

Trends in fertility intentions and contraceptive practices in the context of COVID-19 in sub-Saharan Africa: Insights from four national and regional population-based cohorts

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Workshop Presentation – Pandemic Babies? The Covid-19 Pandemic and Its Impact on Fertility and Family Dynamics

Session 2 – Fertility Trends

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COVID-19: A Threat to SRH Health and Rights

- **Unprecedented strains** on individuals and health systems
- Anticipated **impact on sexual and reproductive health** behaviors and outcomes
- Projected **15 million additional unintended pregnancies and 28,000 maternal deaths**, if service disruption affected 10% of women in need of SRH services in low- and middle-income countries (Riley, 2020)
- **Adverse impact on sub-Saharan Africa's** fragile economy and healthcare systems.
 - 55% satisfied need for contraception and 91/1,000 women/year unintended pregnancy in sub-Saharan Africa

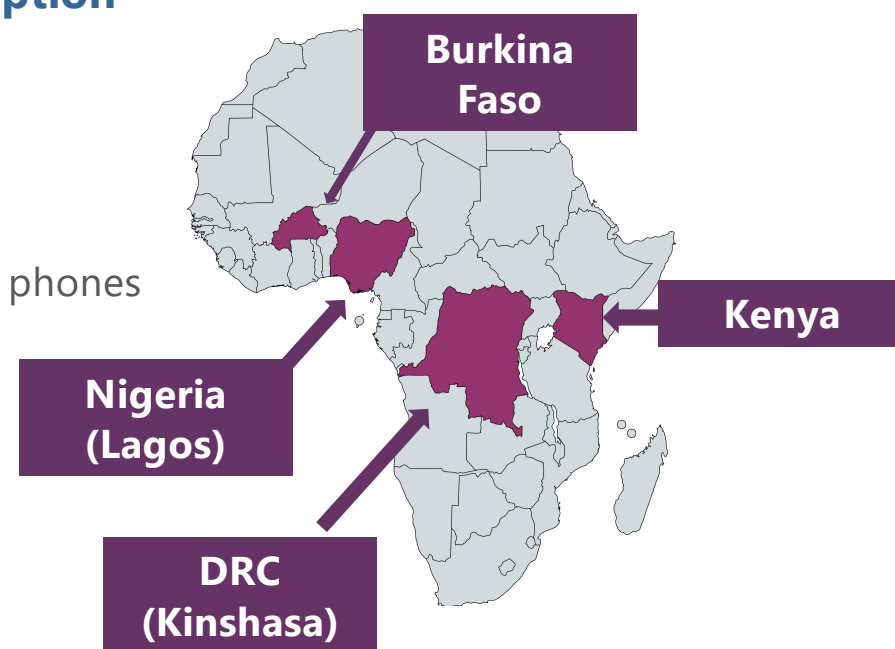
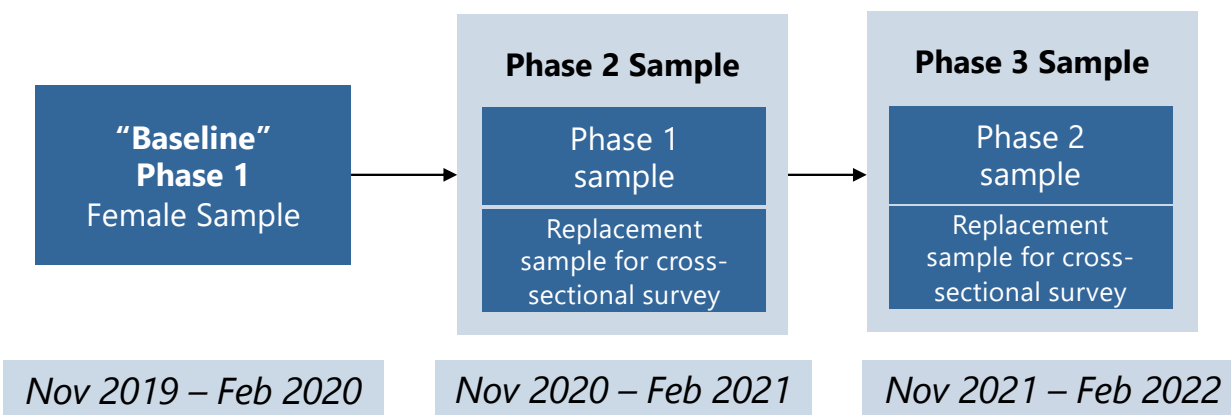
Study Objectives

Research Questions

1. How has the pandemic affected **women's need for contraception**?
2. How has the pandemic affected **contraceptive behaviors**?
3. How has the pandemic affected the **reproductive outcomes**?

PMA Study Design

- **Data collection platform** collecting annual data to produce nationally/regionally representative indicators on **contraception and reproductive health**
 - Two-stage cluster-randomized sampling
 - Cohorts of women of reproductive age (15-49 years)
 - Network of locally trained interviewers to collect data on smart phones



Methods: Study samples

Country/Site	Phase 1 (Baseline)	Phase 2 Cross-sectional (with household replacement)	Phase 2 Panel (No replacement)
Burkina Faso	6,590	5,491	5,207 (79%)
Kinshasa, DRC	2,611	2,006	1,967 (75%)
Kenya	9,477	7,018	6,932 (73%)
Lagos, Nigeria	1,469	1,130	1,088 (74%)

Methods: Measures and analysis

Population-level

Measures

1. At risk of unintended pregnancy
2. Use of any contraception among women at risk
3. Use of Prescriber-dependent method among users
4. Pregnant with mixed or negative emotional reaction

Analysis

Descriptive analysis comparing estimates at each time point across geographies

Individual-level

Measures

Change in contraceptive behaviors among women at risk in both surveys (never use, adoption, discontinuation, continued use)

Analysis

- GEE model evaluating how change in contraceptive behaviors varied by sociodemographic characteristics
- Multivariate logistic regression exploring factors related to adoption and to discontinuation
- Multivariate logistic regression exploring factors related to adoption and to discontinuation

Population-level changes: Results — % (95% CI)

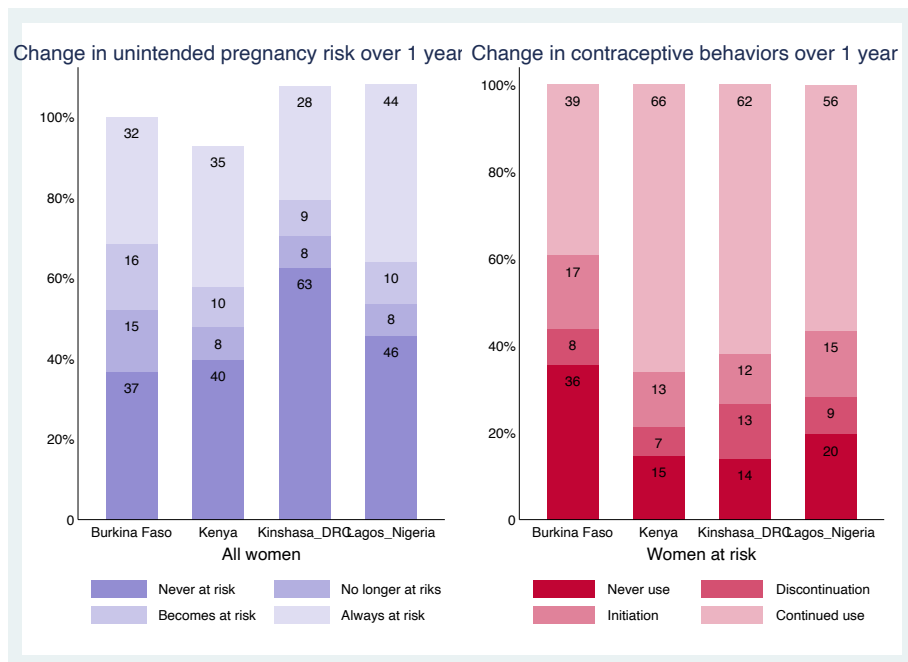
	Burkina Faso		Kenya		DRC-Kinshasa		Nigeria-Lagos	
	Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2	Phase 1	Phase 2
Intends to have a child in next year	13.4 (11.8, 15.3)	14.1 (12.3, 16.1)	6.9 (6.1, 7.8)	6.2 (5.5, 6.9)	12.2 (9.3, 15.8)	10.1 (7.8, 13.2)	16.8 (14.6, 19.2)	16.2 (14.6, 18.0)
At risk of unintended pregnancy	44.1 (41.1, 47.2)	44.5 (41.4, 47.4)	46.3 (44.9, 47.6)	45.6 (44.3, 46.9)	27.8 (24.7, 31.1)	29.2 (26.3, 32.2)	39.5 (36.6, 42.5)	40.4 (37.7, 43.2)
Contraception among women at risk of unintended pregnancy	43.2 (39.0, 47.6)	52.3 (48.0, 56.6)	71.3 (69.4, 73.2)	76.5 (74.6, 78.2)	71.8 (67.4, 75.9)	72.4 (68.2, 76.2)	63.4 (56.8, 69.5)	69.7 (63.7, 75.2)
Provider-dependent contraception among users	83.4 (79.3, 86.9)	79.1 (74.3, 83.1)	88.3 (86.7, 89.8)	86.3 (84.6, 87.8)	37.3 (29.5, 45.9)	35.6 (28.3, 43.5)	40.1 (33.7, 46.9)	35.2 (29.1, 41.8)
Pregnant with mixed or negative reaction	8.5 (7.6, 9.6)	7.6 (6.6, 8.4)	5.4 (4.9, 5.9)	5.1 (4.6, 5.7)	5.7 (4.5, 7.1)	5.2 (4.1, 6.5)	4.7 (3.7, 6.0)	4.7 (3.7, 5.9)
Pregnant with mixed or negative reaction	2.0 (1.5, 2.6)	2.0 (1.3, 3.1)	2.4 (2.0, 2.8)	1.9 (1.6, 2.3)	2.7 (2.0, 3.7)	2.6 (2.0, 3.4)	1.1 (0.6, 2.1)	0.8 (0.4, 1.6)

Increase in contraceptive use in Burkina, Kenya & Lagos

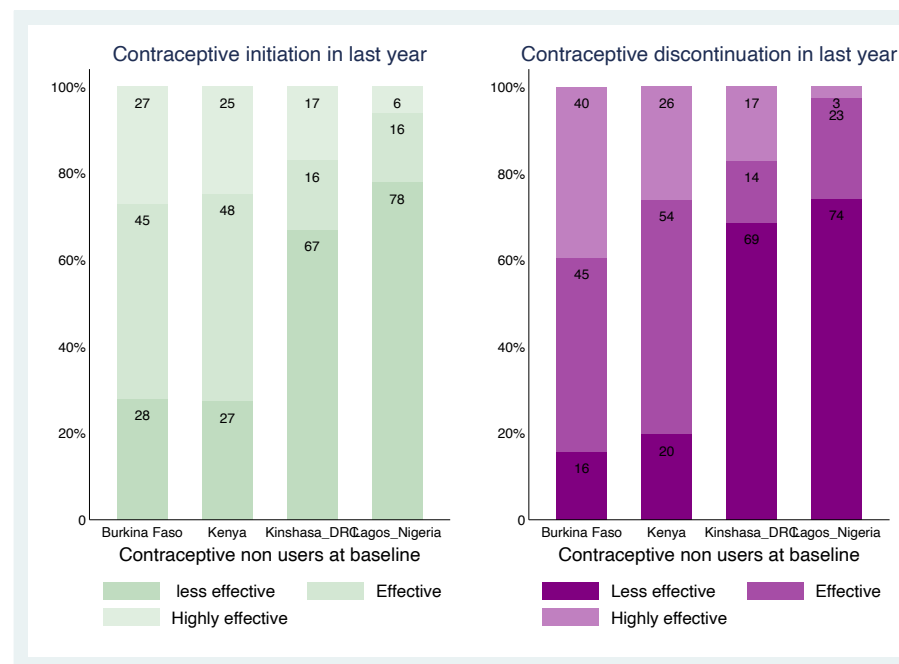
TH; JHP

Small decrease in provider dependent methods among users Burkina & Kenya

Individual-level changes: Contraceptive use



Contraceptive initiation more common than discontinuation in Burkina Faso, Kenya and Lagos



Adoption and discontinuation mostly involved

- Less effective methods in Kinshasa & Lagos
- short acting methods in Burkina Faso & Kenya

Factors associated with being pregnant & having mixed or negative feelings

		Burkina Faso N=4,018	Kenya N=5,616	Kinshasa-DRC N=1,489	Lagos-Nigeria N=836
Age	15-24	ref	ref	ref	ref
	25-34	0.2 (0.1-0.4)	0.7 (0.3-1.2)	0.6 (0.3-1.2)	0.4 (0.1,,2)
	35-49	0.1 (0.0-0.3)	0.2 (0.0-0.4)	0.1 (0.0-0.3)	0.1 (0.0-0.4)
Marital status	Not in a cohabitating union	ref	ref	ref	ref
	Married or in union	1.3 (0.6-2.9)	0.9 (0.5-1.6)	2.6 (1.3,5.3)	1.8 (0.2-15.6)
Parity	0-1	ref	ref	ref	ref
	2-3	1.0 (0.5-2.0)	1.2 (0.6-2.4)	2.6 (1.0-7.2)	3.0 (0.6-16.2)
	4+	2.7 (0.9-8.4)	1.3 (0.5-3.4)	2.7 (0.9-57.8)	1.7 (0.1-21.2)
Residence	Urban	0.7 (0.3-1.6)	0.6 (0.3-1.3)	--	--
	Rural	ref	ref	--	--
Education	No schooling /primary	ref	ref	ref	ref
	Secondary low	1.4 (0.7-2.6)	0.4 (0.1-1.7)	0.5 (0.2-1.3)	0.4 (0.1-3.1)
	Secondary high	0.3 (0.1-1.2)	0.4 (0.2-0.7)	0.5 (0.1-2.7)	3.2 (0.0,1.2)
Food insecurity Wealth	Yes	0.8 (0.3-2.8)	0.8 (0.4-1.5)	0.9 (0.4-1.7)	-
	Poorest	ref	ref	ref	ref
	Medium	2.0 (0.8-5.2)	0.8 (0.5-1.3)	0.8 (0.3-1.8)	1.0 (0.1-7.5)
	Richest	1.0 (0.3-2.7)	0.5 (0.2-1.2)	0.7 (0.4-1.3)	1.4 (0.1-10.9)
Contraception at baseline	None	ref	ref	ref	ref
	Less effective (Barrier/natural)	1.1 (0.3-3.5)	1.8 (1.0-3.3)	1.2 (0.6,2.5)	0.3 (0.6,2.5)
	Effective (short-acting hormonal)	1.6 (0.8-3.0)	1.2 (0.7-2.1)	0.8 (0.2-2.7)	0.8 (0.2-2.7)
	Highly effective (long-acting)	0.2 (0.1-0.8)	0.6 (0.0-1.2)	0.1 (0.0-0.8)	0.1 (0.0-0.8)

Conclusions

- Little change in fertility intentions
- Unexpected improvement in contraceptive use In Burkina Faso and Kenya
- Resilient populations + SRH health services during the pandemic in sub-Saharan Africa = Benefits of sustained investments in family planning over a decade?
- Future concerns
 - Increasing need for FP services in sub-Saharan Africa (24% to 55% of women do not use contraception while at risk of an unintended pregnancy)
 - Affordability of FP services in the context of increasing poverty?
 - Reassessment of international commitments to global FP?
- Need for sustained advocacy and monitoring for accountability and progress in SRH

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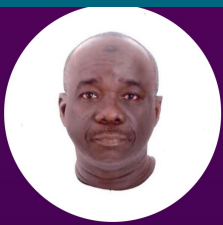
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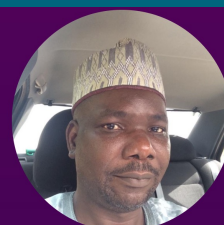
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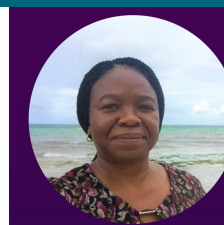
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