The Impact of COVID-19 on Fertility Intentions and Contraceptive Use: Results from Longitudinal Studies in Four African Contexts

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Background

• What is the effect of a shock (economic, infectious disease, disaster) on fertility preferences and contraceptive use?
  • Results from previous research are mixed, with variation across contexts and over time.
    • Large-scale economic uncertainty (e.g., the Great Recession) has generally led women to postpone and limit fertility in US and Europe (with some exceptions).
    • However, uncertainty may increase/accelerate childbearing desires: in SSA childbearing can be a means of securing financial stability from partners and/or family members, and protection from further economic hardship.
Performance Monitoring for Action (PMA), in its new phase, introduced longitudinal panel design

- Baseline core survey completed in Nigeria, DRC, Burkina Faso, Kenya. Another component of baseline data collection, scheduled to take place after core survey, but not yet completed
- Data collection had not yet started in Uganda, Niger, India, Cote d’Ivoire
- Forced to delay data collection due to COVID-19 restrictions in March

### PMA Panel Surveys: Timeline

<table>
<thead>
<tr>
<th>Country</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
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<td></td>
<td>QTR 4</td>
<td>QTR 1</td>
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<tr>
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<td>FQ</td>
<td>P2</td>
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<td>FQ</td>
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<td>India</td>
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<td>FQ</td>
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<td>P1</td>
<td>FQ</td>
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<td>FQ</td>
<td>P2</td>
<td>CEI</td>
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- P1: Phase 1
- SDP: SDP
- SDP+CEI: SDP+CEI
- P2: Phase 2
- SDP: SDP
- SDP+CEI: SDP+CEI
- P3: Phase 3
- SDP: SDP
- SDP+CEI: SDP+CEI
- CEI: CEI
- CEI follow-up: CEI follow-up
PMA COVID-19 Data Collection

• Phone numbers collected for participating women in baseline core survey
• Interviewers conduct COVID-19 interviews via phone, enter information on smart phones via ODK
• Target samples: women providing phone numbers in Kenya (nationally-representative), Burkina Faso (nationally-representative), DRC (Kinshasa), and Nigeria (Kano, Lagos)
• Linked baseline core survey (socioeconomic characteristics, family planning characteristics, etc…) with COVID-19 survey information
• Created inverse probability weights to account for owning a phone, responding to the survey, etc…
Fertility Intentions: Population-Level Trends

• **Goal**: compare population-level estimates of fertility desires from pre-COVID surveys from late 2019/early 2020 (baseline) with phone-based surveys of the same sample of respondents conducted in June and July of 2020 (during COVID-19).

• Identify changes in fertility desires as a result of the COVID-19 pandemic.
  • Changes in the women reporting that she would like to have a/another child or no more children, and if she would like to have a/another child, how long she would prefer to wait before the birth
  • Categorized women as (1) wanting a child within 24 months, (2) after 24 months, or (3) not desiring any more children
Fertility Intentions: Population-Level Trends

• Significant differences between the two surveys in Burkina Faso, Kenya, and Lagos: declines in the proportion of women who stated that they wanted no more children and modest increases in the percentage of women who reported that they wanted a child but not for another 2+ years.

• In Burkina Faso, there was also a four percentage-point increase in women desiring a child within two years.

• No significant differences between the two surveys in Kinshasa or Kano.
Fertility Intentions: Individual-Level Changes

- **Goal**: examine individual-level changes in childbearing desires before and during COVID-19 restrictions in Burkina and Kenya.
  - **Quantum**: among women who reported wanting no/no more children at baseline, what percentage wants any/more children at follow-up (change) versus no/no more (stability)? And vice-versa.
  - **Tempo**: among women who indicated wanting any/more children at baseline what percentage reports
    - Delaying their fertility intentions at follow-up, that is, shifting from within one year to wanting children later?
    - Accelerating their fertility intentions at follow-up from more than one year to wanting children within one year?
### Fertility Intentions: Individual-Level Changes

- Most women maintained stable overall fertility intentions and timing preferences.
- When changing, more likely to change from not wanting more children to wanting more, instead of changing from wanting more to not wanting.
- Among women who reported wanting more at baseline, more likely to change to delay childbearing than accelerate the next birth.

<table>
<thead>
<tr>
<th>Baseline fertility intention</th>
<th>Fertility intention at COVID-19 follow-up</th>
<th>All women</th>
<th>Wants more/any</th>
<th>Does not want</th>
<th>Within 1 year^</th>
<th>More than 1 year^</th>
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<tr>
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<td>Stable*</td>
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<tr>
<td>Wants more/any</td>
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<td>Does not want</td>
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<td>63.6</td>
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<tr>
<td>Within 1 year^</td>
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<td>-</td>
<td>64.1</td>
<td>35.9</td>
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<td>Wants more/any</td>
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<tr>
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<td>-</td>
<td>9.9</td>
<td>90.1</td>
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</table>
Population-Level Contraceptive Changes

• **Goal**: examine population-level changes in **women’s need for contraception and actual use of contraception** among women in need by comparing pre- COVID and during COVID-19 data
  • All analyses are among women in union
  • Women with “need for contraception” were defined as those who ever had sexual intercourse, were married or in union (as a proxy for recent sexual activity), not pregnant, not infertile, and who did not intend to give birth in the next 12 months.
  • Using data from Burkina Faso; Democratic Republic of Congo-Kinshasa, Kenya; and Nigeria-Lagos
Population-Level Contraceptive Changes

• Between baseline and COVID-19 follow-up surveys, the proportion of women in need of contraception increased significantly only in Lagos.

• Contraceptive use among women in need increased significantly in the two rural geographies, with an 17-percentage point increase in rural Burkina Faso (31% to 48%) and a 7-percentage point increase in rural Kenya (72% to 79%).

• No differences in contraceptive use overall were found in Lagos or Kinshasa.

• Variation by sub-group:
  • Increase in the need for contraception among nulliparous women across all sites
  • Decrease in contraceptive use for youngest women in Lagos (-33 percentage points)
Individual-Level Contraceptive Changes During COVID-19

- **Goal**: estimate the *extent to which women’s contraceptive status changed* at the individual-level (i.e., contraceptive adoption, discontinuation, and switching) between the pre-COVID-19 and COVID-19 periods

- Analysis limited to **women who were at risk of unintended pregnancy** (sexually active, not sterile, not pregnant, and not trying to have a child in the next year)

- Data from Burkina Faso and Kenya
Individual-Level Contraceptive Changes During COVID-19

• Among women at risk of unintended pregnancy, **most did not change their contraceptive use status** during COVID-19

• Those who changed their status were **more likely to adopt a method than discontinue use**

![Bar chart showing contraceptive changes in Burkina Faso and Kenya.](chart.png)
Among **women at risk of unintended pregnancy** who were using contraception before and during the pandemic:

- Most were using methods during COVID-19 that were **as or more effective**, relative to their pre-pandemic method.
- Only **5%** of these women in Burkina Faso and **7%** in Kenya switched to less effective methods.
Main Messages: COVID-19 and FP

• Early in the pandemic, there was general concern that women in low-income contexts would want to delay childbearing but wouldn’t be able to access family planning due to COVID-19 disruptions- leading to unwanted increases in fertility.

• However, we find that:
  • **Fertility intentions were stable or modestly increased** early in the COVID-19 restrictions
  • PMA results generally show **increased contraceptive use among women in-need** during COVID-19 restrictions, particularly in rural areas of Burkina Faso and Kenya.
  • Similarly, women were **more likely to start using contraception** instead of discontinuation, and were more likely to switch to more effective methods.

• This is consistent with PMA results that few women had difficulty in accessing health facilities for family planning.
Caveats

• Results use data from 3-4 months after COVID-19 restrictions began. The impact of COVID-19 may change with longer duration after restrictions.

• Variation across settings: there is not one pattern that explains all results for the impact of COVID-19 on FP-related outcomes.

• There may be an impact of survey mode on responses, which could explain some of the change between PMA baseline (face-to-face in the first four countries) and COVID-19 surveys (phone).

• There are other factors that influence some of the changes we observe before-during COVID-19 that are not measured in PMA surveys, such as strikes among health personnel (in Burkina Faso), availability of backup FP commodities, the extent of COVID-19 restrictions, changes in sexual activity/partnership status, etc...
References

• Information presented here comes from the following publications/papers:
  
  
  