

Full title: Perceptions of husband’s fertility preferences and covert contraceptive use in 8 Sub-Saharan African countries

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Short abstract

Covert use of contraception is a common but underreported and understudied phenomenon where one partner uses contraception without the other’s knowledge. This paper uses an indirect estimate of female covert use in eight sub-Saharan African countries to test the association between covert use among female users and perceptions of husband’s fertility preferences. We used DHS couple data to examine the relationship between wives’ perceptions of husbands’ fertility preferences and type of contraceptive use (overt versus covert) in Benin, Ethiopia, Kenya, Mali, Nigeria, Sierra Leone, Uganda and Zambia using logistic regression. Perceptions that husbands wanted more children were associated with increased odds of using covertly compared to perceiving that husbands wanted the same number in all countries except Benin and the strength of the relationships ranged from aOR 2.97 in Zambia to aOR 4.31 in Sierra Leone. Not knowing husbands’ fertility preferences was also associated with increased odds of using covertly compared to perceiving that husbands wanted the same number in all countries except Zambia, ranging from aOR 1.99 in Ethiopia to aOR 3.88 in Kenya. Understanding the factors associated with covert use has critical programmatic and policy implications for reproductive health and autonomy.

Extended Abstract

Introduction

Covert use of contraception is a common but underreported and understudied phenomenon where one partner (typically a woman) uses contraception without the other’s knowledge¹. On the one hand, covert use can empower women in achieving their reproductive goals in situations where they may experience or perceive a lack of control. Women have reported discreet use because they consider contraception or sexually transmitted disease prevention a female’s responsibility (Kibira et al., 2020; MacPhail et al., 2009; McCarraher et al., 2006), potentially symbolizing “full reproductive autonomy” (Kibira et al., 2020) on one end of the spectrum, challenging gender norms covertly. On the other hand, covert use can be considered akin to coercion on the other end of the empowerment spectrum, practiced by women who are so disempowered in their relationships they have no choice but to use covertly. Further, covert use may perpetuate normative expectations like female obedience and conception soon after marriage (Henry et al., 2014; Wilson-Williams et al., 2008). Covert users may choose to hide their use of contraception for fear of marriage dissolution, social sanctions, financial backlash, and/or intimate partner violence in case of discovery (Alio et al., 2009; Bawah et al., 1999; Castle et al., 1999; Heck et al., 2018; Wilson-Williams et al., 2008). Understanding the factors associated with covert use has critical programmatic and policy

¹ Overt use is defined as an individual’s decision to use contraception, with or without the spouse’s involvement, but with the spouse’s knowledge (Biddlecom & Fapohunda, 1998)

implications for reproductive health and autonomy: covert users may be less inclined to seek treatment or switch methods due to side effects than open users (Biddlecom & Fapohunda, 1998; Castle et al., 1999; Kibira et al., 2020)

Across sub-Saharan African countries, national estimates of covert use among women using modern contraception have ranged from 15 to 77% (Biddlecom & Fapohunda, 1998; Gasca & Becker, 2018). The increase in contraceptive use across the region was expected to reduce covert use (Biddlecom & Fapohunda, 1998), but there is some evidence that covert contraceptive use is also rising (Gasca & Becker, 2018).

Various methods have been used to estimate female covert contraceptive use, though all have limitations. Until recently, there was a direct question in Demographic and Health Surveys that asked women currently using contraception if their husband/partner knew about their use. Estimates using this direct question were believed to be lower bounds of the true prevalence, given issues related to reporting bias, trust, and privacy (Choiriyah & Becker, 2018; Gasca & Becker, 2018). Other approaches to estimate female covert use have used couple data to examine discordant reporting of contraceptive use, or discordant reports of type of method used (Bankole & Singh, 1998; Becker and Costenbader, 2001). These methods are thought to overestimate covert use because there may be other reasons for discordant reporting—for example that the male partners have forgotten the details of contraceptive use, are referring to a different sex partner or different time periods of use, or do not wish to disclose details of contraceptive use with the interviewer (Biddlecom & Fapohunda, 1998; Choiriyah & Becker, 2018). To correct for the shortcomings in prior indirect approaches, a recent study from Choiriyah & Becker (2018) created a new covert use measure that utilized contraceptive decision-making questions and spousal discordant reporting of contraceptive use; the estimates generated from this approach are thought to be closer to the truth as they are higher than the direct question estimates and lower than the discordant method estimates.

Several studies conducted in sub-Saharan Africa have explored determinants of covert use, though varying methodologies, contexts, and definitions of covert use limit the comparability and generalization of results. Specifically, a seminal study in Zambia described motivations for covert use among female users such as the health and economic welfare of their children, husbands' opposition to use, husbands' pronatalism, and problematic spousal communication (Biddlecom & Fapohunda, 1998). A longitudinal, qualitative study in Mali indicated covert users were generally older and in polygynous marriages, and perceived that their husbands' opposition to contraceptive use was due to pronatalism, religion, worries about infidelity and contraceptive-induced side effects (Castle et al., 1999). More recent literature in three sub-Saharan African contexts highlights that covert use, often viewed as a strategy employed among women who are less empowered, may, in fact, be an expression of individual autonomy, as some women perceive contraceptive use as solely their choice and do not wish to engage partners (Kibira et al., 2020).

While we have a better understanding of why women use covertly, few studies have examined correlates of covert use or differences in user characteristics between covert and overt users. A study in Ghana identified that single (compared to married), Muslim/traditionalist (compared to Christian), and women who desired to space their births for more than four years (compared to women who wanted sooner) were more likely to use covertly than to not use any contraception (Baiden et al., 2016). In Rakai, Uganda, predictors of covert use included being previously or never married, never completing any level of schooling or completing higher levels, having multiple sex partners in the past year, working in a non-traditional industry, and experiencing physical abuse (Heck et al., 2018). In Nigeria, one study found that covert users were less educated and wealthy than overt users, less likely to cohabitate with their partners, and more likely to live in urban communities and be employed (OlaOlorun et al., 2020).

A common theme found across studies is that female partners may use covertly due to their perceptions of discordant fertility desires and/or spousal disapproval of contraception. This often occurs in the same contexts where spousal communication around family size and contraception is low (additionally posing

questions around the accuracy of these perceptions) (Baiden et al., 2016; Bankole & Singh, 1998; Casterline & Sinding, 2000). To date, no other studies have quantitatively examined whether perceptions of husbands' fertility preferences may be driving the decision to use covertly rather than overtly across multiple contexts in the sub-Saharan African context. Clarifying the relationship between perceptions of husbands' fertility preferences and covert use could enable healthcare practitioners to provide more tailored family planning services to couples and women alike. If covert use is directly linked to perceptions of spousal fertility preferences, this could inform interventions that attempt to increase overt use by encouraging spousal communication and involvement of male partners. In cases where this is not possible or safe, understanding why women use covertly can enable healthcare practitioners to accommodate discretion in their services.

The present study fills a gap by using a novel, indirect estimate of covert use in eight sub-Saharan African countries to test the association between covert use among female users and perceptions of their husbands' fertility preferences. We hypothesized that women who believe their husbands want more children than them or who don't know their husbands' fertility preferences would be more likely to use covertly than those who perceived they wanted the same number of children.

Methods

Data and country selection

Data for this study come from the Demographic and Health Surveys (DHS), nationally representative household surveys that are conducted approximately every 5 years in participating countries and collect data on key population and health indicators (ICF, 2021). The DHS use a multi-stage, stratified cluster design. We used the couple data sets provided by DHS which are created by linking eligible and interviewed men and women from the same households who are in union.

This analysis included sub-Saharan African countries with a DHS conducted in the past decade (since 2010) who met the exclusion criteria and power analysis specifications. Given that the main outcome variable of interest, covert use, uses the measurement method proposed by Choiriyah and Becker (2018), the sample reflects the same exclusion criteria as their paper, specifically excluding: women not using female-controlled, modern methods, defined as users of the pill, IUD/Norplant, injection, female sterilization, or female condom; women in polygamous unions (with monogamous union defined as when wives report their husband as having no other wives and husbands report only having one wife); men whose last sexual partner was not wife (we retain those husbands responding that the relationship with his most recent sex partner was his spouse or live-in partner); and women who report that their method was obtained/started more recently than last sex. The final sample in each country represents monogamous couples² in which the female is using a female-controlled, modern method.

Because the analysis is focused on covert use among a subset of contraceptive users, a power calculation was conducted to select countries with sufficient sample. The countries that met the sample size threshold were: Benin, Ethiopia, Kenya, Mali, Nigeria, Sierra Leone, Uganda and Zambia. Full power calculations can be requested from the authors.

Variables

Our dependent variable was covert use, as defined in Choiriyah and Becker³ (2018). Covert users were selected from the denominator of all female-controlled, modern users, and those who met the following

² Couples in the DHS are defined as married or living together as married. We refer to 'husbands' throughout the paper but this also includes partners living together as married.

³ Choiriyah and Becker created two new measures of estimating covert use, Revision 1 and Revision 2. Revision 1 required the direct question on covert use and therefore cannot be used with the most recent DHS surveys. Thus, we use their Revision 2 to estimate covert use.

criteria: whose husband reports non-use or use of a traditional method, and who reports the decision maker about her current family planning use was “mainly her.” All other modern users are defined as overt users.

The main independent variable of interest was the wife’s perception of her husband’s fertility desires relative to her own. The original question is: “*Does your husband/partner want the same number of children that you want, or does he want more or fewer than you want?*” Answer categories include: Husband wants more children than me; husband wants the same number of children as me; husband wants fewer children than me; and don’t know. We categorized this variable into three exposure groups of interest: women who think their husbands want the same or fewer number of children than they do, women who think their husbands want more children than they do, and women who “don’t know” their husbands’ fertility preferences. We kept “don’t know” as a third category given the high percentages of women who gave this answer category across countries.

Our multivariable models adjusted for several socio-demographic variables that have been cited in the literature as associated with female covert use: age, education, residence, and parity. We also include the following measures as proxies of gender equity, which might also influence covert use, including the wife’s highest level of education, her employment status, and age and education differentials between spouses (Kishor & Subaiya, 2008; Wolff et al., 2000).

Analyses

First, we tabulated descriptive statistics, including our sociodemographic variables and main independent variable across the overall sample. Second, we compared characteristics between overt and covert users using design-based F-statistics to test whether differences were significant at the $p < 0.05$ level. Third, we conducted simple and multiple logistic regression for each country, comparing the odds of covert use versus overt use (referent) among women in our sample by our independent variable of interest and covariates listed above.

Additionally, we conducted a sensitivity analysis. Because prior research suggests that experiences of gender-based violence may be associated with covert use, we rerun our final regressions including measures of intimate partner violence collected via the DHS domestic violence module, which is generally administered to one-third of female respondents. Because not all respondents are administered the module, we limited these analyses to 5 countries to ensure sufficient sample size: Ethiopia, Kenya, Mali, Nigeria and Zambia.

All regression model coefficients and standard errors were adjusted for the multi-stage complex survey design and conducted in Stata 16. For couples, we used men’s weights, as their response rates are more variable and couple analyses using men’s weights usually produce less biased results than female weights (Becker & Kalamar, 2018).

Preliminary Results

Descriptive characteristics of the samples

The samples of couples differed across the eight countries (Table 1). In Ethiopia, Mali, and Uganda, over two thirds of the couples resided in rural areas. In Nigeria, a majority of the couples (61%) resided in urban areas. In Benin, Kenya, Sierra Leone and Zambia, the split was closer to half in each residence. Across all countries, the largest proportions of women were age 25-34 years, yet the next largest age category varied by country. Most women in the sample also reported having 2-4 children; this ranged from to 47% in Uganda 63% in Kenya. Parities were highest in Benin, Nigeria and Uganda where 43%, 40% and 39% of women reported having 5 children or more, respectively. Highest education level attained varied by country; while over half of wives reported no formal education in Benin, Ethiopia, Mali and Sierra Leone, over 90% of wives in Kenya, Nigeria, Uganda, and Zambia had at least a primary education. Over two

thirds of wives reported being employed in all countries except for Ethiopia and Zambia, where 36% and 52% were.

Across countries, husbands were on average older than wives; the majority of husbands in all countries were above age 35. Husbands were on average more educated than wives, but large percentages in Benin (41%), Ethiopia (39%), Mali (48%) and Sierra Leone (43%) reported no formal education. Levels of husband education were highest in Nigeria and Zambia where 76% and 58% reported having secondary or higher education.

In this population of users, method mix also differed across countries. Short-acting methods were more popular in Ethiopia, Kenya, Sierra Leone, Uganda, and Zambia, where injectables were the predominant method. Long-acting methods were more popular in Benin, Mali and Nigeria, where implants were the most used method.

Perceptions of husbands' fertility preferences

Wives' perceptions of husbands' fertility preferences differed by country. In Benin, Ethiopia, Kenya, Nigeria, Uganda and Zambia, at least 50% of wives perceived that their husbands wanted the same number or less children than them, ranging from 50% in Benin to 71% in Kenya. Twenty to 30% of wives across all countries except Sierra Leone perceived that their husbands wanted more children than them; in Sierra Leone only 14% of wives reported this. While only 8% of wives in Nigeria and Kenya reported that they did not know their husbands' fertility preferences, over 20% of wives in Benin, Ethiopia, Mali, Sierra Leone and Zambia reported this, reaching 36% in Mali and 42% in Sierra Leone.

Factors associated with covert use

The percentage of women using covertly among the users of female-controlled, modern methods varied across sites (Table 1). In Zambia, Ethiopia and Kenya, covert users represented less than 10% of the full sample (5%, 7%, and 9%, respectively). In Uganda, 13% of female-controlled, modern users were classified as covert, and in Nigeria 17% were. In Mali, Benin and Sierra Leone just over one in four women were using covertly (26% in Mali and 29% in Benin and Sierra Leone).

Several factors were related to overt use, although these patterns were not consistent across countries. In Benin, Ethiopia and Kenya, wealth was related to type of use, with covert users more likely to be in the lower wealth tertiles and overt users having higher percentages in the highest wealth tertile. In Ethiopia, Kenya and Zambia, there was a relationship between type of use and the wife's age; covert users were more likely to be older while overt users were more likely to be in the youngest age group. In Ethiopia, Kenya and Uganda, there were significant or marginally significant relationships between wife's educational attainment and type of use, with overt users more likely to report having at least a secondary education.

In Benin, Ethiopia, Kenya and Uganda there was a significant or marginally significant relationship between husband's highest education level and type of use; overt users were more likely to report that their husbands had at least a secondary education while covert users were more likely to report that their husbands had no formal education.

Across all countries, there was a significant or marginally significant relationship between type of use and the wife's perception of her husband's fertility preference (Figure 1). Overt users were more likely to perceive that their husbands wanted the same or less children than while covert users were more likely to report that their husbands wanted more children than them or that they didn't know their husbands' fertility preferences.

Regressions

In the simple logistic regressions, across all countries except for Benin, perceptions that husbands wanted more children were associated with higher odds of using covertly compared to perceiving that husbands wanted the same or less children (Figure 2). The strength of the relationships ranged from OR 2.96 (1.48-5.90) in Uganda to 3.98 (2.12-7.48) in Nigeria. Not knowing husbands' fertility preferences was also associated with increased odds of using covertly compared to perceiving that husbands wanted the same or fewer children than them in all countries except Zambia, with odds ratios ranging from OR 2.21 (1.24-3.92) in Ethiopia to 3.96 (2.28 -6.86) in Kenya.

In the multiple logistic regressions, the relationships between perception of husband's fertility preference and covert contraceptive use remained almost the same as the simple logistic regressions across countries (Figure 2). While in some countries (Benin, Ethiopia, Kenya, and Zambia), both relationships were slightly attenuated in the fully adjusted models, in others (Mali, Sierra Leone, Uganda) the strength of the associations increased in the fully adjusted models. In all countries except for Benin, women who perceived their husbands wanted more children than they had increased odds of using covertly compared to those who reported their husbands wanted the same number or less children than them, ranging from aOR 2.97 in Zambia to aOR 4.31 in Sierra Leone. In all countries except for Zambia, women who did not know their husbands' fertility preferences had increased odds of using covertly compared to those who reported their husbands wanted the same number or less children than them, ranging from aOR 1.99 in Ethiopia to aOR 3.88 in Kenya.

Next steps

The final paper will include the sensitivity analysis outlined in the methods section. Our discussion will tie these findings to context-specific evidence as well as pose implications of this research.

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Tables & Figures

Table 1. Sample characteristics of couples using female controlled modern contraceptive methods in 8 Sub-Saharan African countries

	Benin (2017/18)				Ethiopia (2008)				Kenya (2014)				Mali (2018)				Nigeria (2018)				Sierra Leone (2013)				Uganda (2016)				Zambia (2018)			
	Overall	Overt	Covert	P value	Overall	Overt	Covert	P value	Overall	Overt	Covert	P value	Overall	Overt	Covert	P value	Overall	Overt	Covert	P value	Overall	Overt	Covert	P value	Overall	Overt	Covert	P value	Overall	Overt	Covert	P value
Household characteristics																																
Household wealth																																
Lower	32.68	28.54	42.75	0.02	37.37	36.44	49.67	0.03	27.04	26.18	35.79	0.03	36.84	39.60	28.92	0.28	28.85	27.76	34.22	0.60	36.83	36.64	37.30	0.92	29.86	29.79	30.35	0.17	27.91	28.50	17.68	0.23
Middle	35.03	33.66	38.37		40.47	41.31	29.43		30.58	30.48	31.59		31.18	30.57	32.91		33.35	33.66	31.85		27.86	27.28	29.30		33.34	31.95	42.86		31.37	31.09	36.20	
Highest	32.29	37.80	18.88		22.16	22.25	20.91		42.38	43.35	32.62		31.99	29.83	38.17		37.80	38.59	33.93		35.31	36.09	33.41		36.81	38.27	26.79		40.72	40.41	46.12	
Residence																																
Urban	56.45	62.33	42.15	0.01	21.53	21.70	19.27	0.59	44.26	44.89	37.99	0.17	35.74	33.51	42.12	0.23	61.47	61.78	59.93	0.80	45.98	47.50	42.25	0.51	24.30	24.49	23.04	0.82	45.20	44.07	64.99	0.00
Rural	43.55	37.67	57.85		78.47	78.30	80.73		55.74	55.11	62.01		64.26	66.49	57.88		38.53	38.22	40.07		54.02	52.50	57.75		76.70	75.51	76.96		54.80	55.93	35.01	
Wife Characteristics																																
Age, years																																
15-24	15.86	16.66	13.90	0.85	24.22	24.19	24.64	0.05	20.84	21.25	16.64	0.01	26.57	28.70	20.50	0.31	11.07	11.51	8.87	0.62	14.82	14.96	14.47	0.63	23.32	23.16	24.43	0.97	25.40	26.09	13.37	0.01
25-34	51.23	51.15	51.42		49.13	49.96	38.17		51.74	52.49	44.23		49.92	49.58	50.90		47.19	46.23	51.94		51.95	50.03	56.69		46.70	46.87	45.51		41.25	41.46	37.58	
35+	32.92	32.19	34.68		26.65	25.85	37.19		27.42	26.26	39.13		23.51	21.72	28.61		41.74	42.26	39.19		33.23	35.01	28.84		29.98	29.97	30.07		33.35	32.45	49.05	
Parity																																
0-1 children	9.61	10.56	7.29	0.47	23.17	23.23	22.29	0.27	17.58	18.40	9.28	0.00	14.09	16.77	6.41	0.10	6.82	7.34	4.25	0.64	15.32	13.31	20.28	0.48	13.14	13.48	10.82	0.68	14.57	15.11	5.23	0.06
2-4 children	47.72	49.25	44.01		47.63	48.14	41.02		62.51	62.75	60.14		48.37	48.32	48.53		53.65	53.19	55.94		52.63	53.46	50.59		47.41	47.78	44.89		51.50	51.64	49.01	
5 plus children	42.67	40.19	48.69		29.20	28.63	36.69		19.91	18.85	30.58		37.54	34.91	45.06		39.53	39.48	39.81		32.04	33.23	29.13		39.45	38.75	44.29		33.93	33.25	45.76	
Highest Schooling level																																
None	53.65	50.23	61.99	0.29	52.81	52.12	61.94	0.06	2.89	2.48	7.01	0.00	51.28	50.16	54.48	0.84	10.32	9.80	12.88	0.77	56.77	56.64	57.10	0.48	8.81	7.94	14.73	0.04	6.85	6.91	5.78	0.91
Primary	23.29	24.96	19.24		33.23	33.37	31.45		56.85	56.02	65.19		16.06	16.58	14.58		18.32	18.65	16.65		15.25	13.58	19.35		60.03	59.14	66.07		49.92	49.87	50.79	
Secondary or higher	23.05	24.81	18.78		13.96	14.52	6.61		40.27	41.51	27.80		32.66	33.26	30.93		71.36	71.54	70.47		27.98	29.78	23.54		31.17	32.91	19.21		43.22	43.21	43.43	
Wife employed																																
No	15.28	13.94	18.56	0.43	64.47	64.14	68.87	0.34	25.29	25.18	26.38	0.76	38.09	36.61	42.31	0.45	15.11	15.72	12.07	0.41	28.05	25.36	34.69	0.30	15.07	14.52	18.87	0.38	47.78	47.83	46.96	0.91
Yes	84.72	86.06	81.44		35.53	35.86	31.13		74.71	74.82	73.62		61.91	63.39	57.69		84.89	84.28	87.93		71.52	74.03	65.31		84.93	85.48	81.13		52.22	52.17	53.04	
Husband characteristics																																
Age, years																																
15-24	6.00	6.01	5.97	0.28	6.70	6.60	8.21	0.33	4.45	4.53	3.64	0.00	3.74	4.04	2.90	0.30	1.84	2.05	0.87	0.31	2.58	2.82	1.98	0.85	6.70	6.99	4.73	0.54	7.02	7.31	1.98	0.01
25-34	36.25	39.51	28.47		41.05	41.64	32.86		40.68	41.99	27.46		37.75	40.77	29.26		23.01	24.11	17.77		33.60	32.45	36.40		41.86	42.53	37.29		40.00	40.68	28.08	
35+	57.75	54.48	65.56		52.25	51.76	58.93		54.87	53.47	68.89		58.51	55.19	67.84		75.14	73.84	81.37		63.82	64.72	61.62		51.44	50.49	57.98		52.97	52.00	69.94	
Highest Schooling level																																
None	41.40	36.75	52.72	0.09	39.07	38.73	43.58	0.01	1.31	1.16	2.83	0.00	48.41	46.48	53.91	0.61	8.20	7.48	11.79	0.38	43.36	39.65	52.52	0.17	4.66	3.92	9.68	0.10	4.10	4.32	0.32	0.16
Primary	23.00	25.11	17.87		39.86	39.25	47.91		51.55	50.24	64.70		16.23	16.93	14.21		15.97	16.96	11.05		12.07	13.79	7.83		56.21	55.83	58.87		38.07	37.58	46.59	
Secondary or higher	35.59	38.14	29.41		21.07	22.02	8.50		47.14	48.60	32.48		35.37	36.59	31.88		75.83	75.56	77.16		44.57	46.56	39.65		39.13	40.25	31.46		57.83	58.10	53.09	
Couple characteristics																																
Difference between husband and wife age, years																																
Wife older than husband	7.55	8.01	6.43	0.48	4.35	4.15	7.03	0.23	4.24	4.29	3.74	0.14	0.92	1.24	24.87	0.54	2.19	2.52	0.57	0.07	6.33	7.68	2.98	0.32	5.52	5.27	7.26	0.22	3.56	3.67	1.67	0.26
Wife and husband same age or within +/- 5 years	45.57	43.08	51.64		43.26	43.72	37.30		50.73	51.09	47.08		29.10	30.59	40.23		40.11	38.77	46.72		42.38	44.60	36.89		51.53	52.84	42.53		54.01	54.59	43.89	
Husband older by 6-10 years	28.97	31.77	22.16		32.92	33.14	30.06		34.20	34.35	32.71		38.28	37.60	34.91		36.18	38.62	24.11		30.84	28.01	37.80		31.17	31.22	30.85		32.77	32.38	38.52	
Husband older by 11+ years	17.90	17.13	19.77		19.47	19.00	25.62		10.83	10.27	16.48		31.70	30.58			21.52	20.09	28.59		20.46	19.70	22.34		11.78	10.67	19.36		9.67	9.37	14.93	
Difference between husband and wife schooling, years																																
Wife more school than husband	15.61	15.91	14.87	0.45	17.14	17.17	16.66	0.68	28.24	27.69	33.78	0.00	21.79	20.98	24.10	0.57	19.61	20.76	13.90	0.44	17.06	18.25	14.12	0.73	34.29	33.97	36.46	0.04	29.86	30.19	24.08	0.59
Wife and husband same school	38.14	34.66	46.61		38.51	38.66	36.53		26.57	26.41	28.16		43.91	42.98	46.57		38.84	36.95	48.14		40.02	38.82	43.00		12.55	12.92	9.98		16.43	16.67	12.24	
Husband more school by 1-5 years	25.42	26.41	23.03		31.39	31.01	36.42		39.59	40.68	28.64		16.95	18.95	11.22		25.10	25.54	22.89		20.65	20.64	20.67		38.80	39.62	33.14		45.95	45.45	54.65	
Husband more school by 6-10 years	15.82	16.89	13.24		11.78	11.89	10.38		5.27	5.03	7.68		16.42	15.83	18.11		12.54	13.04	10.07		14.73	13.43	17.95		11.63	11.66	11.41		7.46	7.37	9.04	
Husband more school by 11+ years	5.00	6.13	2.26		1.17	1.26			0.33	0.19	1.74		0.94	1.26			3.92	3.70	5.00		7.53	8.86	4.26		2.74	1.82	9.02		0.31	0.32		
Contraceptive characteristics, as reported by woman																																
Method longevity																																
Short-acting	37.53	39.56	32.58	0.33	71.02	70.69	75.49	0.36	68.85	69.13	66.10	0.49	47.84	50.36	40.64	0.20	47.55	46.26	53.90	0.29	80.04	77.96	85.18	0.30	66.02	63.79	81.31	0.01	76.78	76.71	78.06	0.81
LARC	62.47	60.44	67.42		28.98	29.31	24.51		31.15	30.87	33.90		52.16	49.64	59.36		52.45	53.74	46.10		19.96	22.04	14.82		33.98	36.21	18.69		23.22	23.29	21.94	
Method mix																																
Female sterilization	2.74	1.72	5.24	0.26	0.69	0.55	2.46	0.15	4.47	4.51	4.07	0.44	1.34	1.68	0.35	0.40	1.56	1.88		0.21	1.71	2.40		0.53	6.60	6.67	6.13	0.07	3.55	3.65	1.80	0.10
IUD	17.44	19.32	12.86		5.35	5.46	3.90		7.37	6.89	12.16		6.69	6.49	7.26		8.68	8.78	8.16		0.27	0.38										

Figure 1. Bivariate relationships between perceptions of husbands' fertility and type of contraceptive use in 8 Sub-Saharan African countries

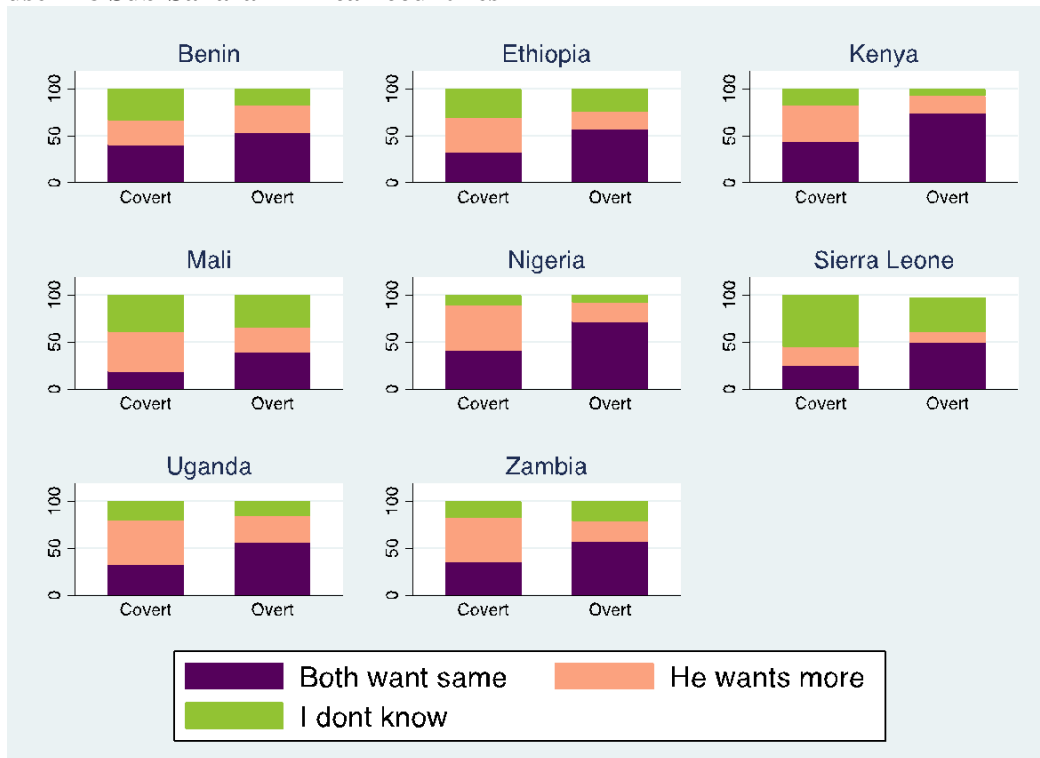


Figure 2. Unadjusted and adjusted odds ratios for perceptions associated with covert use compared to overt use among couples in 8 Sub-Saharan African countries (reference= perception that husband wants the same number of children/less than me)

