Unmet need and unwanted childbearing in Pakistan: Evidence from a panel survey

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IUUSP seminar, Nanyuki, Kenya
May 14, 2013
Outline

• Background and context
• Objectives
• Data and Method
• Results
• Conclusions and implications
Background

- Unmet need estimated from cross-sectional surveys
- Fertility desires, contraceptive use, and unmet need status change over time
- Raises the issues of stability and validity
- Can be studied by panel studies
- Will contribute to literature generated by a small number of panel studies in developing countries (Egypt, India, Morocco, Peru, and Taiwan)
Context in Pakistan

- Long history of family planning program
- Low contraceptive use
- High unmet need
  - Fear of side effects
  - Lack of access and supplies
  - Husband’s perceived disapproval
- High discontinuation
- FALAH project implemented between 2008 & 2012
  - Reinvigorate the concept of birth spacing
  - Improve access to good quality services
- Two cross-sectional surveys conducted in 2008/09 & 2011/12
Comparisons of PDHS and FALAH results

<table>
<thead>
<tr>
<th>Year</th>
<th>CPR</th>
<th>Unmet need</th>
<th>% demand met</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990/91</td>
<td>12</td>
<td>30</td>
<td>28</td>
</tr>
<tr>
<td>2006/07</td>
<td>31</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td>2008/09</td>
<td>32</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>2011/12</td>
<td>54</td>
<td>43</td>
<td>50</td>
</tr>
</tbody>
</table>
Specific objectives

- Assess stability of unmet need
- Assess validity of unmet need
- Compare the effects of two strategies on unwanted fertility:
  - Elimination of unmet need
  - Elimination of unwanted fertility among those with met need
Data

- About 5300 women interviewed in 2008/09 and 2011/12 under FALAH project
- Panel selected after matching respondent’s & husband’s names in the same household visited in two cross-sectional surveys
Measurement of Unmet need for Limiting

- Used revised definition (Bradley et al 2012)
- Divided women in three groups:
  - met need (using contraception)
  - unmet need for contraception
  - no need for contraception
    - want soon, want later, infecund
Measurement of Fertility

Baseline survey 2008/09

Birth

End line survey 2011/12
Measurement of unwanted fertility

Prospective

Want no more children in 2008/09

Birth

2011/12

Retrospective

2008/09

Last birth never wanted

Birth
Measurement of adjusted unwanted fertility

Want no more children in 2008/09

Birth

Want no more children in 2011/12
Results
Met contraceptive need increased between 2008/09 and 2011/12

![Bar chart showing the percentage of women's contraceptive need met, unmet, and no need between 2008/09 and 2011/12. The chart shows a decrease in the percentage of women with unmet need and an increase in the percentage with met need.]
Contraceptive need status remained stable for majority of women (67%)
Contraceptive need valid in predicting subsequent fertility

- Full sample (1+ births):
  - No need: 64.5%
  - Unmet need: 44.0%
  - Met need: 19.6%

- Reduced sample (one birth):
  - No need: 51.3%
  - Unmet need: 36.4%
  - Met need: 16.1%
Contraceptive need valid in predicting subsequent unwanted fertility

![Bar chart showing contraceptive need in predicting subsequent unwanted fertility](chart.png)

- **Prospective**
  - Unmet need: 36.4
  - Met need: 16.1
  - No need: 0.0

- **Retrospective**
  - Unmet need: 17.4
  - Met need: 7.8
  - No need: 3.7

- **Adjusted Prospective**
  - Unmet need: 32.5
  - Met need: 14.7
  - No need: 0.0
Unwanted fertility estimates

Prospective: 14.1
Retrospective: 8.4
Adjusted prospective: 12.7
Classification of birth remain same for 79% of births

<table>
<thead>
<tr>
<th>Classification of birth between surveys</th>
<th>Retrospective classification of last birth before 2011/12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unwanted</td>
</tr>
<tr>
<td>Adjusted Prospective</td>
<td>18.1</td>
</tr>
<tr>
<td>Unwanted</td>
<td></td>
</tr>
<tr>
<td>Wanted</td>
<td>4.9</td>
</tr>
<tr>
<td>Total</td>
<td>22.9</td>
</tr>
<tr>
<td>N</td>
<td>288</td>
</tr>
</tbody>
</table>
Estimated effect of two biases on unwanted fertility

Change in fertility desires
Post-facto rationalization
Retrospective
Reducing unwanted fertility

- Overall unwanted fertility:
  - \[ R = \text{Unmet need} (p_1*r_1) + \text{met need} (p_2*r_2) + \text{No need} (p_3*r_3) \]
  - \[ = (0.251*32.48) + (0.309*14.75) + (0.440*0.0) \]
  - \[ = 8.1 + 4.6 + 0.0 = 12.7 \]

- Unwanted fertility can be reduced by focusing on both strategies simultaneously:
  - reducing unmet need
  - supporting women with met need to reduce and ultimately eliminate their unwanted fertility
Implied unwanted fertility under two scenarios if a choice has to be made

- **Unmet need eliminated:**
  - What would be the unwanted fertility among women with unmet need ($r_1$):
    - unlikely to reduce to zero
    - more likely to mimic the behavior of those with met need now, i.e., $r_1 = r_2$
    - $R_1 = p_1 * r_2 + p_2 * r_2 + p_3 * r_3 = (.251*14.75) + (.309*14.75) + (.440*0.0) = 3.7 + 4.6 + 0.0 = 8.3$

- **Unwanted fertility among those with met need eliminated:**
  - $r_2 = 0$
  - $R_2 = p_1 * r_1 + p_3 * r_3 = (.251*32.8) = 8.1$

- Equally effective in reducing unwanted fertility in Pakistan
Comparison of two strategies in other countries

- Elimination of unmet need superior in Taiwan and Egypt
- Elimination of unwanted fertility among those with met need superior in Morocco and Peru
- Equally effective in Pakistan
- Outcome seems to depend upon the relative magnitude of unwanted fertility among women with currently met need
  - Method mix
  - Switching patterns
Implications for reducing unwanted fertility

- Focus on reducing unmet need in countries with method mix tilted toward LA&PMs
  - India with permanent methods
  - Taiwan and Egypt with IUDs
- Focus on women with met need in countries with method mix tilted toward short acting traditional and modern methods
  - Peru and Morocco
Supporting women with met need is important in all countries

- Will reduce subsequent unmet need
  - 17% of women with met need in Pakistan and 20% in Egypt moved to unmet need subsequently
- Will reduce overall unwanted fertility
  - Contribution of women with met need to unwanted fertility ranged from 54% in Peru and 46% in Morocco to 36% in Pakistan and 30% in Egypt and Taiwan
- Elimination of unmet need will not eliminate unwanted fertility
  - Reduce from 5.9% to 3.4% in Egypt
  - Reduce from 12.7% to 8.3% in Pakistan
  - Further reduction will require supporting women with met need
Supporting women with met need to achieve their reproductive intentions through sustained use of contraception

- By improving quality of care & content of CPI
  - Help clients to initially select a method appropriate to her needs & circumstances
  - Encourage clients to switch and facilitate switching whenever the method selected originally does not remain suitable
Reduce the *gap* between discontinuation of the original method and initiation of the same or a different method

**Mind the Gap**