Measuring unmet need for dual protection in Kenya: an analysis of community survey and family planning client cohort datasets


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Background

• Unmet need for FP is a commonly used demographic indicator to measure total demand for FP (and thus the relative success of a FP programme) taking into account women’s fertility preferences and current contraceptive practices (Westoff, 2006).

• But, it fails to assess the extent to which clients are at risk of STIs (including HIV) and their use of dual protection methods (either condoms alone, or condoms used with another method).

• No standardised measures for measuring unmet need for condoms and dual protection have been developed (to our knowledge).
Aims

- To assess the extent of unmet needs for FP and unmet needs for prevention among both community members and FP clients in the Central Province of Kenya, and how these overlap
- To investigate the determinants of unmet needs across both study groups
Methods

Community survey (population level):
• Household survey around the towns of Thika and Nyeri (≤10km from town) (2009) (cross-sectional)
• Multi-stage cluster sample of households within 60 EAs, with random selection of one respondent per household (m or f, aged 18-49)
• Only female data analysed here (N=820)

Clinic survey (clinic level):
• Exit survey of FP clients attending 12 health facilities in Central Province* (late 2009/early 2010) (first round of 2 year cohort study investigating service integration)
• N=1913 (all female, aged 18-45)

* Thika District Hospital, Nyahururu Hospital, Nyeri Provincial Hospital, Murangá Hospital, Ruiru HC, Engineer HC, Kirwara HC, Njabini HC, Ngorano HC, Kigumo HC, Warazo HC, Kangari HC
## Defining unmet need for FP

<table>
<thead>
<tr>
<th>Community survey</th>
<th>FP clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of sexually active women* not currently using a contraceptive method who want no children within the next 2 years OR women currently pregnant who report an unwanted pregnancy in the past year</td>
<td>% of sexually active women** not using contraceptive method over past 12 mths who want no children within the next 2 yrs OR women whose most recent pregnancy*** was mistimed or unwanted</td>
</tr>
</tbody>
</table>

* Reports current partner in past 12 months  
** Reports current partner in past month  
*** Where pregnancy cited as reason for no contraceptive use in past 12 months
## Defining unmet need for HIV/STI prevention

<table>
<thead>
<tr>
<th>Community survey</th>
<th>FP clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of sexually active women* AT RISK for STI/HIV who report no condom use at last sex with any sexual partner</td>
<td>% of sexually active women** AT RISK for STI/HIV who report no condom use at last sex</td>
</tr>
<tr>
<td>AT RISK</td>
<td>AT RISK</td>
</tr>
<tr>
<td>• Attended STI svc in past 12 months OR</td>
<td>• Was told by provider she had STI OR</td>
</tr>
<tr>
<td>• Attended HIV care or partner did in past 12 months OR</td>
<td>• &gt;1 current sexual partner OR</td>
</tr>
<tr>
<td>• &gt;1 current sexual partner OR</td>
<td>• Thinks partner has other sex partners OR</td>
</tr>
<tr>
<td>• Never had HIV test or does not know status</td>
<td>• HIV +/partner HIV+ OR</td>
</tr>
<tr>
<td></td>
<td>• Never had HIV test, or doesn’t know status or doesn’t know partner status</td>
</tr>
</tbody>
</table>

* Reports current partners in past 12 months
** Reports current partners in past month
At risk:

Unmet needs:

- **FP clients (N=1913):**
  - At risk of pregnancy: 97.1%
  - At risk of STI/HIV transmission: 54.2%

- **Community (N=820):**
  - At risk of pregnancy: 84.2%
  - At risk of STI/HIV transmission: 23.8%

- **FP clients (N=1913):**
  - Unmet need for FP: 1.8%
  - Unmet need for condoms: 0.9%
  - Unmet need for DP: 5.7%

- **Community (N=820):**
  - Unmet need for FP: 18.7%
  - Unmet need for condoms: 20.5%
  - Unmet need for DP: 5.7%
Community survey data
Distribution of unmet needs (crude)
Determinants of unmet need for FAMILY PLANNING in community (multivariable)

N=820
Determinants of unmet need for PREVENTION in community (multivariable)

N=820
FP client data
Distribution of unmet needs for prevention

N=1908

* test for trend
Determinants of unmet need for PREVENTION in cohort (multivariable)

N=1908
Risk profile summary

Those with increased odds of unmet needs are:

<table>
<thead>
<tr>
<th>Unmet need for FP (community survey)</th>
<th>Unmet need for prevention (community survey)</th>
<th>Unmet need for prevention (FP clients)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Younger</td>
<td>• Older</td>
<td>• Married</td>
</tr>
<tr>
<td>• Not married</td>
<td>• Married</td>
<td>• Lower education</td>
</tr>
<tr>
<td>• Have secondary education</td>
<td>• Lower SES</td>
<td>• Christian</td>
</tr>
<tr>
<td>• Not the main earner</td>
<td>• Nulliparous</td>
<td>• Manual workers</td>
</tr>
<tr>
<td>• Never had HIV test</td>
<td>• Have more sex partners</td>
<td>• Medium income</td>
</tr>
<tr>
<td></td>
<td>• Not been for FP services in past year</td>
<td>• Different fertility desires to partner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Have more children</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Are HIV- or unknown status</td>
</tr>
</tbody>
</table>
Limitations

- Crude estimate of unmet needs, definitions may be problematic:
  - no data on contraceptive type in comm. survey
  - “Condom use at last sex” suffers from substantial reporting bias
  - Sufficient to examine condom use at last sex act only? Need to differentiate risk and unmet needs indicators by partner type?
  - Current sexual activity: is 1 month appropriate?
- Differences in indicator variables across surveys make direct comparisons challenging
- Survey not specifically aiming to measure unmet needs – unmeasured risk factors in determinants analysis
- Multi-variable models require further analysis to tease out potential effect modification
Conclusions

- At the community level, unmet needs for STI/HIV prevention are as important as those for FP
- Few women have both unmet needs for FP and for prevention, and risk profiles of the two groups clearly differ - different strategies may be needed to address different types of prevention needs – pregnancy vs STI/HIV
- But among FP clients (with met FP needs), unmet needs for prevention are high: dual protection strategies still useful for many women
- We need to develop standardised indicators to measure those AT RISK of STIs/HIV – and measure this outcome consistently across countries and surveys
- Challenges in measurement remain e.g. condom use & its consistency; STI risk and diagnosis
- Further research: explore unmet needs for prevention using DHS data
Acknowledgements

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THANK YOU!

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