Long-term contraceptive protection, discontinuation and switching behaviour
IUD use dynamics in 14 developing countries

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Outline

- Background
- Objectives
- Methods
- Main findings
- Implications for policies & programmes
- Conclusions
Background: IUD Prevalence

- Northern America: 4.8%
- Latin America & Caribbean: 7%
- Africa: 4.4%
- Asia: 17.9%
- Europe: 12.4%
- Oceania: 1.1%

UN, 2011
Background: Rationale

- Avoiding unintended pregnancy depends on effective and persistent use.

- Discontinuation & switching are key determinants of success of achieving reproductive intentions:
  - 15 countries (DHS data): Discontinuation accounted for 20-48% of unwanted fertility (Blanc, 2002).
  - In the US: >50% of unintended pregnancies occurred during a period when contraceptives were not being used (Finer, 2006).

- Once a method is adopted, quick and easy access to other methods is important.

- Despite low failure rates, IUD has high method-related discontinuation rates.
Objectives

- To provide socio-demographic profile of IUD users, continuation of use and reasons for the discontinuation of use at 12, 24 and 36 months

- To provide information on method-switching following discontinuation for method-related reasons
Methods

- **14 Demographic Health Surveys (DHSs)** with contraceptive calendar
- **DHSs** with **at least 300 IUD episodes** were included
- **Single-decrement table**: estimated reasons for discontinuation
  - reported method failure (i.e. the respondent became pregnant while using the IUD);
  - a desire to become pregnant;
  - no further need (i.e. sexual abstinence due to illness or marital dissolution);
  - method-related reasons
- Estimated cumulative cause-specific discontinuation rates at 12, 24 and 36 months
- **Multiple-decrement life-table**: estimated switching behaviours at 3 months after having discontinued the IUD due to method-related reasons
Methods

- Four covariates were used:
  - Place of residence: rural vs. urban
  - Education level: primary schooling or less vs. secondary schooling or higher
  - Motivation for use: using the IUD to limit or to space birth
  - Wealth tertiles: Top third (the richer) vs. bottom third (the poorer)
Findings: 14 countries

- 14 DHSs were carried out between 1993 and 2008
- Contraceptive calendar data: 218,092 women across the 14 surveys
- Total fertility rate (TFR): 1.9 in Vietnam - 4.8 in Bolivia
- Unmet need for family planning: 4.8% in Vietnam - 24.3% Bolivia
Findings: IUD use

- IUD use: 2.2% in the Dominican Republic and Bangladesh - 42% in Kazakhstan (median 8.6%)
- Motivation for IUD use: 50% for spacing & 50% limiting births
- IUD users did not differ to users other methods - residence, education, motivation for use or wealth
- Compared to other modern methods (MM): urban and less educated women were more likely to use the IUD in Indonesia and Nicaragua

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<thead>
<tr>
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<th>INDONESIA</th>
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<th>NICARAGUA</th>
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<tbody>
<tr>
<td></td>
<td>IUD</td>
<td>MM</td>
<td>IUD</td>
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<tr>
<td>Urban</td>
<td>67%</td>
<td>42%</td>
<td>77%</td>
<td>64%</td>
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<tr>
<td>Secondary or higher education</td>
<td>19%</td>
<td>44%</td>
<td>41%</td>
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Findings: all cause discontinuation

- Median: **13.2%** at 12 months; **27.5%** at 24 months & **41.5%** at 36 months
Findings: cause-specific discontinuation

● The main reasons for discontinuation were method-related
  – 8.9% at 12 months, 16.7% at 24 months, 27% at 36 months)

● 12-month discontinuation due to health concerns was 8.9%
  (range: 6.0% in Kazakhstan to 32.2% in Bangladesh)

● 12-month discontinuation due to IUD failure was low
  (median: 1.3%; range: 0.4% in Bangladesh to 3.2% in Kazakhstan)
Findings: method-related discontinuation

- Discontinuation among urban women was double that among rural women in the Philippines & Vietnam:
  - Philippines: 11.7% in urban vs. 4.8% in rural
  - Vietnam: 9.4% in urban vs. 5.6% in rural

- Educated women were >10 times more likely to discontinue IUD use than less educated women in Indonesia (8.1% versus 0.8%)

- Spacers were more likely to discontinue IUD use than limiters (11.4% versus 7.9%):
  - Similar for spacers and limiters in Bolivia, the Dominican Republic and Morocco
Findings:
Switching behaviours at 3-month

- 49.9% of women had switched to another reversible modern method:
  - 24.6% (contraceptive pill), 8.8% (injectables), 8.2% (barrier methods), and 0.5% (another IUD)

- High rates of switching to another modern method in Peru (70.5%) and Morocco (69.8%)

- Low switching to another modern method in Bolivia (16.7%) and Kazakhstan (25.2%)

Source: Demographic and Health Surveys
Implications for programmes & policies

- IUD use varies between countries - reflecting **policy choices** about which methods to promote and **biases** in family planning services

- 40% to 80% women who switched - indicating variability in access and acceptability

- IUD is suitable for women of all reproductive ages regardless of
  - Residence (urban vs. rural)
  - Household wealth
  - Education levels
Implications for programmes & policies

- Among women who discontinued IUD due to method-related reasons:
  - 12.4% became pregnant within three months
  - 24% were still at risk of becoming pregnant

- Roles for FP providers:
  - improve counselling/follow-up services to ensure that women’s concerns are addressed
  - ensure that contraceptive options are discussed prior to IUD removal
MSI’s IUD provision in SSA
Conclusions

- IUD offers three times the length of contraceptive protection than other modern reversible methods
- IUD users experience fewer side effects
- Increasing the provision of an easier and more effective method, such as the IUD, would:
  - contribute towards the prevention of unintended pregnancies
  - have vast benefits for women’s reproductive health
  - expand women’s choices with implications for increasing overall contraceptive prevalence
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