Comparing PMA and RHCS surveys - Ethiopia 2015 - Lessons Learned

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Parallel Session
2:30-3:30pm
October 13, 2016
Outline of presentation

• Background -
  • Importance of tracking health system/supply indicators

• Aims of analysis
  • Contrasting RHCS and PMA2020 approaches

• Example of reconstructing PMA2020 SDP weights to be representative at national level and comparable to RHCS

• Conclusions: Should there be standardization in measurement?
Background

PMA2020 (Performance Monitoring and Accountability)
• 4 rounds of surveys since 2014
• Frequency - twice in a year
• Sample size in Round3 = 444
• Supported by BMGF/JHU

RHCS (Reproductive Health Commodity Surveys)
• 6 rounds of surveys since 2010
• Frequency - once in a year
• Sample size in 2015 survey = 499
• Supported by UNFPA-Country Offices
## Contrasting RHCS and PMA2020 approaches

<table>
<thead>
<tr>
<th>Measurement approach</th>
<th>RHCS</th>
<th>PMA2020/SDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sampling frame</td>
<td>All registered health facilities</td>
<td>Population (EA) based</td>
</tr>
<tr>
<td>Sample design</td>
<td>Stratified systematic sample (<em>stratum is facility type</em>)</td>
<td>Main public facilities linked to sample EA and up to 3 private facilities within EA boundary</td>
</tr>
<tr>
<td>Sample power</td>
<td>Based on % SDPs in each category (primary, Secondary, tertiary)</td>
<td>Population sample of reproductive aged women based on mCPR</td>
</tr>
<tr>
<td>Weight construction</td>
<td>Self-weighting usually 95% confidence intervals</td>
<td>Reconstruct SDP weights to be nationally representative 95% confidence intervals</td>
</tr>
<tr>
<td>Indicators</td>
<td>Facility-based (has client exit interviews)</td>
<td>Facility-based (Population level indicators can be linked)</td>
</tr>
</tbody>
</table>
Contrasting RHCS and PMA2020 approaches (2)

<table>
<thead>
<tr>
<th>Measurement approach</th>
<th>RHCS</th>
<th>PMA2020/SDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurrence for trend tracking</td>
<td>Annually</td>
<td>Annually (or semi-annually)</td>
</tr>
<tr>
<td>Analytic advantages</td>
<td>Most SDPs are relocatable and reinterviewed, forming a panel of facilities with improved tracking precision</td>
<td>Most SDPs are relocatable and re-interviewed, forming a panel of facilities with improved tracking precision Multilevel analysis of how supply influences demand (individual consumption) possible given linkage by GPS location</td>
</tr>
<tr>
<td>Sector coverage</td>
<td>Public and some private (if registered)</td>
<td>Public and private Includes pharmacies and retail outlets</td>
</tr>
</tbody>
</table>
Measurement/wording of Questions

PMA2020

Method provision (1 question)
• Which of the following methods of contraception are counseled, provided, prescribed/referred and/or charged?

Stock-status of contraceptives (2 questions)
• Has the [METHOD] been out of stock at any time in the last 3 months? - Does not include sterilization

• Stock-out on day of survey

Verification - asked for SDPs who respond “Yes” to method availability
• You mentioned that you typically provide the [METHOD] at this facility, can you show it to me?

RHCS

Method provision (2 Questions)
• Is this SDP expected to provide this method?
• If ‘Yes’, please state whether the SDP actually offer it to clients on a regular basis (Yes/NO)

Stock-status of contraceptives (2 questions)
• No stock-out in the last three months before the survey? Yes/No (Includes all methods including fe/male sterilization)

• Stock-out on day of survey

Verification - for both ‘yes/no’ responses to stock availability
• Inventory taken, contraceptive is in stock/NOT in stock?
Overlapping indicators in 2015 surveys

- Percentage of facilities providing at least 3 or 5 contraceptives (by type of facility)

- Stock-out of contraceptives on the day of survey (except permanent methods)
  - Verification of stock-in on day of survey

- Stock-out of contraceptives in the 3 months before the survey (except permanent methods)
Overlapping indicators (2)

Contraceptives covered in both surveys (7 methods)
- male condom
- female condom
- Pills
- injectables
- implant
- IUDs
- emergency contraception

• Contraceptives covered in PMA only (2 methods)
  - progestin only pills and
  - Beads

• Contraceptives covered in RHCS only - on stock-out questions (2 methods)
  - Sterilization (male and female)
Percent of SDPs providing at least 5 contraceptive methods on day of survey

- Hospital
- Health Center
- Health Post

PMA2020 R3 (Wted):
- Hospital: 99
- Health Center: 82
- Health Post: 14

RHCS 2015:
- Hospital: 97
- Health Center: 74
- Health Post: 15
Comparisison between PMA and RHCS in 3 month stock-out

PMAR3 - PLUS day of survey stock-out

RHCS2015

- Male condom
- IUD
- Injectable
- Implant
- Pills
- Emergency contraception
Comparison between PMAR3 and RHCS2015 on ‘day of survey’ stock-out by facility type

Higher stock-out among HPs in RHCS survey
### How often is stock-status verified?

#### % of Facilities In and Out of Stock by Verification

**PMA2020-Round 3**

<table>
<thead>
<tr>
<th>Product</th>
<th>In-Stock Verified</th>
<th>Out of Stock</th>
<th>In-Stock Not Varified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injectable</td>
<td>96</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Implant</td>
<td>97</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>IUD</td>
<td>94</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Pill</td>
<td>94</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Male Condom</td>
<td>96</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Female Condom</td>
<td>51</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>EC</td>
<td>80</td>
<td>18</td>
<td>2</td>
</tr>
</tbody>
</table>

Legend:
- Gray: Out of Stock
- Green: In-Stock Not Varified
- Blue: In-Stock Verified
# Does verification of stock status matter?

## % of Facilities In and Out of Stock of Methods by Verification

<table>
<thead>
<tr>
<th>Method</th>
<th>Verified</th>
<th>Not Verified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injectable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Implant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IUD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pill</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male Condom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female Condom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Contraception</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

RHCS-2015

% of Facilities In and Out of Stock of Methods by Verification

- Injectable: 12% In, 10% Out
- Implant: 18% In, 16% Out
- IUD: 24% In, 22% Out
- Pill: 10% In, 8% Out
- Male Condom: 14% In, 12% Out
- Female Condom: 99% In, 99% Out
- Emergency Contraception: 44% In, 43% Out
Take home messages

• Stock-out of contraceptives generally higher in the RHCS survey particularly at Health posts

• Verification of stock-status which is done differently in the 2 surveys may not affect estimates of stock-out on day of survey

• Differences in study design, and wording of questions makes it difficult to draw direct comparisons between PMA and RHCS surveys.

  • Standardization of questions - key to ensure comparability
Thank You!