Contraceptive Use and Discontinuation among Postpartum Women in Nairobi Urban Slums

By

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Presentation outline

- Background
- Methodology
- Results
- Discussion/Conclusion

Background

- Significant proportion of pregnancies in Kenya are unintended – 43%
- High levels of induced abortion – over 465,000 abortions procured in 2012
  - 70% were not using any for modern contraception
- Unmet need for contraception is reportedly highest within 12 months post-delivery
  - KDHS shows 50% of non-first births occur less than 24 months apart
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Background Cont.

- Women in Nairobi urban slums resumed sexual relations early, but many were not using any form of contraception up to six months postpartum
  - 12% of these women were pregnant by the 12 month after giving birth
- Available studies on PP have relied on cross-sectional data, with focus on timing of adoption

Research Questions

- Draw on longitudinal data to answer the following questions:
  - Is the timing of contraceptive adoption (e.g. before or after resumption of menses) among women in urban slums related to length of use?
  - What characteristics of urban slum women are associated with discontinuation of adopted contraceptive method?
  - To what extent do baseline characteristics predict successful prolonged use of a modern method?

Methodology

- Focuses on 2 slums in Nairobi – Viwandani and Korogocho
- MCH data nested within NUHDSS [2006-2010]
  - Women who gave birth since Sept. 2006 and children where recruited
  - Follow-up visits done every 4 months using a calendar method – 10 cohorts
  - Collected data on reproductive events since birth of index child
- Women with 12 months continuous calendar are utilized for analyses – eight cohorts [N = 3,579]

Methodology

- Survival analyses of ordinal woman-months to estimate the probability of first adoption FP in the first 12 months
  - Protected: Months a woman is considered protected if she has not yet resumed sexual activity.
    - This also includes months where women who had resumed menses but were not yet sexually active.
  - Low Protection: Months she was amenorrheic but sexually active
  - Exposed: Months of exposure includes months where a woman was not amenorrheic and was sexually active.
  - Currently Pregnant: defined as months of pregnancy after birth of the index child

Methodology

- Calculate cumulative discontinuation rates per 100 episodes of FP use at 3, 6, and 12 months
- Explanatory Variables: Age, marital status, education at recruitment; parity, ethnicity, site, timing of FP adoption, type of FP, and breastfeeding status

RESULTS

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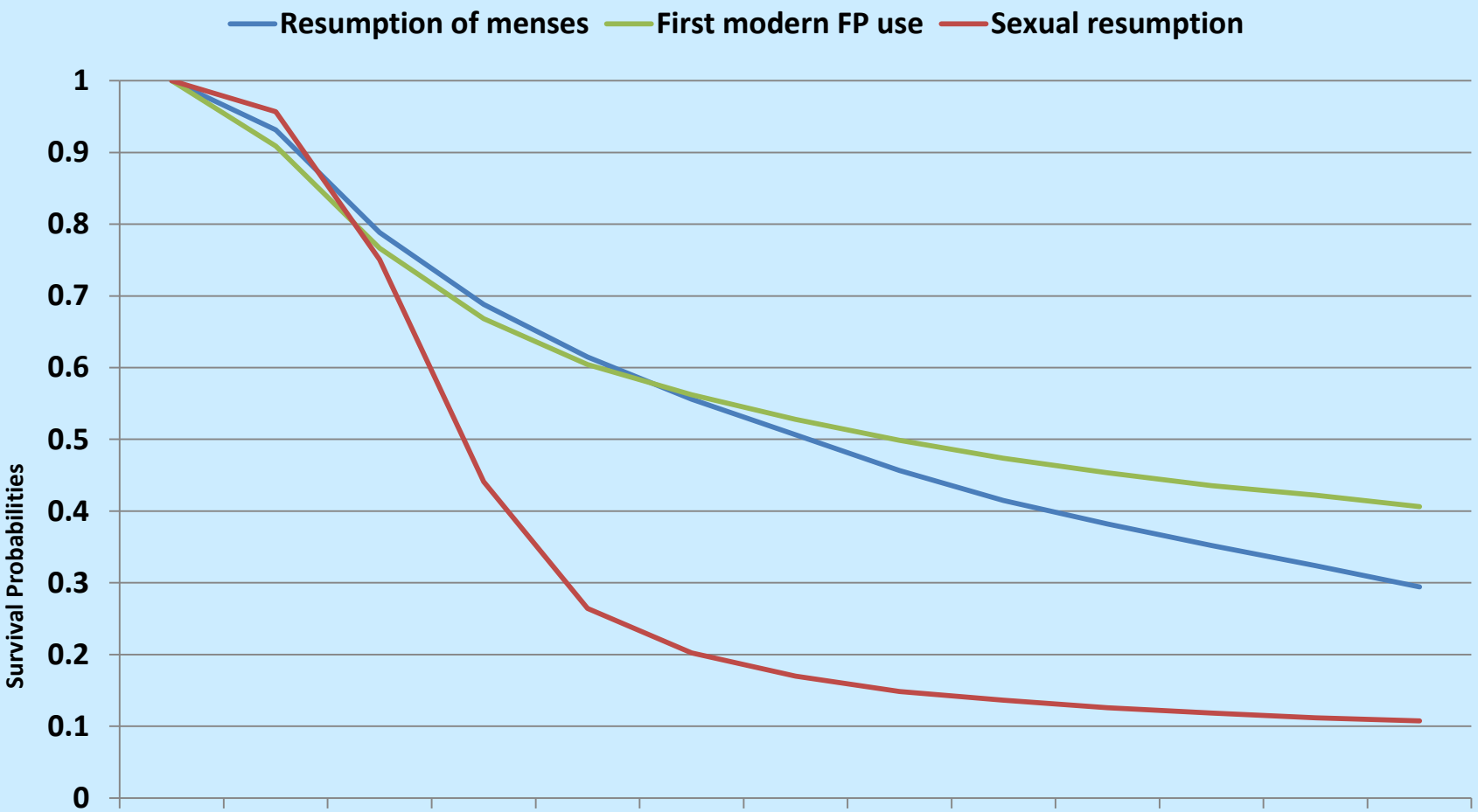
Descriptive Results

- 47% residing in Viwandani; 53% in Korogocho
- 63% were between the ages of 20 and 30 years
- 83% were currently married/cohabiting
- 46% had primary level of education; 30% had incomplete or no education
- 29% were primiparous; 25% had 2 children; 21% had 4+ children

Figure 1: Time to first menstrual resumption, first use of modern contraceptive and sex among postpartum women in Nairobi informal settlements during 2006-2010



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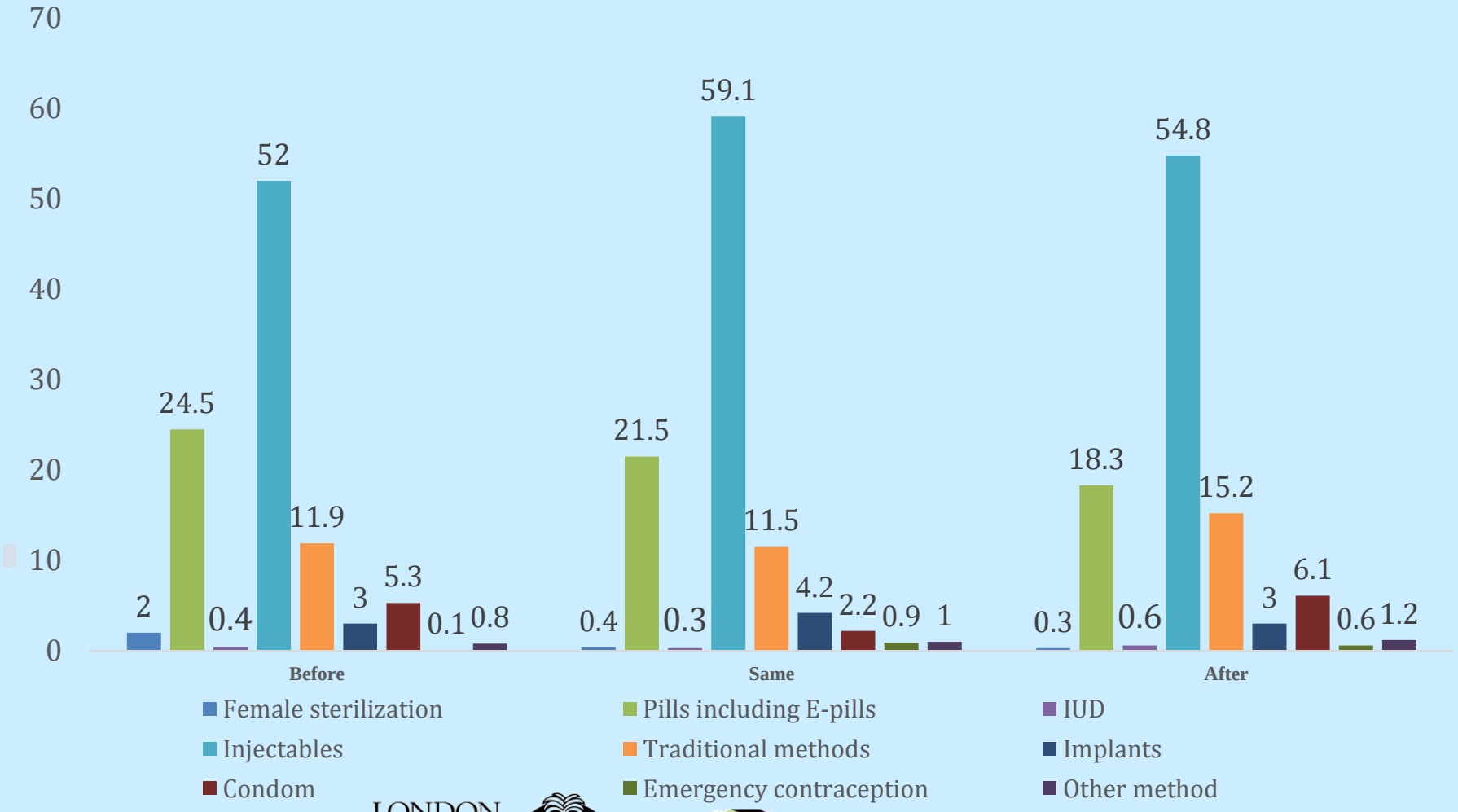
Women-months of exposure and protection during the 12 postpartum months by categories of contraceptive use					
Protection categories of postpartum months	None	Modern	Traditional	Total	Total women-months of observation
Protected (Amenorrhea & No sex)	89.4	9.3	1.3	100.0	10,029
Protected (No sex but have menses)	72.1	25.8	2.2	100.0	4,314
Low protection (Amenorrhea but have sex)	58.0	35.5	6.5	100.0	**12,531**
Exposed (Has menses and sex)	23.6	68.3	8.1	100.0	**15,225**
Currently pregnant	100.0	0.0	0.0	100.0	396
Total	50.3	36.4	4.9	100.0	46,393

Choice of first contraceptive method used before, during and after menstrual resumption among women who reported family planning (FP) use during the postpartum



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Odds of adoption of modern method of FP 12 months after birth, among all women at recruited during the period 2007–2010

		Multivariate Cox PH Model			
		Haz. Ratio	P>|z|	[95% Conf. Interval]	
Site (Ref: Korogocho)	Viwandani	1.29	<0.001	1.165	1.427
Mother's age at recruitment (Ref: 15-19 Yrs)	35-39	0.69	0.009	0.517	0.911
	40-49	0.41	0.001	0.238	0.697
Mother's marital status at recruitment (Ref: Married/cohabiting)	Formerly married	0.55	0.001	0.433	0.694
	Never married	0.33	0.001	0.262	0.404
Mother's level of education at recruitment (Ref: Incomplete primary/no education)	Secondary+	1.20	0.011	1.042	1.370
Ethnicity (Ref: Kikuyu)	Luhya	0.79	0.001	0.689	0.903
	Luo	0.62	0.000	0.531	0.713
	Kamba	0.73	0.001	0.638	0.830
	Other	0.56	0.001	0.485	0.653
Parity (Ref:1)	4 and above	0.74	0.001	0.622	0.889

Discontinuation of first postpartum modern method [N= All births with 12-month continuous postpartum calendar data]				
	Cumulative discontinuation rate per 100 episodes			No of modern FP adopters
	3 month	6 month	12 month	
Timing of contraceptive adoption				
Before resumption of menses	19.0%	31.3%	44.0%	1,058
Same time as resumption of menses	17.1%	27.1%	46.0%	668
After resumption of menses	20.9%	35.6%	52.1%	703
Type of contraception				
Pills	30.2%	48.2%	64.5%	589
IUD	8.3%	8.3%	17.5%	12
Injectables	13.6%	24.4%	40.0%	1566
Implants	1.9%	5.1%	12.6%	103
Condom	49.6%	65.0%	83.7%	125
Breastfeeding status at first adoption				
Not breastfeeding	20.5%	35.0%	56.5%	160
Breastfeeding	18.9%	31.2%	46.3%	2,264
Marital status at recruitment				
Married/cohabiting	17.5%	29.9%	44.3%	2,145
Formerly married	33.2%	49.4%	68.0%	116
Never married	28.5%	38.4%	65.2%	168
Mother's level of education at recruitment				
Incomplete primary/no education	20.3%	32.4%	51.6%	609
Completed primary	17.7%	30.0%	46.1%	1,180
Secondary+	20.1%	32.9%	43.4%	634
Total	**19.0%**	**31.4%**	**46.7%**	**2,429**

Self-reported reasons for discontinuation of first postpartum modern method

	No specific response	Not in need	Method failure	Method-related	Low/no sexual exposure	Access-related	Wanted more effective method	Other	N=Women who discontinued the first modern method
Type of contraception									
Pills	17.9	3.6	4.1	**42.5**	7.4	0.7	16.5	7.4	419
Injectables	17.0	4.5	2.5	**46.9**	12.2	3.7	4.8	8.4	794
Condom	**26.9**	0.9	3.7	10.2	17.6	0.0	18.5	22.2	108
Timing of FP adoption									
Before resumption of menses	15.9	4.0	3.2	**44.1**	8.9	2.5	11.9	9.5	597
Same resumption of menses	17.2	3.7	2.8	**42.9**	11.3	3.4	9.6	9.0	354
After resumption of menses	21.6	4.5	3.0	**40.5**	14.8	1.5	5.5	8.5	398
Total	**17.9**	**4.1**	**3.1**	**42.7**	**11.3**	**2.4**	**9.4**	**9.1**	1,350

Discussion

- High discontinuation rates indicates that past users were significantly contributing to pool of women with unmet need in the slums
  - 24% of women in slums report unmet need [NCSS 2012]
    - Need to fix the ‘leaking bucket’ (Jain, 2014)
- Choice of short term methods – pills and injectables
  - Discontinued for method-related reasons and not access-related reasons
    - Programs need to also focus on client-side factors

Discussion

- Method mix during the postpartum period maybe inadequate in meeting contraceptive need
  - Provider counselling at point of initiation inadequate?
  - Motivation to promptly switch might be low after bad experience
    - Expanding available range of methods
    - Improving client-provider interaction
    - Addressing myths and misconceptions

Discussion

- Need for additional counselling on postpartum fertility
  - Integrating postpartum FP with antenatal and postnatal services could increase awareness, demand and use
- Non-breastfeeding women and women who adopted after menses resumed were more likely to discontinue
  - Maybe concerned about disruption to menstrual period

Conclusion

Effective interventions that address the health concerns of women, with regard to method choice and management of side effects will have a more sustained, rather that intermittent impact on uptake and continuous use of contraception among women in Nairobi slums

STEP UP

STRENGTHENING EVIDENCE FOR PROGRAMMING ON UNINTENDED PREGNANCY

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The **STEP UP (Strengthening Evidence for Programming on Unintended Pregnancy) Research Programme Consortium** is coordinated by the Population Council in partnership with the African Population and Health Research Center; ICDDR,B; the London School of Hygiene and Tropical Medicine; Marie Stopes International; and Partners in Population and Development. STEP UP is funded by UKaid from the Department for International Development.

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