td>38.9 (102)</td>
<td>25.7 (62)</td>
<td>0.003</td>
</tr>
<tr>
<td>Not willing to have sex the first time they had sex</td>
<td>13.1 (29)</td>
<td>48.2 (81)</td>
<td>0.0001</td>
</tr>
</tbody>
</table>
Gender differences in sexual experiences
n=1500

% of students

<table>
<thead>
<tr>
<th>Category</th>
<th>Males</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ever Had Sex</td>
<td>42.4</td>
<td>33.5</td>
</tr>
<tr>
<td>1st Sex &lt;16 years</td>
<td>16.8</td>
<td>10.1</td>
</tr>
<tr>
<td>More than one partner in past 12 months</td>
<td>16.8</td>
<td>13.0</td>
</tr>
</tbody>
</table>

* indicates statistically significant difference
Knowledge of Pregnancy Prevention methods

- 88.2% of youth knew at least one modern method to prevent pregnancy
- 72.7% of youth knew of the condom
- 38.9% knew of the pill.
- 17.5% had heard of the injectable
- 87.3% knew of a place to get a condom
- 73.3% knew of a place they could get the pill
- Median number of methods known; 1 (range 0 to 8)
- Radio was most frequently cited source of information
Use of a Pregnancy Prevention Method at first sex

- The condom was most ever used method; used by 75.5% of youth
- 73.0% of youth reported using a method at first sex
- Fear of side effects and fear of what other people would say most frequently cited reasons for youth not using a method
Adjusted Beta Coefficients for Factors Associated with Number of Pregnancy Prevention Methods Known, Young people in Mukono

<table>
<thead>
<tr>
<th>FIXED EFFECTS</th>
<th>Adjusted models (Beta(SE))</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.85 (0.65)</td>
<td>0.193</td>
</tr>
<tr>
<td>Age</td>
<td>0.06 (0.02)</td>
<td>0.012</td>
</tr>
<tr>
<td>Parent/guardian permissiveness</td>
<td>-0.07(0.03)</td>
<td>0.017</td>
</tr>
<tr>
<td>Communication with parent/guardian on HIV/sex</td>
<td>-0.03(0.02)</td>
<td>0.085</td>
</tr>
<tr>
<td>Parent/guardian monitoring</td>
<td>0.01 (0.01)</td>
<td>0.413</td>
</tr>
<tr>
<td>Number of sources of health information</td>
<td>0.01 (0.19)</td>
<td>0.941</td>
</tr>
<tr>
<td>A least 50% of senior four candidates passed</td>
<td>0.11 (0.10)</td>
<td>0.308</td>
</tr>
<tr>
<td>RANDOM EFFECTS</td>
<td>1.77 (0.03)</td>
<td>0.0000</td>
</tr>
</tbody>
</table>
### Adjusted Odds Ratios for Factors Associated with use of a method at first sex, Young People in Mukono, Uganda

<table>
<thead>
<tr>
<th>FIXED EFFECTS</th>
<th>Odds Ratio</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.02</td>
<td>0.711</td>
</tr>
<tr>
<td>Parent/guardian permissiveness</td>
<td>1.01</td>
<td>0.721</td>
</tr>
<tr>
<td>Communication with parent/guardian on HIV/sex</td>
<td>1.12</td>
<td>0.004</td>
</tr>
<tr>
<td>Parent/guardian monitoring</td>
<td>1.08</td>
<td>0.011</td>
</tr>
<tr>
<td>Number of sources of health information</td>
<td>0.80</td>
<td>0.225</td>
</tr>
<tr>
<td>A least 50% of senior four candidates passed</td>
<td>1.26</td>
<td>0.239</td>
</tr>
</tbody>
</table>

### RANDOM EFFECTS

<table>
<thead>
<tr>
<th>Odds Ratio</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0001</td>
<td>1.000</td>
</tr>
</tbody>
</table>
Conclusions

- Parental/guardian communication does not improve knowledge of methods known although it influences use of method at first sex;
- Number of sources of health information is not associated with methods known or use but unmeasured aspects of school seem to influence knowledge;
- Unmeasured school factors are not associated with first time use.
Overall Study Strengths

- Included a large sample;
- Explored associations in two different domains: school and family;
- Examined unmeasured school factors;
- Conducted in a district that is similar to many districts in the country.
Study Limitations

- Used cross sectional data;
- Used self reported measures;
- Only included in-school youth.
Acknowledgements

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Thank You!