

Performance Monitoring for Action

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

Philip Anglewicz, PhD



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.

PMA Project Context

- 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													
Country	2019	2020				2021				2022			
	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4	QTR 1	QTR 2	QTR 3	QTR 4
DR Congo	P1		FQ		P2		SDP		P3		SDP		
Nigeria	P1		FQ		P2		CEI		P3		CEI		
Kenya	P1		FQ		P2		CEI		P3		CEI		
Burkina Faso	P1		FQ		P2		CEI		P3		CEI		
India		----->		P1		SDP		P2		SDP		P3	
Cote d'Ivoire		----->		P1		SDP		P2		SDP		P3	
Uganda		----->		P1		CEI		P2		CEI		P3	
Niger		----->		P1		CEI		P2		CEI		P3	
	P1	Phase 1	SDP	SDP+CEI	P2	Phase 2	SDP	SDP+CEI	P3	Phase 3	SDP	SDP+CEI	
			CEI	CEI follow-up			CEI	CEI follow-up			CEI	CEI follow-up	

PMA COVID-19: Data Collection

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...

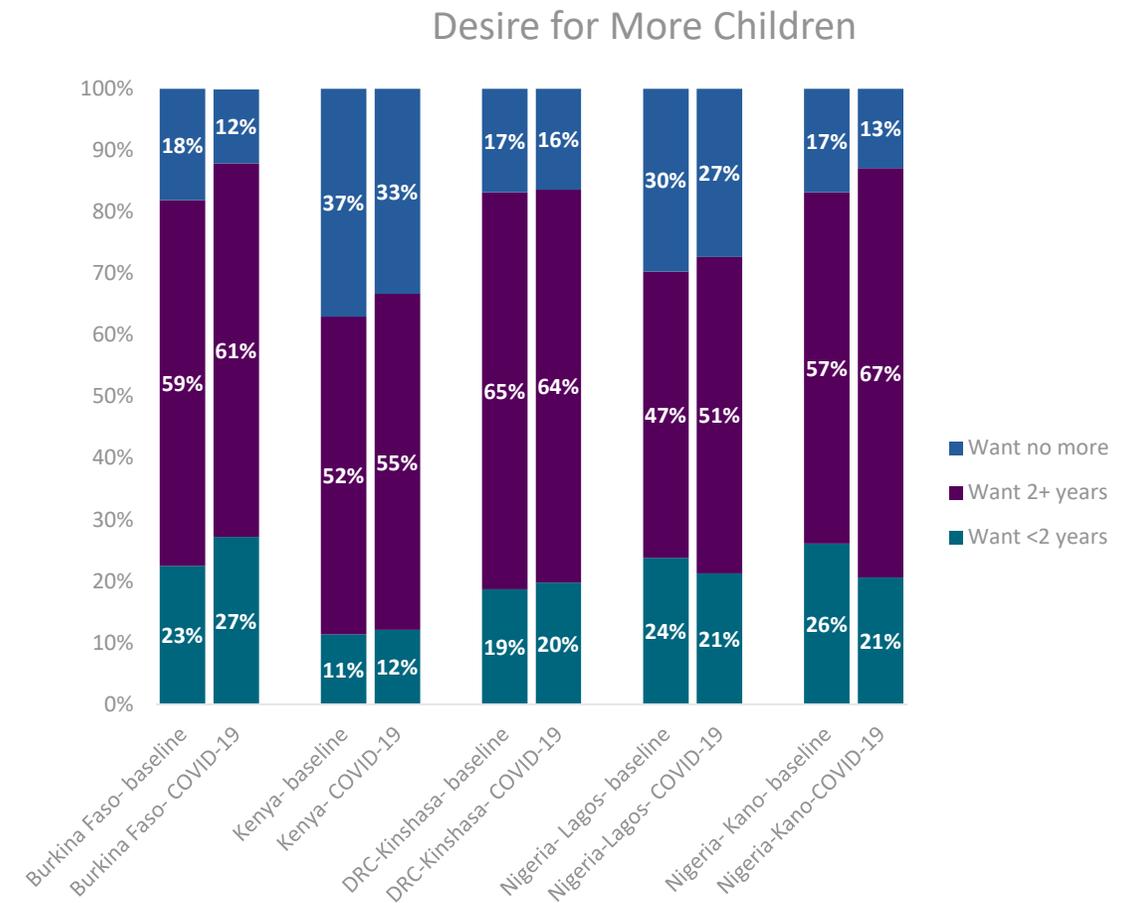


Fertility Intentions: Population-Level Trends

- **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

Baseline fertility intention		Fertility intention at COVID-19 follow-up				
		All women	Wants more/any	Does not want	Within 1 year [^]	More than 1 year [^]
Burkina Faso	Stable*	89.1	-	-	-	-
	Changer*	10.9	-	-	-	-
	Wants more/any	-	94.8	5.2	-	-
	Does not want	-	36.5	63.6	-	-
	Within 1 year [^]	-	-	-	64.1	35.9
	More than 1 year [^]	-	-	-	14.0	86.0
Kenya	Stable*	84.2	-	-	-	-
	Changer*	15.8	-	-	-	-
	Wants more/any	-	87.4	12.6	-	-
	Does not want	-	19.1	80.9	-	-
	Within 1 year [^]	-	-	-	52.8	47.2
	More than 1 year [^]	-	-	-	9.9	90.1

- 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

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

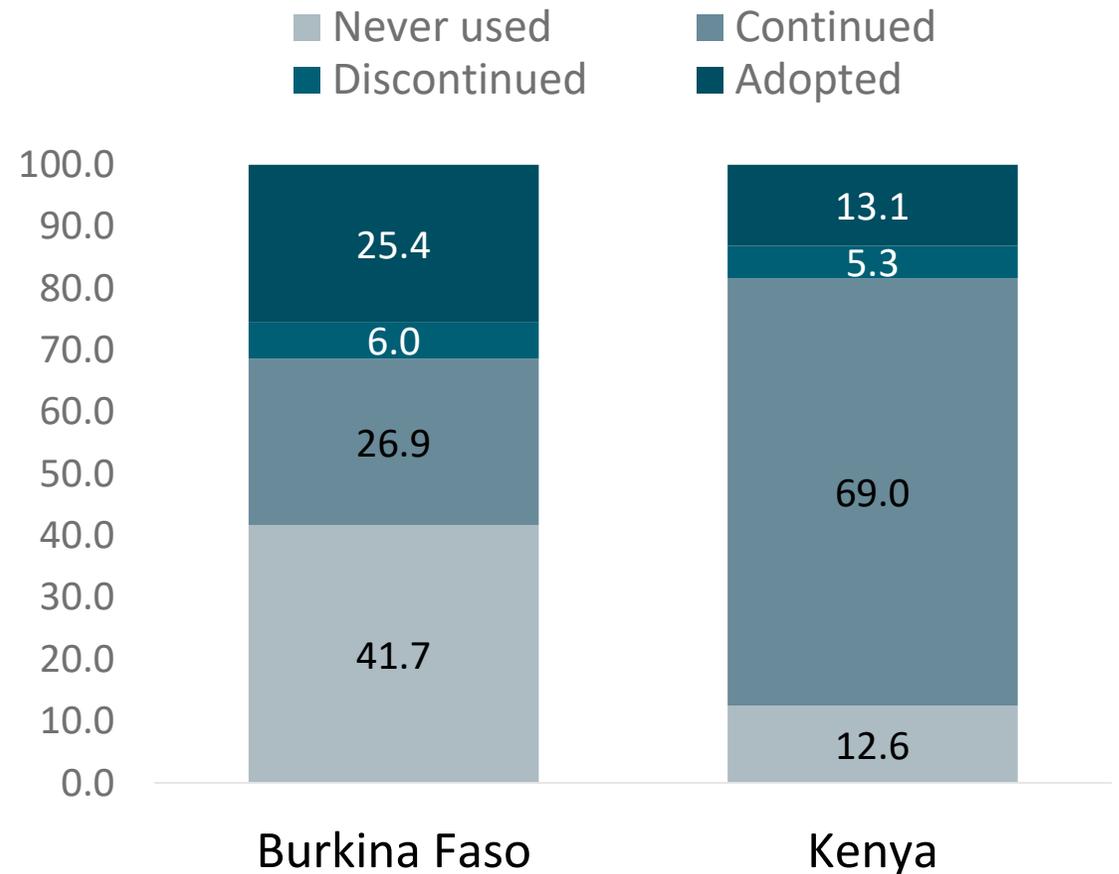
- Between baseline and COVID-19 follow-up surveys, the proportion of women in need of contraception increased significantly only in Lagos.
- **Contraceptive use among women in need increased significantly** in the two rural geographies, with an 17-percentage point increase in rural Burkina Faso (31% 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

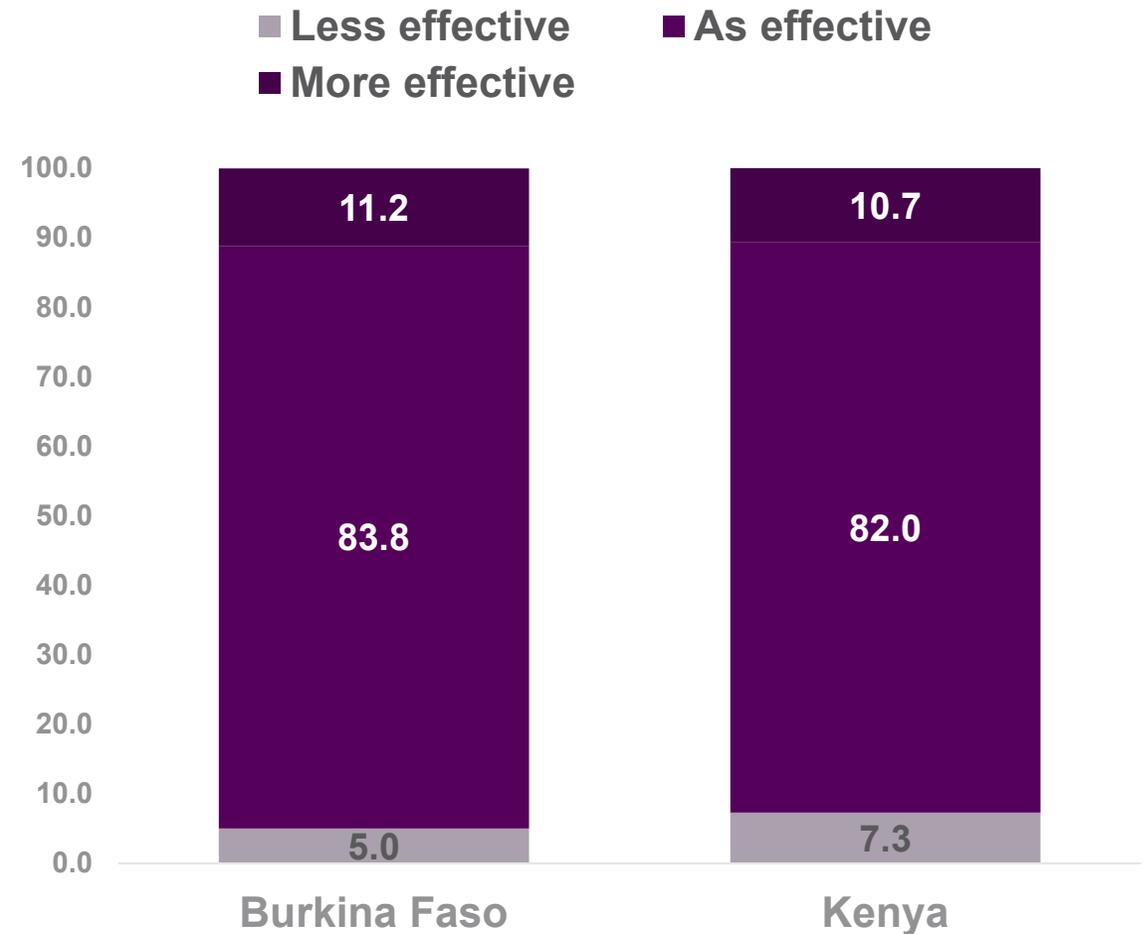
- Among women at risk of unintended pregnancy, **most did not change their contraceptive use status** during COVID-19
- Those who changed their status were **more likely to adopt a method than discontinue use**



Individual-Level Contraceptive Changes During COVID-19

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:
 - Wood, Shannon, Celia Karp, Funmilola OlaOlorun, et al. (2021). Trends in the need for and use of contraception before and during COVID-19 in four sub-Saharan African geographies: results from population-based national or regional cohort surveys. Forthcoming in **The Lancet- Global Health**.
 - Karp, Celia, Shannon Wood, Funmilola OlaOlorun, et al. (2021). Contraceptive dynamics during COVID-19 in sub-Saharan Africa: Longitudinal evidence from Burkina Faso and Kenya. **BMJ Sexual & Reproductive Health** Published Online First: 12 February 2021. doi: 10.1136/bmjsexrh-2020-200944.
 - Zimmerman, Linnea, Celia Karp, Alison Gemmill, et al. Uncertainty in the Context of the COVID-19 Pandemic and Its Impact on Fertility Intentions in Kenya and Burkina Faso. Presented at PAA, May 7th 2021.