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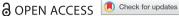
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# Her, his, and their fertility desires and contraceptive behaviours: A focus on young couples in six countries

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### **ABSTRACT**

Most studies examining contraceptive use among women focus on their own fertility desires and family planning attitudes and do not incorporate the desires and attitudes of their partner. Using Demographic and Health Survey data from young couples (wife is aged 15-24) from six countries, we use descriptive and multivariate analyses to examine the association between couple-level fertility desires and current contraceptive use and women's future intention to use contraception. Results demonstrate that young couples want to have children immediately or may want to delay having children for two or more years; very few do not want (more) children. Discordant fertility desires were found in all countries. Compared to couples where both partners want a child soon, young couples that want to delay childbearing or where the husband wants a child, and the wife wants to delay or avoid childbearing are significantly more likely to use contraception. Similar results are found for women's intention to use contraception. When discordant fertility desires are associated with the outcomes, the young wife's fertility desire matters more than her husband's. Among young couples, promoting communication and positive social norms for delaying a first or second birth can lead to positive health outcomes for mothers and babies.

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### **KEYWORDS**

Couple; youth; family planning; fertility desires; discordance

# Introduction

Prior studies have demonstrated that young women (ages 15-24 years) married or living with their partner (in union) have unmet family planning (FP) needs, that is, they are sexually active and want to delay or avoid childbearing but are not using a contraceptive method (MacQuarrie, 2014, 2015). In an examination of 61 countries, MacQuarrie (2015) finds that unmet need for modern contraception varied for young women married or in union from a low of 10.8% in the Middle East and North Africa to a high of 29% in West and Central Africa; most of this unmet need is for delaying or spacing births (MacQuarrie, 2014). Unmet need, while a crude indicator of future contraceptive use (Sarnak et al., 2020; Staveteig, 2017), is indicative that a number of young women married or in union are potentially at risk of unintended pregnancies.

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Most studies examining contraceptive use among women focus specifically on a woman's own fertility desires and FP attitudes and do not incorporate the desires and attitudes of her partner (Becker, 1999, 1996). To address this gap, some studies examine a woman's perception of her partner's fertility desires or her perception of his approval of FP and how this relates to her reported contraceptive use or unmet need, adjusting for her own desires and approval. For example, studies in Angola and urban Kenya show that a woman's perception of her partner's desires (i.e. he wants the same number of children as her) or her perception of his approval of FP are positively associated with modern contraceptive use (Prata et al., 2017; Tumlinson et al., 2013). Additionally, in a study from Bangladesh, Razzaque (1999) shows that the woman's perception of her husband's desire for a child was more important for subsequent childbearing than the woman's own fertility desire. Though these studies recognise the importance of including husband's desires and preferences in analyses exploring contraceptive use and future childbearing, they ultimately rely on only the woman respondent rather than the husband himself. The small number of papers that use couple-level data, that is data from both the woman and her partner, to compare the effect of the woman's perception of her partner's desires to his actual desires find that including the partner's actual desires leads to better-fitting multivariate models and more specific programmatic recommendations (Baschieri et al., 2013; Speizer, 1999).

Studies using couple-level data show how both partner's fertility desires jointly affect contraceptive use. In their 18-country study using Demographic and Health Survey (DHS) data, Bankole and Singh (1998) demonstrate that at the aggregate level there is a high agreement between spouses for continued childbearing and when there is an agreement for delaying or avoiding childbearing, the couple is more likely to use a contraceptive method. The authors also find that when there is disagreement, husbands tend to be more pronatalist and want a child sooner than their wives (Bankole & Singh, 1998). In multivariate analyses, the authors find that in six of the nine countries where one spouse's desire has more influence on contraceptive use, it is the wife's desire that is more important than the husband's (Bankole & Singh, 1998). Similarly, in a study from Egypt, Takuri (2012) finds that when couples have discordant fertility desires, the odds of use is two times higher when the wife wanted no more children and the husband wanted children compared to the case where the husband wanted no more children and the wife wanted children. Conversely, a small number of studies find that the husband's fertility desire matters more than the wife's on contraceptive use behaviours (Tilahun et al., 2014; Wolff et al., 2000). Studies using couple-level data to examine the influence of the wife's and husband's fertility desires on contraceptive use behaviours all focus on married couples of all ages (e.g. women between the ages of 15-49); there is a need to examine how discordance affects use across differing geographies and by factors known to influence use such as age.

To date, only a few quantitative studies from low- or middle-income countries (LMIC) focus on young couples. For example, Challa and colleagues (2020) examine couples where the wife is aged 15-19 to determine how couple communication about contraception relates to contraceptive use behaviours in Niger. The authors find that less than a quarter of young couples report discussion and that those who discussed are more likely to report contraceptive use, and those who discussed are less likely to use covertly than overtly (Challa et al., 2020). Further, Yeatman and Sennott (2014) examine young couples (i.e. the wife is aged 15-25 years) and demonstrate that family size preferences of each partner influence changes in the other partner's preferences over time, adjusting for each partner's demographic characteristics. Notably, no studies from LMIC were found that examine how joint fertility desires of young couples are associated with contraceptive use. Examination of how concordant and discordant fertility desires of young couples (i.e. where the wife is aged 15-24) are related to contraceptive use across varying geographies is important because young women and their partners may have unmet FP needs and be at risk of unintended pregnancies.

This study fills this gap by examining how joint fertility desires are associated with contraceptive use across different fertility and FP use contexts among couples where the wife is aged 15-24 at the time of the survey. It is pertinent to examine young couples' fertility desires and FP use behaviours to inform programs seeking to reach couples with messages to delay a first birth, avoid closely spaced births or achieve fertility intentions.

# Materials and methods

# Study samples

This paper uses secondary data from representative household surveys collected as part of the DHS program. DHS data are useful for this type of cross-country study as the DHS program uses standardised questionnaires and approaches that make comparisons across countries possible. In addition, the DHS program created the couple-level data sets using a standardised approach for linking husbands and wives in the sample. Notably, a challenge with this type of cross-country comparison using DHS data is that it is more difficult to incorporate country-specific items into the cross-country presentation; in this study, this was done by using different reference groups for variables like education and religion that made the most sense for each country.

Six countries were selected to be included in the analysis to represent countries with higher contraceptive use and lower fertility (India, Kenya, and Ethiopia), and countries with lower contraceptive use and higher fertility (Democratic Republic of Congo - DRC, Burkina Faso, and Nigeria). These countries were selected because of their demographic variability and the availability of couple-level data. The DHS typically uses a multi-stage sampling design to select a representative sample of households and women ages 15-49 years to be surveyed. In some countries, in a subset of households, men ages 15-59 (or 15-54, depending on the country) are also surveyed. By linking data for husbands and wives at the household level, DHS creates couple-level data sets that are publicly available. The focus of this analysis is couples where the wife is in the age range 15-24 years and neither partner is infecund or sterilised. The number of eligible couples where the woman is ages 15-24 in the DHS study samples range from 1157 in DRC to 9747 in India; across the countries, 16%-29% of the sample is couples where the wife is aged 15-19 (see Table 1). The size of the couple sample is dependent on the overall number of women and men surveyed as part of the DHS in each country as well as the average age at marriage (i.e. where the average age at marriage for women is younger, there will be more young couples in the sample). The data for the six countries were collected in the last decade with the data from Burkina Faso being the oldest (2010) followed by DRC (2013-2014), Kenya (2014), India (2015-2016), Ethiopia (2016) and Nigeria (2018).

# Dependent variables

The key dependent variables for this analysis are based on the wife's reported current use of contraception and among non-users, her intention to use contraception in the future. In the DHS, all women were asked if they or their partner are currently doing something or using any method to delay or avoid getting pregnant. Those women who reported 'yes,' are asked which method they are using. For this analysis, modern methods include IUD, implant, injectable, daily pill, male or female condom, emergency contraception, lactational amenorrhoea method, and standard days method. Traditional methods include rhythm, withdrawal, and other traditional methods reported. Men were asked a similar question about their use of a method to delay or avoid pregnancy; however, in most countries, this question was not asked specific to a wife or partner. Thus, we use the wife's reported method use for the contraceptive use outcome.

Women who were not using any method to avoid pregnancy were asked if they think they will use a contraceptive method to delay or avoid pregnancy at any time in the future (yes, no, don't know). This question was not asked to men in the survey and therefore, this outcome represents only women's future use intentions. Two categories are created for this outcome: intends to use



Table 1. Demographic characteristics of sample of couples where wife is aged 15–24 by study country.

	India	Kenya	Ethiopia	DRC	Burkina Faso	Nigeria
	n = 9747	1207	n = 1492	1157	n = 1418	n = 1734
Age of wife						
15–19	19.17	16.25	24.71	28.59	28.39	28.61
20-24	80.83	83.75	75.29	71.41	71.61	71.39
Age of husband						
15–24	32.98	22.52	24.98	28.49	17.81	11.63
25–29	46.79	48.59	44.75	45.42	32.92	32.1
30–34	16.20	19.33	21.99	18.57	22.88	26.92
35–39	3.19	6.37	6.00	4.20	10.97	16.37
40+	0.84	3.19	2.29	3.32	15.42	12.98
Age difference						
Within 5 years	74.61	64.51	61.10	64.69	43.08	32.76
5–10 years older	20.32	24.34	28.36	25.51	26.85	32.92
10+ years older	5.07	11.15	10.54	9.80	30.07	34.32
Type of union						
Monogamous	na	94.40	97.36	86.81	68.16	76.04
Polygynous	na	5.60	2.64	13.19	31.84	23.96
Place of residence						
Urban	31.38	47.18	12.72	28.49	15.34	29.22
Rural	68.62	52.82	87.28	71.51	84.66	70.78
Couple education						
Neither educated	5.43	2.84	18.49	2.91	66.40	33.46
Him only educated	10.47	2.98	15.97	11.91	14.13	17.03
Both primary or her higher	15.06	51.89	45.08	18.71	14.27	12.92
Both educated or him higher	69.05	42.30	20.46	66.48	5.20	36.59
Parity of wife						
None	34.27	18.01	25.98	21.91	22.45	21.62
One	44.69	40.81	40.27	35.92	39.62	39.56
Two	18.02	29.21	22.57	27.85	28.89	24.94
Three or more	3.02	11.96	11.18	14.32	9.04	13.88
Religion						
Catholic/Orthodox (Ethiopia)	19.01	19.44	38.22	28.82	18.48	6.61
Protestant		71.77	20.81	64.26	6.36	20.36
Muslim/traditional/other		8.79	40.97	6.92	68.04	73.03
Hindu (trad/other-Burkina Faso)	80.99	na	na	na	7.12	na

Note: All indicators use men's weights; only 9 women report Catholic in Ethiopia and these are grouped with Orthodox.

contraception in the future and does not intend to use contraception in the future (the last category includes non-users who were undecided about future use). The analysis sample includes all couples for the contraceptive use outcome but a reduced sample of non-users at the time of the survey for the intention to use contraception in the future outcome.

# Independent variables

The key independent variable for this analysis is based on the wife and the husband's future fertility desires. This was created based on a question that asked both women and men: 'Now I have some questions about the future, would you like to have (a/another) child or would you prefer not to have any (more) children?' Response options were: have another child, no more/none, can't get pregnant, and undecided. Those who said that they wanted another child were asked how long they would like to wait before the (next) child. These questions were used to create a fertility preference variable for women and for men that includes three categories: wants a child soon/now (within 2 years), wants to delay (next) child two or more years, and wants no (more) children. Note that those who gave non-numeric responses on the timing of future childbearing (e.g. 'after marriage' or 'up to God') represent less than 2.5% of respondents across the countries. These non-numeric responders and those who report that they are undecided about future childbearing or undecided about when they want their next birth are coded as 'wants to delay' as is typically done in unmet need

calculations (Bradley & Casterline, 2014). All couples where one or both partners report that they are sterilised or infecund to this question are dropped from the analysis. By combining the husband and wife fertility preferences, we create a couple fertility preference variable with six categories: both partners want a child now, both partners want to delay a birth, both partners want no more children, he wants a child now/she wants to delay or avoid childbearing, she wants a child now/he wants to delay or avoid childbearing, and one wants to delay and the other wants no more children. The first three categories are concordant couples while the fourth through sixth are discordant, although the sixth group (one delay/one no more) is concordant on possibly needing contraception at the time of the survey (see Table 2).

This analysis also examines a woman's perception of her husband's fertility desire. Women were asked, 'does your husband/partner want the same number of children that you want, or does he want more or fewer than you want?' Response options were 'same number,' 'more children,' 'fewer children,' and 'don't know.' This question provides a perspective of the information that can be examined when couple-level data are not available. Notably, when the wife says her husband wants the same number of children, this could equate to a desire to continue childbearing or a desire to delay or stop childbearing. In India, this question was only asked to women using a non-sterilisation method and therefore the results are not similar to the other countries and are not presented. This analysis examines whether the perception of the partner desire is associated with the outcomes of interest.

Table 2. Fertility preferences and FP use intentions among young couples (wife age 15-24).

					Burkina	
	India	Kenya	Ethiopia	DRC	Faso	Nigeria
	n = 9747	1207	n = 1492	n = 1157	n = 1418	n = 1734
Wives' fertility preferences*						
Wants now (within 2 years)	41.04	16.73	26.64	28.62	29.25	52.07
Wants to delay 2+ years	37.08	68.33	61.97	67.57	69.43	45.83
Wants no more	21.88	14.93	11.39	3.81	1.32	2.11
Husbands' fertility preferences*						
Wants now (within 2 years)	38.69	21.09	31.48	31.15	29.05	59.97
Wants to delay 2+ years	37.10	64.70	60.90	63.97	69.34	36.17
Wants no more	24.21	14.22	7.62	4.87	1.61	3.86
Couple fertility preferences**						
Both want now	19.02	7.68	11.32	14.04	15.56	27.68
Both delay/undecided	27.94	52.93	50.16	56.85	57.65	25.59
Both no more	14.21	5.93	1.64	0.59	0.18	0.62
He wants now/she delay or no more	13.46	10.62	14.75	12.68	12.22	27.08
She wants now/he delay or no more	14.57	6.67	8.16	9.25	12.17	16.62
One delay/other no more	10.79	16.16	13.97	6.58	2.23	2.41
Wife's perception of husband's desire for						
children**						
Same	na	62.04	43.80	31.50	38.17	32.53
More		19.46	18.68	26.85	37.96	49.59
Fewer		5.64	4.68	9.84	4.50	4.57
Don't know		12.86	32.84	31.81	19.37	13.30
Contraceptive use						
Non-user	74.36	47.57	62.09	84.00	87.68	89.08
Using modern method	18.08	48.53	37.61	7.54	11.79	8.39
Using traditional method	7.57	3.91	0.30	8.46	0.53	2.53
Intention to use in the future (among non-	n = 7340	n = 634	n = 961	n = 993	n = 1228	n = 1547
users)						
Non-user does NOT intend	38.73	19.76	28.99	56.29	25.03	60.28
Non-user/intends	61.27	80.24	71.01	43.71	74.97	39.72

Note: All indicators use men's weights. na - not available.

<sup>\*</sup>Those who are undecided on future fertility or timing of future fertility coded 'wants to delay'.

<sup>\*\*</sup>India: this was only asked to women using a non-sterilisation method at the time of the survey; non-users not asked.



# Data analysis

Multivariable logistic regression analyses are performed to examine the association between couplelevel fertility desires and contraceptive use among young couples. Analyses also explore if the wife's perception of her partner's desires is associated with use. Similar analyses are performed using the woman's reported intention to use contraception in the future among non-users as the outcome variable. All descriptive and multivariable analyses are weighted using the men's weights based on the recommendation by the DHS to use men's weights when couple-level weights are not available. In an earlier paper, Becker and Kalamar (2018) demonstrate a strategy to create couple-level weights with DHS data; however, the required information to create these weights is not typically included as part of the DHS data sets. All analyses adjust the standard errors for the clustered sampling design in the DHS surveys. All analyses were performed in Stata statistical software version 16.

All multivariable analyses adjust for key demographic factors that have been found to be associated with contraceptive use and unmet need in previous analyses of couples or youth including the woman's age, the age difference between spouses, couple education level, wealth group (household variable), woman's reported religion, woman's prior birth experience, place of residence, whether the woman reports that she is in a monogamous union (African countries only), and caste (Indiaspecific) (Bankole & Singh, 1998; MacQuarrie, 2014). Some of these variables need greater explanation. In each country, DHS recoded education level to standard categories: no education, primary level, secondary level, and higher. Using these recoded variables, we create a joint education variable for the young couple as: neither educated; he is only educated; both have primary education or she has a higher education than him; and both secondary education or higher or she has primary and he has higher. In some of the countries, these categories are small (e.g. neither educated or both secondary educated); given these small groups, the reference group for the multivariate analysis is different by country. Further, religion categories vary by country context and therefore the reference group for religion also changes in the multivariate models (Table 1). Finally, the age difference variable is calculated as whether the husband's age is within 5 years of his wife (including being younger), or if he is 5–10 years older, or if he is more than 10 years older. The coding and descriptive statistics for these variables can be seen in Table 1.

### Results

# Description of young couples across study countries

The six countries included have different fertility and contraceptive use contexts. The total fertility rate (TFR) is highest in DRC at 6.6 births per woman followed by Burkina Faso (6.0) and Nigeria (5.3). TFR in Ethiopia is 4.6 while Kenya is 3.9; India is the lowest at 2.2 births per woman. Among all women married or in union ages 15-49, the modern contraceptive prevalence is highest in Kenya (53.2%) and India (47.8%) followed by Ethiopia (35.3%). Use is lowest in DRC (7.8%) followed by Nigeria (12.0%) and Burkina Faso (15.0%). Among young women married or in union ages 15-24, use is lower than for their older counterparts except for in Ethiopia where use is somewhat higher (36.8%). In the other countries, modern method use among young women married or in union is 47.5% in Kenya, 21.0% in India, 7.8% in Burkina Faso, 7.5% in DRC, and 6.4% in Nigeria.<sup>2</sup>

It is worth noting that while the wives in this analysis sample are young (ages 15-24 years), the husbands are not restricted on age. Between 12% (Nigeria) and 33% (India) of husbands are in the same age range (15-24) as their spouse (see Table 1). In Burkina Faso and Nigeria, more than a quarter of the husbands are age 35 or older and in Kenya, Ethiopia, and DRC, more than a quarter are age 30 or older. When we examine the age difference between spouses, Nigeria and Burkina Faso have the lowest percentage of spouses that are within 5 years of age while in India, nearly threequarters of spouses are within 5 years of age. The percentage within five years is 65% for Kenya and DRC and 61% for Ethiopia. In a third of the couples in Nigeria and Burkina Faso, the spouse

is more than 10 years older than his wife. Given that we are focusing on young couples where the wife is between ages 15-24, many of the women have no children (18-34%) or just one prior live birth (about 40%). In the African countries, between a third and two-fifths of the young couples have had two or more children. Among the couples included from the African countries, a third are in polygynous unions in Burkina Faso followed by nearly a quarter in Nigeria and 13% in DRC; only a small percentage of couples are in polygynous unions in Kenya and Ethiopia.

In Burkina Faso and Nigeria, there are many couples (66% and 33%, respectively) where both partners are not educated. Conversely, in the other four countries, education is more common with most couples having at least primary education or higher. The sample across all countries is predominately rural with the greatest percentage urban in Kenya (47%) and the smallest percentage urban in Ethiopia (13%). Finally, presented in Table 1 is the woman's reported religion by country. In Nigeria, nearly three-quarters of the sample is Muslim; a small percentage of this group report a traditional religion. In Burkina Faso, 68% of the sample is Muslim and the remaining couples are Catholic (18%), Protestant (6%) or report a traditional religion (7%). In Kenya and DRC, most of the sample is Christian with a larger percentage Protestant than Catholic. In Ethiopia, the main religions are Orthodox religion, Muslim, and Protestant. More than 80% of the couples in India are Hindu.

# Wife and husband fertility preferences

The fertility preferences of each spouse and the joint fertility preferences are shown in Table 2. Across the African countries, with the exception of Nigeria, about two-thirds of young wives and their husbands report that they want to delay a future birth two or more years; in Nigeria, only 46% of wives and 36% of husbands want to delay a birth and more than 50% want a child soon (within 2 years). In Ethiopia, DRC and Burkina Faso, about a quarter to a third of wives and husbands want a child within two years. In Kenya, one-fifth of husbands and 17% of wives report that they want a child within two years. Kenya has the highest percentage of wives and husbands among the African countries that report that they do not want any(more) children; this is followed by Ethiopia. In India, more than a third of husbands and wives want a child soon and more than a third want to delay childbearing two or more years. Notably, in India, 22% of wives and 24% of husbands report that they do not want any(more) children.

When husband and wife fertility preferences are examined jointly, we see that more than 50% of couples agree on their future desire (i.e. both want a child now, both want to delay, or both want no more) with the highest concordance in Burkina Faso (73%), DRC (71%), and Kenya (67%). Notably, most of this concordance is to delay the next birth two or more years. In Nigeria, a quarter of husbands and wives agree that they both want a child now, this is followed by India where 19% of couples both report that they want a child now. Across the countries, discordance on future childbearing is not uncommon. Where there is discordance, in four out of five of the African countries, a greater percentage of the couples have the husband wanting a child soon but the wife wanting to delay or avoid childbearing (i.e. husbands more pronatalist). For example, in Ethiopia, for 15% of young couples, the husband wants a child now, but the wife wants to delay (and a small percentage want no more). In another 8% of young couples, the wife wants a child now and the husband wants to delay (or a small percentage want no more). In India, a slightly greater percentage of women want a child now and their partner wants to delay or avoid childbearing than vice versa and in nearly 11% of young couples in India, both partners want to delay or avoid childbearing.

In Kenya, more than 60% of young women report that their husband wants the same number of children as for them and nearly 20% of women report that he wants more. Only about 6% report that their partner wants fewer children and 13% report that they do not know their partner's intentions. In Ethiopia, more than two-fifths of women report that their partner wants the same number of children but a third report that they do not know their partner's desire for children. In Nigeria, Burkina Faso, and DRC, a greater percentage of women report that their partner wants more children than them with about half of women in Nigeria giving this response. In DRC, about a third of



women report that they do not know their partner's desire and a similar percentage report that their partner wants the same number of children.

# Women's reported use and intentions to use

In our couple sample where the wife is aged 15-24 years, the percentage of women reporting use of a modern contraceptive method is highest among couples from Kenya (48.5%) followed by Ethiopia (37.6%) and India (18.1%) (see Table 2). The percentage using a modern method is lower in Burkina Faso (11.8%), Nigeria (8.4%), and DRC (7.5%). Traditional method use is common in DRC where a greater percentage of young couples is using traditional methods (8.5%) than the percentage using modern methods.

Also presented in Table 2 is the woman's reported intention to use contraception in the future among non-users of contraception at the time of the survey. Notably, where use is high, the percentage of women intending to use in the future is high (e.g. India, Kenya, and Ethiopia). Conversely, in Nigeria and DRC, intention to not use in the future is higher than intention to use in the future. In Burkina Faso where overall use is low, a high percentage of women report that they intend to use in the future.

# Association between fertility desires and contraceptive outcomes

Multivariable analyses adjusting for wife's age, the age difference between spouses, couple-level education, place of residence, religion, type of union (African countries), caste (India), and prior birth experience were undertaken to examine how couple fertility desires are associated with contraceptive use behaviours (see Table 3). In India and DRC, compared to couples where both partners want a child soon/now, those couples where both partners want to delay childbearing have higher odds of currently using contraception. Further, in India, Kenya, DRC, and Burkina Faso, when the husband wants a child now but his wife wants to delay or avoid childbearing, the couple has higher odds of using contraception (p < 0.10). In India, when both partners want to delay or avoid childbearing or one partner wants to delay and the other wants to avoid, the couple also has higher odds of using contraception compared to couples where both partners want a child soon. In all countries, if the wife wants a child now but her husband does not (i.e. he wants to delay or avoid childbearing), there is no difference in use compared to couples where both partners want a child now. Generally, the demographic variables are in the expected direction when they are significant such that Muslim women and women with no children have lower odds of using while urban couples (Ethiopia and Nigeria), monogamous couples (Ethiopia and Burkina Faso), and educated couples have higher odds of using.

In results not shown, we restricted the models to only monogamous couples for the five sub-Saharan African countries. The results of the couple fertility desire variable on current use were similar to those presented above (contact the first author for results with monogamous sample).

Table 4 presents the same models with the woman's perception of her husband's desire instead of the joint fertility preferences. In this case, we find that in Ethiopia, Burkina Faso, and Nigeria, if the wife thinks her husband wants more children than her, the couple has lower odds of using contraception than if the wife thinks her husband wants the same number (or fewer) children than her. Further, in Ethiopia and Burkina Faso, if the wife reports that she does not know her partner's desire, there are lower odds of use than if she thinks her husband wants the same or fewer children. In this model, similar results are found for the demographic variables as in the previous model. In models restricted to the monogamous couples for the African countries, the results are similar to those presented here (contact the first author for models).

In the analysis of the woman's reported intention to use contraception in the future (Table 5), we see that in Ethiopia, DRC, Burkina Faso, and India if both partners want to delay childbearing, there are higher odds that the wife reports that she intends to use contraception in the future compared to

Table 3. Logistic regression odds ratios (95% Cl) for use of any FP and association with fertility intentions among couples where the wife is aged 15–24 by country.

	India	Kenya	Ethiopia	DRC	Burkina Faso	Nigeria
Couple fertility preferences						
Both want now	1.00	1.00	1.00	1.00	1.00	1.00
Both delay/undecided	2.48 (1.88–3.29)***	1.05 (0.50–2.22)	1.22 (0.67–2.24)	2.99 (1.00–8.90)*	1.74 (0.77–3.94)	1.66 (0.90–3.05)
He wants now/she delay or no more	1.36 (1.00–1.85)*	2.26 (0.90–5.67)+	1.51 (0.75–3.03)	3.22 (0.92–11.34) <sup>+</sup>	2.42 (0.87–6.71) <sup>+</sup>	1.61 (0.90–2.86)
She wants now/he delay or no more	0.92 (0.66–1.29)	1.33 (0.49–3.61)	0.85 (0.37-1.94)	2.39 (0.68–8.43)	1.75 (0.72–4.29)	1.33 (0.64–2.74)
One delay/other no more	1.97 (1.44–2.68)***	0.95 (0.44–2.08)	1.12 (0.58–2.16)	1.47 (0.43–5.05)	2.20 (0.63–7.62)	1.83 (0.70–4.81)
Both no more	2.12 (1.52–2.96)***					
Age group: 15–19 vs. 20–24 (ref.)	1.13 (0.89–1.43)	0.84 (0.52–1.36)	1.13 (0.78–1.64)	1.05 (0.52–2.10)	0.52 (0.29-0.93)*	0.69 (0.39–1.22)
Age difference: within 5 years (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
5–10 years older	1.09 (0.89–1.33)	0.89 (0.58–1.38)	0.88 (0.61–1.27)	1.04 (0.61–1.75)	0.86 (0.55–1.34)	0.85 (0.55–1.32)
More than 10 years older	1.46 (1.08–1.96)*	0.66 (0.40–1.09)	1.16 (0.66–2.02)	0.65 (0.27–1.55)	0.45 (0.27-0.76)**	0.93 (0.55–1.57)
Union type: mono vs. poly (ref)	na	1.33 (0.66–2.70)	3.42 (1.33–8.77)*	1.76 (0.86–3.58)	1.83 (1.02–3.27)*	0.80 (0.42-1.50)
Residence: urban vs. rural (ref.)	0.96 (0.78–1.19)	1.06 (0.70–1.61)	2.03 (1.00-4.10)*	1.23 (0.47–3.17)	1.02 (0.62–1.69)	1.76 (1.11–2.78)*
Education: neither educated	0.44 (0.31-0.63)***	1.00	0.74 (0.40–1.37)	1.00	0.92 (0.57–1.49)	1.00
Him only educated	0.60 (0.48-0.76)***		0.46 (0.25-0.85)*		0.79 (0.44–1.42)	1.19 (0.47–3.01)
Both primary or her higher	1.07 (0.87–1.32)	2.93 (1.40–6.13)**	1.01 (0.63–1.61)	1.75 (0.66–4.62)	1.00	3.49 (1.65-7.40)***
Both educated or him higher	1.00	3.12 (1.36–7.19)**	1.00	2.88 (1.16–7.19)*		3.82 (1.69-8.60)***
Wealth: middle wealth (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
Lowest	0.93 (0.71–1.21)	0.47 (0.28–0.79)**	0.32 (0.18–0.59)***	0.66 (0.33–1.33)	1.31 (0.66–2.63)	0.58 (0.30–1.13)
Low	1.17 (0.96–1.43)	0.88 (0.53-1.48)	0.79 (0.47–1.33)	0.88 (0.40–1.95)	0.88 (0.44–1.75)	0.62 (0.34–1.14)
High	0.89 (0.72–1.11)	1.25 (0.69–2.25)	1.27 (0.74–2.18)	1.39 (0.49–3.94)	2.61 (1.51–4.51)***	0.93 (0.54–1.61)
Highest	1.09 (0.83–1.44)	1.34 (0.69–2.61)	1.07 (0.53–2.16)	1.63 (0.55-4.80)	6.54 (3.35–12.79)***	1.50 (0.83–2.72)
Parity: 2+ births (ref.)	1.00	1.00	1.00	1.00	1.00	-
None	0.30 (0.23-0.40)***	0.10 (0.05-0.20)***	0.47 (0.27-0.80)**	0.26 (0.09-0.72)**	0.28 (0.11-0.71)**	0.09 (0.02-0.32)***
One	1.14 (0.91–1.43)	0.71 (0.47–1.07)	0.91 (0.59–1.40)	0.86 (0.49–1.51)	0.69 (0.44–1.08)	0.91 (0.60–1.36)
Religion: Muslim*	1.00	1.00	1.00	1.00	1.00	0.47 (0.29-0.74)***
Catholic		3.10 (1.56–6.17)***	5.30 (3.44-8.19)***	1.80 (0.79–4.09)	1.81 (1.19–2.76)**	1.00
Protestant		2.02 (1.08–3.78)*	3.24 (1.97–5.32)***	2.27 (1.01–5.08)*		
Hindi (India)/ Other (Burkina Faso)	0.88 (0.71–1.08)				0.64 (0.20–2.06)	
Caste: Other backward caste (ref.)	1.00	na	na	na	na	na
Missing	1.63 (1.09–2.46)*					
Scheduled caste	1.41 (1.16–1.72)***					
Scheduled tribe						
None of them	2.02 (1.57–2.61)***					
Unweighted # of observations	9702	1,207	1,492	1,157	1,418	1,734

na – Not applicable in models for African countries; these models also drop small number of couples where one/both partners reported being sterilised. Models adjust for place of residence, couple education, wife's age group, husband's age wealth, religion, caste (India), and prior birth experience (none, one, 2+); All analyses use man's weights.

\*Included with this group is traditional/other/none which are small (except Burkina Faso where other/traditional is pulled out).

 $^{+}p \le 0.10$ ;  $^{*}p \le 0.05$ ;  $^{**}p \le 0.01$ ;  $^{***}p \le 0.001$ .

Table 4. Logistic regression odds ratios (95% CI) for use of any FP and association with wife's perception of husband fertility desires (young couples).

	Kenya	Ethiopi	DRC	Burkina F so	Ni eria
erception of husband's desired number of children					
Same/fewer (ref.)	1.00	1.00	1.00	1.00	1.00
More	0.85 (0.53–1.36)	0.57 (0.36-0.88)*	1.19 (0.71–1.98)	0.46 (0.28–0.73)***	$0.66 (0.41 - 1.05)^{+}$
Don't know	0.83 (0.52–1.32)	0.60 (0.40–0.88)**	0.87 (0.49–1.57)	0.41 (0.23-0.73)**	0.83 (0.42–1.61)
Age group: 15–19 vs. 20–24 (ref.)	0.85 (0.51–1.40)	1.12 (0.78–1.62)	1.07 (0.53–2.17)	0.52 (0.29-0.94)*	0.70 (0.40–1.24)
Age difference: within 5 years (ref.)	1.00	1.00	1.00	1.00	1.00
5–10 yea s older	0.91 (0.60–1.40)	0.86 (0.59–1.25)	1.00 (0.60–1.67)	0.83 (0.53-1.30)	0.81 (0.52–1.26)
More than 10 years older	0.73 (0.45-01.18)	1.17 (0.66–2.07)	0.61 (0.25–1.50)	0.46 (0.27-0.77)**	0.92 (0.55–1.56)
Union type: mono vs. poly (ref)	1.05 (0.55–2.01)	3.20 (1.27-8.04)*	1.87 (0.91-3.83)+	1.42 (0.79–2.54)	0.74 (0.38–1.44)
Residence: urban vs. rural (ref.)	1.10 (0.72–1.69)	2.12 (1.05-4.31)*	1.18 (0.47–2.96)	1.07 (0.65–1.76)	1.75 (1.11–2.76)*
Education: Neither educated	1.00	0.78 (0.42–1.43)	1.00	0.92 (0.56–1.51)	1.00
Him only educated		0.46 (0.26–0.83)**		0.74 (0.40–1.35)	1.20 (0.48–2.97)
Both primary or her higher	2.75 (1.36–5.58)**	1.07 (0.67–1.69)	1.69 (0.64–4.44)	1.00	3.56 (1.68–7.54)***
Both educated or him higher	2.99 (1.34–6.67)**	1.00	2.98 (1.20–7.38)*		3.80 (1.68-8.55)***
Wealth: middle wealth (ref.)	1.00	1.00	1.00	1.00	1.00
Lowest	0.48 (0.29-0.81)**	0.33 (0.18-0.60)***	0.68 (0.33–1.39)	1.22 (0.60–2.47)	0.57 (0.29–1.10)+
Low	0.88 (0.53–1.47)	0.79 (0.47–1.33)	0.85 (0.37–1.94)	0.88 (0.44–1.75)	0.62 (0.34–1.13)
High	1.17 (0.65–2.10)	1.21 (0.69–2.10)	1.41 (0.49–4.05)	2.49 (1.45–4.25)***	0.93 (0.54–1.60)
Highest	1.30 (0.68–2.49)	0.99 (0.49–2.00)	1.52 (0.52–4.41)	5.90 (3.01–11.55)***	1.56 (0.86–2.82)
Parity: 2+ births (ref.)	1.00	1.00	1.00	1.00	1.00
None	0.11 (0.06-0.21)***	0.46 (0.28-0.77)**	0.22 (0.08-0.63)**	0.21 (0.09-0.48)***	0.07 (0.02-0.25)***
One	0.78 (0.53–1.15)	0.90 (0.59–1.39)	0.82 (0.46–1.46)	0.65 (0.42-1.00)*	0.86 (0.58–1.29)
Religion: Muslim*	1.00	1.00	1.00	1.00	0.51 (0.32-0.82)**
atholic	2.96 (1.51–5.81)**	5.13 (3.32-7.95)***	1.89 (0.84–4.23)	1.95 (1.30–2.94)***	1.00
Protestant	1.91 (1.03–3.52)*	3.11 (1.92–5.04)***	2.28 (1.03–5.08)*		
Hindi (India)/ Other (Burkina Faso)				0.75 (0.23–2.49)	
Unweighted number of observations	1,204	1,492	1,157	1,418	1,734
Unweighted number of observations	1,204	1,492	1,157	1,418	1,7

India not included since question on perceptions only asked to users of FP, models use men's weights. Models adjust for place of residence, couple education, wife's age group, husband's age wealth, religion, and prior birth experience (none, one, 2+); All analyses use man's weights.  $^*$ Included with this group is traditional/other/none which are small (except Burkina Faso where other/traditional is pulled out).  $^*$ P  $\leq$  0.10;  $^*$ P  $\leq$  0.05;  $^*$ P  $\leq$  0.01;  $^*$ \*\*P  $\leq$  0.001.

**Table 5.** Logistic regression odds ratios (95% CI) for intention to use FP and association with fertility preferences among young couples.

igne 3. Euglistic regression data fathor (53% Et) for interition to use it and association with references annoting young couples	אי כין וטו ווונכוונוטוו נט ליכני	שביוו מווע מששטכומנוטוו שונון	leitility preferences amon	g young couples.		
	India	Kenya	Ethiopia	DRC	Burkina Faso	Nigeria
Couple fertility preferences						
Both want now (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
Both delay	1.68 (1.30–2.16)***	1.15 (0.45–2.93)	2.24 (1.03-4.88)*	2.25 (1.22–4.26)**	1.48 (0.93–2.36) <sup>+</sup>	1.07 (0.77–1.50)
He wants now/she doesn't	1.35 (1.06–1.72)*	0.73 (0.26–2.09)	2.33 (1.10-4.94)*	2.45 (1.15–5.22)*	0.85 (0.50-1.47)	1.51 (1.08–2.12)*
She wants now/he doesn't	0.98 (0.77–1.25)	0.32 (0.11–0.96)*	0.84 (0.33–2.17)	1.00 (0.44–2.26)	0.77 (0.46–1.28)	0.82 (0.56–1.21)
One delay/other no more	1.24 (0.91–1.68)	3.88 (1.06–14.15)*	4.23 (1.51–11.82)**	3.00 (1.14–7.93)*	1.58 (0.49–5.12)	1.52 (0.67–3.46)
Both no more	1.37 (0.99–1.90)+					
Age group: 15–19 vs. 20–24 (ref.)	1.09 (0.89–1.32)	0.86 (0.47–1.56)	0.94 (0.55–1.60)	1.15 (0.72–1.84)	0.80 (0.54–1.19)	0.88 (0.67–1.16)
Age difference: within 5 years (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
5–10 years older	0.69 (0.57–0.85)***	1.30 (0.73–2.30)	1.04 (0.58–1.84)	0.95 (0.63–1.42)	0.83 (0.56–1.24)	1.02 (0.76–1.36)
More than 10 years older	0.86 (0.61–1.21)	0.96 (0.44–2.06)	1.44 (0.70–2.97)	0.66 (0.32–1.37)	0.80 (0.54–1.20)	1.29 (0.92–1.83)
Union type: mono vs. poly (ref)	na	0.93 (0.37–2.34)	0.96 (0.39–2.39)	1.20 (0.69–2.09)	1.12 (0.76–1.64)	1.36 (0.98–1.90) <sup>+</sup>
Residence: urban vs. rural (ref.)	0.75 (0.60-0.93)**	0.71 (0.34–1.48)	1.09 (0.33–3.59)	1.58 (0.88–2.85)	0.98 (0.59–1.63)	1.39 (0.96–2.01)+
Education: Neither educated	0.61 (0.46-0.81)***	1.00	0.25 (0.10-0.66)**	1.00	1.04 (0.66–1.63)	1.00
Him only educated	0.95 (0.77-1.17)		0.33 (0.13-0.83)*		1.21 (0.69–2.13)	1.27 (0.86–1.86)
Both primary or her higher	0.95 (0.77-1.17)	6.59 (3.12–13.90)***	0.56 (0.24–1.29)	0.89 (0.44–1.77)	1.00	1.47 (0.91–2.37)
Both educated or him higher	1.00	3.57 (1.51–8.44)**	1.00	1.53 (0.93–2.53)		1.82 (1.16–2.87)**
Wealth: middle wealth (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
Lowest	0.99 (0.80–1.24)	0.52 (0.20–1.39)	0.73 (0.33–1.60)	0.96 (0.53–1.73)	0.61 (0.37–0.99)	0.93 (0.63–1.37)
Low	1.06 (0.86–1.30)	0.90 (0.32–2.52)	1.10 (0.53–2.26)	1.62 (0.93–2.84)+	0.78 (0.51–1.20)	0.95 (0.67–1.33)
High	1.07 (0.84–1.36)	1.19 (0.40–3.55)	1.95 (0.83-4.55)	0.94 (0.50–1.75)	1.46 (0.93–2.31)+	1.06 (0.68–1.65)
Highest	1.17 (0.86–1.60)	1.12 (0.36–3.48)	0.48 (0.15–1.52)	2.48 (1.08–5.69)*	0.83 (0.46–1.52)	0.75 (0.44–1.29)
Parity: 2+ births (ref.)	1.00	1.00	1.00	1.00	1.00	1.00
None	0.88 (0.68–1.14)	0.86 (0.34–2.19)	1.85 (0.90-3.84)+	0.98 (0.57–1.69)	0.88 (0.53–1.46)	0.92 (0.63–1.34)
One	0.94 (0.75–1.17)	1.08 (0.58–2.01)	1.70 (0.90–3.19)	1.02 (0.68–1.53)	0.91 (0.63–1.32)	0.96 (0.72–1.27)
Religion: Muslim*	1.00	1.00	1.00	1.00	1.00	$0.65 (0.42-1.01)^{+}$
Catholic		2.78 (1.26–6.13)*	2.94 (1.50–5.74)**	1.36 (0.62–3.00)	2.12 (1.35–3.32)***	1.00
Protestant		2.54 (1.29–5.00)**	2.05 (1.12–3.76)*	1.59 (0.79–3.19)		
Hindi (India)/ Other (Burkina Faso)	1.11 (0.90–1.37)				1.11 (0.61–2.02)	
Caste: Other backward caste (ref.)	1.00	na	na	na	na	na
Missing	0.72 (0.44–1.19)					
Scheduled caste	1.14 (0.93–1.40)					
Scheduled tribe	1.10 (0.89–1.37)					
None of them	1.32 (1.04–1.68)*					
Unweighted # of observations	7,305	634	961	993	1,228	1.547

na – Models for African countries drop small number of couples where one/both partners reported being sterilised. Models adjust for place of residence, couple education, wife's age group, husband's age wealth, religion, caste (India), and prior birth experience (none, one, 2+1); All analyses use man's weights.

\*Included with this group is traditional/other/none which are small (except Burkina Faso where other/traditional is pulled out).  $^+$ P  $\leq$  0.10;  $^*$ P  $\leq$  0.05;  $^*$ \*P  $\leq$  0.01;  $^*$ \*\*P  $\leq$  0.01.

couples where both partners report that they want a child now/soon. Further, in Ethiopia, DRC, Nigeria, and India, if the husband wants a child now but the wife does not (i.e. she wants to delay or avoid childbearing), there is higher odds that the woman reports that she intends to use in the future. Where both partners want to delay or avoid childbearing, there are higher odds that the woman reports an intention to use in the future (India, Kenya, Ethiopia and DRC) compared to couples where both partners want a child now. Finally, in Kenya, among couples where the wife wants a child now but the husband does not (i.e. he wants to delay or avoid childbearing), there are lower odds that the woman reports an intention to use in the future than those couples where both partners want a child now; this may reflect the wife's desire to have a child and her influence over future contraceptive adoption. Fewer of the demographic variables are significant in this model. We find that among more educated couples, there is a higher odds of the woman reporting an intention to use and Muslim women have lower odds of intending to use across most countries.

In models restricted to monogamous couples from sub-Saharan Africa, the results are similar for Kenya, Ethiopia, and DRC. That said, in Burkina Faso and Nigeria, the associations discussed above remain positive but did not attain significance in the smaller monogamous sample.

Finally, Table 6 presents the results of woman's reported intention to use in the future with the wife's perception of her partner's desire for children as the key independent variable. In this case, only in Burkina Faso and Nigeria does the wife's perception matter. In Nigeria, if the wife thinks her partner wants more children than her, she has lower odds of reporting an intention to use. Further in both Nigeria and Burkina Faso, if the wife reports that she does not know her partner's intention, there are lower odds she reports an intention to use in the future. Again, education and religion are the main factors associated with intention to use, as found above. In models restricted to the monogamous sample for the African countries, the results are similar with the exception of Burkina Faso where the effect of not knowing the partner's intention does not attain significance.

### Discussion

This analysis examines young couples where the wife is between the ages of 15-24 years to determine the role of fertility desires of both partners on the current use of contraception and the association between fertility desires and women's future intention to use contraception among non-users. Six countries were included to cover a mix of fertility and FP scenarios. Our findings demonstrate that there is both concordance and discordance in fertility desires across the study countries. Further, our findings highlight that when there are discordant fertility desires between a young wife and her husband, it is the wife's fertility desire that is more associated with her contraceptive use and future intention to use.

Among young couples in the African countries, most husbands and wives report that they want more children at some point in the future. This is not surprising since these young couples are just starting out their married lives and they all live in countries that value childbearing. In India, 22% of wives and 24% of husbands report that they want to avoid future childbearing. In Kenya, about 14% of wives and husbands want to avoid childbearing; in Ethiopia, 11% of wives and 7.6% of husbands report the same. In the other African countries, less than 5% of wives and husbands want to avoid childbearing.

Joint couple-level fertility desires show high concordance for future childbearing. Where discordance in fertility desires exist among couples, in four of the six countries, a slightly greater percentage of husbands want a child soon and the wife wants to delay or avoid childbearing (Ethiopia, Kenya, DRC, and Nigeria); in India, a greater percentage of wives want a child now and the husband wants to delay or avoid childbearing and in Burkina Faso, the percentages are about the same. Our findings are similar to what was found by Bankole and Singh (1998) where they found that when there were discordant fertility intentions, it was generally the wife not wanting more children but the husband still wanting more children (i.e. husbands more pronatalist). Given that most of the young couples want a child in the future, it is not surprising that contraceptive use is low in

Table 6. Logistic regression odds ratios (95% CI) for intention to use FP and association with wife's perception of husband's fertility desire among young couples.

	Kenya	Ethiopia	DRC	Burkina Faso	Nigeria
Perception of husband's desired number of children					
Same/fewer (ref.)	1.00	1.00	1.00	1.00	1.00
More	0.89 (0.38–2.07)	0.94 (0.56–1.58)	0.89 (0.57–1.38)	0.76 (0.55–1.06)	0.73 (0.54-0.97)*
Don't know	0.80 (0.39–1.62)	1.19 (0.68–2.08)	0.83 (0.51–1.33)	0.60 (0.37–0.96)*	0.42 (0.27–0.65)***
Age group: 15–19 vs. 20–24 (ref.)	0.72 (0.40–1.31)	0.87 (0.51–1.49)	1.14 (0.73–1.79)	0.81 (0.55-1.20)	0.92 (0.70–1.21)
Age difference: within 5 years (ref.)	1.00	1.00	1.00	1.00	1.00
5–10 years older	1.17 (0.65–2.12)	1.05 (0.59–1.87)	0.94 (0.62–1.42)	0.82 (0.55–1.23)	1.00 (0.74–1.33)
More than 10 years older	0.90 (0.43–1.88)	1.48 (0.74–2.97)	0.61 (0.30–1.23)	0.84 (0.56–1.26)	1.29 (0.91–1.82)
Union type: mono vs. poly (ref)	1.20 (0.49–2.97)	1.00 (0.40–2.47)	1.19 (0.70–2.00)	1.13 (0.77–1.68)	1.28 (0.91–1.81)
Residence: urban vs. rural (ref.)	0.60 (0.29–1.25)	1.09 (0.33–3.61)	1.56 (0.86–2.85)	1.05 (0.63–1.75)	1.34 (0.92–1.94)
Education: neither educated	1.00	0.21 (0.08–0.53)***	1.00	1.01 (0.65–1.57)	1.00
Him only educated		0.29 (0.12-0.71)**		1.13 (0.65–1.96)	1.24 (0.84–1.82)
Both primary or her higher	7.92 (3.92–16.00)***	0.53 (0.23–1.18)	0.90 (0.45–1.81)	1.00	1.48 (0.91–2.42)
Both educated or him higher	4.94 (2.17–11.28)***	1.00	1.67 (1.00–2.79)+		1.80 (1.15–2.82)**
Wealth: middle wealth (ref.)	1.00	1.00	1.00	1.00	1.00
Lowest	0.56 (0.24–1.33)	0.73 (0.34–1.58)	0.92 (0.50–1.69)	0.60 (0.37–0.97)*	0.88 (0.59–1.30)
Low	0.94 (0.37–2.38)	1.15 (0.54–2.44)	1.49 (0.82–2.68)	0.77 (0.50–1.17)	0.93 (0.66–1.32)
High	1.22 (0.42–3.51)	1.76 (0.77–4.02)	0.94 (0.49–1.80)	1.46 (0.93–2.30)	1.09 (0.71–1.68)
Highest	1.03 (0.36–3.01)	0.46 (0.14–1.46)	2.65 (1.15–6.10)*	0.79 (0.44–1.44)	0.84 (0.49–1.46)
Parity: 2+ births (ref.)	1.00	1.00	1.00	1.00	1.00
None	0.69 (0.27–1.73)	1.18 (0.61–2.28)	0.76 (0.46–1.25)	0.71 (0.44–1.15)	0.83 (0.57–1.19)
One	0.86 (0.48–1.56)	1.51 (0.81–2.81)	0.95 (0.63–1.42)	0.86 (0.59–1.24)	0.93 (0.70–1.23)
Religion: Muslim*	1.00	1.00	1.00	1.00	0.73 (0.47–1.14)
Catholic	3.05 (1.34–6.95)**	2.94 (1.49–5.80)**	1.31 (0.60–2.85)	2.21 (1.42–3.45)***	1.00
Protestant	2.41 (1.29–4.52)**	2.01 (1.06-3.80)*	1.49 (0.75–2.98)		
Hindi (India)/ Other (Burkina Faso)				1.23 (0.66–2.26)	
Unweighted number of observations	633	961	993	1,228	1,547

India not induded since question on perceptions only asked to users of FP; models use men's weights. Models adjust for place of residence, couple education, wife's age group, husband's age wealth,

religion, and prior birth experience (none, one, 2+); All analyses use man's weights. 

\*Included with this group is traditional/other/none which are small (except Burkina Faso where other/traditional is pulled out). 

\* $p \le 0.10$ ; \* $p \le 0.05$ ; \*\* $p \le 0.01$ ; \*\*\* $p \le 0.01$ .

these contexts. Those women using a method in these contexts are likely using to space a future birth.

Our multivariate findings demonstrate that joint couple-level fertility desires matter for contraceptive use among young couples across these settings. Among discordant couples, we find that the young wife's fertility desires may be more important than her partner's for current use or her intention to use in the future in a number of these contexts. That is, the wife's desire to avoid childbearing may be driving couple-level use. In their multi-country study with DHS data, Bankole and Singh (1998) find similar results whereby in six of the nine countries, the wife's desire was more associated with contraceptive use than the husband's. The importance of the young wife's fertility desires over her partner's desires on her reported contraceptive use behaviours may reflect the wife using a method, with or without her partner's involvement. This is possible given the typical method mix in most of these countries where women are using injectables, implants and pills. Where there are discordant fertility desires, a wife may use a method covertly to meet her own fertility goals. In this case, the husband may not know about his wife's use. In Nigeria, we find that among women who report using a modern method, 73% of their partners report non-use; among monogamous couples, the percentage reporting non-use is 72%. Conversely, in Kenya where use is higher overall, only 20% of husbands (in all unions and in monogamous unions) report that they are not using when their wives report using a modern method. From the data available, it is not possible to determine if this reflects miscommunication between couples, covert use, or reporting bias where men are reporting about use/non-use with a different partner.

In the analysis that examines the young woman's perception of her husband's fertility desire, we find that in three countries, if the wife thinks her partner wants more children than her, she is less likely to report using contraception or intend to use it in the future. Further, in Ethiopia and Burkina Faso, when the wife does not know her husband's desire, she is less likely to report use or intend to use. This is similar to an earlier study of women of all ages that showed that the woman's perception of her partner's fertility desire affects her use (Tumlinson et al., 2013). By using the young wife's perception, we are able to understand couple dynamics through the woman's data for cases where husband data are not available. We show that while the husband's fertility desires may directly affect the use, husbands also indirectly affect use through the young wife's perception, even if that perception of his fertility desires is incorrect.

These findings are consistent with earlier studies that demonstrate that both the wife and the husband's fertility desires are associated with contraceptive use as is the wife's perception of her partner's desires (Bankole & Singh, 1998; Speizer, 1999; Tumlinson et al., 2013). Most studies that examine the role of partner intentions either use women's data only and examine women's perceptions (Prata et al., 2017; Razzaque, 1999; Tumlinson et al., 2013), or when they include couple samples, focus on couples of all ages (e.g. women ages 15-49) without a focus on young couples (Bankole, 1995; Baschieri et al., 2013; Speizer, 1999; Takuri, 2012; Tilahun et al., 2014). The few studies of young couples found from LMIC (Challa et al., 2020; Yeatman & Sennott, 2014) do not examine the association between joint fertility desires and contraceptive use. By focusing on young couples, we see that many of these young couples still desire children. Further, when there are discordant fertility desires, the young wife's desire to delay or avoid childbearing was more associated with current use and her reported intention to use than was the husband's desire for a child in the next two years.

### Limitations

This study is not without limitations. An important limitation is that the outcome variables of interest – current use of contraception and intention to use contraception in the future are reported by the women. For the first outcome, it is reasonable to use the wife's report since most of the methods used in these countries are woman controlled. Notably, as discussed above, some of the men may not know about their wife's use (covert use) and this is another reason that using the wife's reported

use makes more sense for this analysis. For the second outcome, it would have been preferable to include joint future use intentions (or examine the husband's future use intentions separately) as our results that demonstrate that the wife's fertility intentions are more associated with this outcome than her husband's may reflect the fact that the outcome comes from the wife's report. Unfortunately, the DHS does not include the question on intentions to use contraception in the future in their surveys of men, so it was not possible to explore this bias. As there is increased interest in examining intentions to use contraception as a measure of FP service needs (Sarnak et al., 2020), including this in male surveys will become increasingly important. Second, the sample comes from the DHS couple sample; in cases where a husband or wife was travelling, they would not be included in the sample. Further, a small number of men are in the couple sample with multiple wives across the countries; this may affect the results, although earlier studies indicated the bias is minimal if observations are only repeated a small number of times (Speizer & Yates, 1998) and our monogamous results discussed above are similar to those presented for the full sample. Third, the data are cross-sectional and thus we can only discuss associations between the fertility intentions and contraceptive use and future use intentions. Finally, the data are self-reported and thus it is possible that women (or men) misreport their fertility intentions or contraceptive use behaviours based on courtesy bias or discomfort with giving a different response.

# **Conclusions and implications**

To conclude, this study demonstrates that among young couples, the fertility intentions of both partners matter for contraceptive use and for women's future use intentions. Further, the wife's fertility desire was more important than the husband's desire where couples were discordant. Programs need to work with young women and their partners to help them recognise that they can meet their fertility desires with available methods. In Ethiopia and Burkina Faso, perception of partner desire was also important suggesting the importance of encouraging partner communication around fertility desires and FP use. In the lower use contexts where most couples want a child, particularly Nigeria, fertility desires were not significantly associated with current use and women's reported intention to use in the future. In these contexts, it is important for programs to address social norms on early childbearing and the possibility to delay a first birth; these types of programs will help to support contraceptive adoption among young couples. These programs may need to start by working with the young wives in facilities during maternal and child health visits or through community activities for young women. As young women begin to adapt their fertility desires, this may lead to increased contraceptive use for spacing, even when the young women's partners are not yet fully convinced of the advantages of delaying or spacing a birth.

Programs seeking to increase contraceptive use often focus on affecting intentions to use contraception in the future. Particularly for young couples, this is an important indicator since young couples may not need FP currently but developing positive norms and attitudes toward future use is a laudable goal of programs working with them. Across almost all countries we find that when both partners want to delay childbearing, the wife is more likely to report an intention to use in the future compared to couples who want a child soon/now. That said, we also see that where the husband wants a child soon and the wife wants to delay or avoid childbearing, the woman is also more likely to intend to use it in the future. Working with young couples to help them clarify and think through their shared fertility desires and intentions and supporting them to understand the benefits of FP for birth spacing and improved health outcomes for the woman and child could help to address this gap in future intention to use. Programs should not necessarily promote current contraceptive use with young couples but rather support them to understand and discuss the benefits of contraception as part of their life planning. This approach could go a long way to help young couples meet their future fertility desires in a healthy and safe manner.



- 1. ICF, 2015. The DHS Program STATcompiler. Funded by USAID. http://www.statcompiler.com.
- 2. Ibid

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