ORIGINAL RESEARCH ARTICLE

Patriarchal norms, partner pronatalism, and women's fertility intentions in Ghana

DOI: 10.29063/ajrh2023/v27i2.8

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Abstract

Social norms influence many dimensions of women's lives and women's assumptions about male partners' pronatalism can have important associations with fertility behaviours. Using data on married/cohabiting women from the 2018/19 Ghana Socioeconomic Panel Survey and a series of robust descriptive analyses and logistic regression models, the links between women's internalization of patriarchal norms, presumed male partner pronatalism and fertility intentions are explored. The characteristics of conservative and liberal women are also examined. Logistic regressions show that greater internalization of patriarchal norms is associated with higher odds of women wanting more children- male children, particularly. Additionally, women's perceptions of their partners' fertility preferences were important- women who assumed that their male partners wanted more children tended to have stronger immediate pronatalist intentions themselves. Descriptive analyses show that conservative women, with greater internalized patriarchal norms, are more pronatalist, less educated, resident in rural parts of the country and more likely to be from poorer households, compared to their more liberal counterparts. Findings encourage the tailoring and targeting of family planning messages along cultural lines, to influence women's fertility intentions. Additionally, the importance of effective spousal communication is highlighted. Findings also emphasise the importance of involving men in the implementation of family planning programs. *(Afr J Reprod Health 2023; 27 [2]: 76-86).*

Keywords: Patriarchy, social norms, fertility, male partner preferences, Ghana

Résumé

Les normes sociales influencent de nombreuses dimensions de la vie des femmes et les hypothèses des femmes sur le pronatalisme des partenaires masculins peuvent avoir des associations importantes avec les comportements de fécondité. À l'aide des données sur les femmes mariées/concubines de l'enquête par panel socioéconomique du Ghana de 2018/19 et d'une série d'analyses descriptives robustes et de modèles de régression logistique, les liens entre l'intériorisation des normes patriarcales par les femmes, le pronatalisme présumé du partenaire masculin et les intentions de fécondité sont explorés. Les caractéristiques des femmes conservatrices et libérales sont également examinées. Les régressions logistiques montrent qu'une plus grande intériorisation des normes patriarcales est associée à une probabilité plus élevée que les femmes veuillent plus d'enfants, en particulier les enfants de sexe masculin. De plus, les perceptions des femmes sur les préférences de fécondité de leurs partenaires étaient importantes - les femmes qui supposaient que leurs partenaires masculins voulaient plus d'enfants avaient elles-mêmes tendance à avoir des intentions pronatalistes immédiates plus fortes. Des analyses descriptives montrent que les femmes conservatrices, avec des normes patriarcales plus intériorisées, sont plus natalistes, moins éduquées, résidentes dans les régions rurales du pays et plus susceptibles d'appartenir à des ménages plus pauvres, par rapport à leurs homologues plus libérales. Les résultats encouragent l'adaptation et le ciblage des messages de planification familiale selon des critères culturels, afin d'influencer les intentions de fécondité des femmes. De plus, l'importance d'une communication conjugale efficace est soulignée. Les résultats soulignent également l'importance d'impliquer les hommes dans la mise en œuvre des programmes de planification familiale. *(Afr J Reprod Health 2023; 27 [2]: 76-86).*

Mots-clés: Patriarcat, normes sociales, fécondité, préférences du partenaire masculin, Ghana

Introduction

High fertility rates and population growth typically have adverse implications for the poverty and welfare outcomes of individuals within a country[1]. Although increases in a country's population growth may also stem from increased in-migration and falling mortality rates, rising fertility levels

remain the most important determining factor in many developing countries, especially in sub-Saharan Africa[2].

Understanding women's fertility intentions is critical to understanding the future trajectory of fertility of any country[2] and these are typically influenced by factors such as their age, marital status, income and household wealth, education, number of children ever born, infant mortality, among others[4-7]. Although often acknowledged but less widely explored due to data limitations, culture and patriarchal norms are also expected to have important effects on women's fertility intentions and behaviours.

Patriarchal norms may be described as a system of kinship relations that are organized in terms of the rule of the father and endorse a set of social and economic values that promote young motherhood and large families[8]. Fertility in many developing countries is "grounded in culture" and established by social norms and customs [9-10] and patriarchal norms which perpetuate the belief that a woman's purpose in life is childbearing may be responsible for a plethora of women's reproductive health outcomes such as their fertility rates, the timing of marriage and childbearing, family sizes, sex preference and composition of children, child marriages, use of contraceptives; among others[11-12]. Women in Ghana typically have limited autonomy and authority owing to the prevalence of such restrictive patriarchal norms[13]. It is therefore, hypothesized that in cases where women's internalization of these messages is strong, greater pronatalist tendencies will be observed. The hypothesis has some backing as social norms and gender ideologies operationalise to marginalise women in India, given their primary identities as wives and mothers, and the existence of rigid social values, gender norms and structures that universally promote childbearing[14]. Other significant associations have been observed between patriarchal norms and gender role attitudes on fertility[15].

There is some rationale for the noted linkages between patriarchal norms and women's fertility intentions and outcomes[16]. First, women may comply with social norms largely because of the social approval they gain from their compliance, or because they fear social sanctions, e.g., gossip, shunning, or violence[17]. Second, women can behave in ways that contradict their personal fertility beliefs or their self-interest (e.g., adverse health implications of high fertility) because they believe that this is what is expected of them. Third, norms can often be underpinned by pluralistic ignorance (where people misperceive others' views). Here, women may perceive/believe that their male partners want more children and act along these lines when, in fact, they may not. Fourth, norms do not exist in a vacuum and are often underpinned by multiple factors, such as cultural or religious beliefs[18-19]. This may make it more difficult for women to resist if they feel that childbirth and having more children is sanctioned by God, for example.

No studies, to the best of authors knowledge, have explored the link between their internalized patriarchal norms and women's fertility intentions in Ghana, despite the noted patriarchal inclination of the country[20] and relatively high total fertility rate of 4 children per women. Although other studies have attempted to explore community-level influences using ethnic affiliations as proxies for cultural influences on women's fertility behaviours and intentions[22-23], women's own internalization of existing social and cultural norms may be a more direct measure of the role of patriarchal culture on fertility outcomes and intentions. This is because the presence of norms in of themselves, without acceptance and assimilation by women, are unlikely to have any effects on women's subsequent (fertility) intentions and behaviours.

A secondary research objective of this paper is to examine the role that women's perceptions of their male partners' preferences play in their fertility intentions. Although the desire for many children is falling over time in Ghana, these changes have been minimal[24] and there remains strong support for having many children, particularly on the part of male partners[13]. According to the most recent wave of the Ghana Demographic and Health Survey (GDHS, 2014), 19 percent of women and 22 percent of men aged 15-49 want to have another child soon (within two years), while 31 percent of women and 38 percent of men want another child two or more years later[24]. Consequences like intimate partner abuse, divorce or the taking on of additional wives can occur when women use contraceptives to try to lower their fertility without male partner's consent[11,13,25]. Male partners can influence women's reproductive health

decision-making in a couple of ways. First, a male partner may actually control the fertility decision, especially in settings where a woman's power to negotiate is weaker[21]. Second, a woman may also be influenced by her knowledge—or perceived knowledge—of her partner's fertility desires, the latter case being of prime interest in this paper[26]. In other settings, male partners do wield significant influence over women's fertility intentions[27]. Similar questions are therefore explored in the Ghanaian setting.

The current study aims to answer the following research questions:

1. What are the characteristics of women with high/low internalization of patriarchal norms in Ghana?
2. What is the link between women's internalization of patriarchal norms and their immediate fertility intentions, as well as child-gender expectations?
3. How are women's presumptions of their male partners' immediate desire for children related with their own immediate fertility intentions?

In this paper, data from the most recent (2018/19) wave of the Ghana Socioeconomic Panel Survey (GSEPS) is used. This dataset is ideal for the exploration of the research questions because there is very detailed information on power relations and structures within the household, which allows for the construction of women's "internalization of patriarchal norms (IPN)" index. It would be the first time that this data set is used to explore connections between cultural norms, male partner preferences and women's fertility intentions. The research builds on recent studies on women's fertility intentions which have noted the limitations of existing studies that do not (explicitly) control for internalized cultural norms and values[2,28].

To the extent that significant positive correlations are observed between women's internalization of patriarchal norms and their immediate fertility intentions, this might encourage the tailoring or targeting of family planning messages along cultural lines, to influence women's fertility intentions and encourage their uptake of family planning and contraceptive methods.

Evidence that shows that presumptions of male partners' fertility preferences significantly affect women's fertility intentions would also signal the importance of effective spousal communication and active male involvement on issues related to women's reproductive health outcomes, to minimize situations of pluralistic ignorance. At the very least, partner-related preferences should be included in empirical investigations of women's childbirth intentions.

Methods

Data

The 2018/19 Ghana Socioeconomic Panel Survey (GSEPS) is employed in this research. This includes a nationally representative sample of 5,010 households in 334 enumeration areas containing 18,889 household members. A two-stage stratified sample design was used for the survey and stratification was based on the then ten (10) regions of Ghana. The first stage involved selecting geographical precincts or clusters from an updated master sampling frame constructed from the 2000 Ghana Population and Housing Census.

Although data on 5,010 households and close to 19,000 individuals were collected, fertility questions were posed to only women above twelve (12) years of age in the household. Only 1,930 women provided responses to questions on their immediate fertility desires, thereby drastically reducing the analytic sample. Furthermore, questions on perceptions of their partners' preferences were answered by only 1,784 women. Missing observations on control variables further reduced the analytic sample to 749 coupled women.

This data set is especially ideal for the exploration of the outlined quantitative research questions given that information is contained on power relations and structures within the household. This is useful in the construction of women's internalization of patriarchal norms and attitudes. Other socioeconomic, demographic, geographical variables are available in the GSEPS data, in addition to measures of women's fertility intentions.

Outcome variable

The dependent variables for this study are women's intention to have more children in the present, as well as the gender of the children they see themselves having in the future. The question on fertility intention from the GSEPS is "*Do you yourself want to have a/another baby now?*" "Yes" responses were coded as "1", while "No" responses

Table 1: Questions on power relations and women's internalization of patriarchal norms (IPN) in Ghana, GSEPS, 2018/19

No.	Question	Response Categories	Coding
	The important decisions in the family should be made only by the men of the family?	Agree/ Disagree	Agree=1 Disagree=0
	A wife has a right to express her opinion even when she disagrees with what her husband is saying?	Agree/ Disagree	Agree=0 Disagree=1
	A wife should tolerate being beaten by her husband in order to keep the family together?	Agree/ Disagree	Agree=1 Disagree=0
	It is better to send a son to school than it is to send a daughter?	Agree/ Disagree	Agree=1 Disagree=0
	When a wife has earned some money, does she have the right to spend it on herself or her children without asking her husband?	Agree/ Disagree	Agree=0 Disagree=1
	A wife is correct in refusing to have sex with her husband when she knows her husband has sex with other women?	Agree/ Disagree	Agree=0 Disagree=1
	If a wife refuses sex, it is correct for her man to withhold money from her?	Agree/ Disagree	Agree=1 Disagree=0
	If a wife refuses sex, it is correct for her man to beat her?	Agree/ Disagree	Agree=1 Disagree=0

***Source*:** Author construction, GSEPS, 2018/19

were coded as "0". The question on the child-gender expectations was: "*In the future, how many more boys (girls) does (Name) see herself having?*" Responses were coded as "1" in either case if women saw themselves having a positive number of boys or girls in the future, and "0" if they saw themselves having none in the future.

Explanatory variables

One of the main explanatory variables is women's internalization of patriarchal norms. Indices of women's internalization of Patriarchal Norms (IPN) were constructed from responses to a set of eight (8) survey questions as presented in Table 1. The responses were assigned scores through a principal component analysis technique. Scores were then standardized to take on values between 0 and 100. Higher IPN scores are indicative of greater internalization of patriarchal attitudes among women (i.e., more conservative women), while lower scores indicated more liberal attitudes.

The second main explanatory variable of interest is women's presumptions of their male partners' desire for more children. The relevant survey question is: "*Couples do not always have the same feelings about the number or timing of children. Does your partner/spouse want to have a/another baby now?"* "Yes" responses were coded as "1", indicating women's assumptions that their partners indeed had pronatalist inclinations. It is important to note that there is no information in the dataset about how women came by these assumptions about their partners' preferences. While some may be based on actual knowledge of their preferences from discussions and negotiations with their spouses, others may be purely based on women's own presumptions.

Other important socio-demographic and socioeconomic background characteristics of the sampled women were included as controls in the regression analyses. These include age, employment status, highest educational attainment, the number of children ever born, the number of child deaths, presence of spouse in the household, household size, asset ownership, religion and ethnic affiliations, urban/rural residence and whether women resided in the northern or southern parts of the country. These are summarized in Table 2.

Methodology

The methodology comprised descriptive analyses and logistic regression models to explore the above-stated research objectives. Descriptive statistics of study variables (i.e., dependent, main independent, and other control variables) are presented in Table 2. Women were categorized into "conservative" and "liberal" groups, based on the extent of their measured internalization of patriarchal norms. Women with IPN scores below 15, the average for the analytic sample, are coded as being "liberal" while women with codes above 15, were coded as being "conservative".

Table 2: Summary Statistics on Married/cohabiting women, GSEPS, 2018/19

	Mean	SD	Min	Max
Fertility intention (Wants baby now)	0.462	0.5	0	1
Desires more boys	0.451	0.5	0	1
Desires more girls	0.435	0.5	0	1
Women's IPN scores	15.775	17.16	0	99.592
Perceived partner preferences (partner wants child now)	0.462	0.5	0	1
Age (years)	36.754	7.34	17	49
Woman is employed	0.858	0.35	0	1
No education	0.418	0.49	0	1
Basic education	0.429	0.5	0	1
Secondary education	0.097	0.3	0	1
Post- secondary education	0.056	0.23	0	1
Number of children ever born	3.678	1.92	1	12
Number of living boys	1.889	1.39	0	8
Number of living girls	1.789	1.32	0	7
Number of child deaths	0.184	0.53	0	4
Household size	4.786	1.89	1	14
Spouse present in household	0.716	0.45	0	1
Christian	0.912	0.28	0	1
Akan	0.578	0.49	0	1
Ga	0.084	0.28	0	1
Ewe	0.159	0.37	0	1
Northerner	0.179	0.38	0	1
Household owns TV	0.698	0.46	0	1
Household owns Radio	0.622	0.49	0	1
Urban residence	0.463	0.5	0	1
North	0.105	0.31	0	1
Observations	749			

***Source*:** Author construction, GSEPS, 2018/19

Following the descriptive analyses, multivariate logistic regression models are run. The models may be specified as follows:

$$ChildNow_i = \alpha_1 + \alpha_2 IPN_i + \alpha_3 Preference_i + \alpha_4 X_i + \varepsilon_i \quad (1)$$

$$BoyFuture_i = \beta_1 + \beta_2 IPN_i + \beta_3 Preference_i + \beta_4 X_i + \varepsilon_i \quad (2)$$

$$GirlFuture_i = \gamma_1 + \gamma_2 IPN_i + \gamma_3 Preference_i + \gamma_4 X_i + \varepsilon_i \quad (3)$$

Where $ChildNow_i$, $BoyFuture_i$, $GirlFuture_i$ are dummy variables to indicate the *i*th woman's intention to have a(nother) child now, expected number of boys in the future and expected number of girls in the future, respectively. The use of a dummy variable to proxy women's immediate fertility intentions and child-gender expectations informed the selected logistic multivariate regression model specification[2,29]. IPN_i refers to PCA-generated scores of the *i*th woman's internalizations of patriarchal norms, with higher scores indicative of greater conservativeness. $Preference_i$ refers to the *i*th woman's assumption about her male partner's preferences. It is a dummy variable and assigned a score of "1" if women think that their partners want to have a child now, and "0" otherwise. X_i refers to the set of other control variables included in the model (see Table 2). α_{1-4}, β_{1-4}, and γ_{1-4} are parameters to be estimated and ε_i is the error term. Following logistic regressions, odds ratios are presented, with standard errors clustered at the regional level.

Results and Discussion

Results of descriptive analyses

Summary statistics of study variables

Data on married/cohabiting women is used in the analyses; the analytic sample comprises 749 women. About 46% of women report that they would like to have a(nother) baby now. Similar percentages of women see themselves having either a boy (45%) or a girl (44%) in the future. When asked what they thought about their partners' preference for childbirths, about 46% of women responded that they believed their partners wanted a(nother) baby now. Although women's IPN scores range from 0 to 100, the average IPN score of the

Table 3: Background Characteristics of Conservative vs Liberal Women, GSEPS, 2018/19

	High Internalization		**Low internalization**		**T-tests**	
	Mean	*SD*	*Mean*	*SD*	*(High- Low)*	*T-stats*
Fertility intention (Wants baby now)	0.509	0.501	0.434	0.496	0.0747**	1.98
Wants more boys	0.498	0.501	0.424	0.495	0.0745**	1.98
Wants more girls	0.466	0.5	0.417	0.494	0.0483	1.29
Perceived partner preferences (partner wants child now)	0.491	0.501	0.445	0.497	0.0461	1.22
Age (years)	36.574	7.59	36.86	7.192	-0.286	-0.51
Woman is employed	0.866	0.341	0.854	0.354	0.0126	0.48
No education	0.469	0.5	0.388	0.488	0.0816**	2.19
Basic education	0.419	0.494	0.434	0.496	-0.0155	-0.41
Secondary education	0.079	0.271	0.108	0.311	-0.0286	-1.27
Post- secondary education	0.032	0.178	0.07	0.255	-0.0374**	-2.15
Number of children ever born	3.881	2.005	3.559	1.862	0.322**	2.22
Number of living boys	1.968	1.478	1.843	1.334	0.124	1.18
Number of living girls	1.913	1.365	1.716	1.292	0.197**	1.98
Number of child deaths	0.209	0.551	0.169	0.514	0.0399	1.00
Household size	4.787	1.772	4.786	1.962	0.000987	0.01
Spouse present in household	0.751	0.433	0.695	0.461	0.056	1.64
Christian	0.903	0.297	0.917	0.276	-0.0148	-0.69
Akan	0.567	0.496	0.585	0.493	-0.018	-0.48
Ga	0.076	0.265	0.089	0.285	-0.0132	-0.63
Ewe	0.162	0.37	0.157	0.364	0.00568	0.20
Northerner	0.195	0.397	0.169	0.376	0.0255	0.88
TV	0.646	0.479	0.729	0.445	-0.0826**	-2.38
Radio	0.614	0.488	0.627	0.484	-0.0134	-0.36
Urban residence	0.383	0.487	0.511	0.5	-0.128***	-3.41
North	0.123	0.329	0.095	0.294	0.0274	1.18
Observations	277		472		749	

*T-statistics in Parenthesis: * p<0.10, ** p<0.05, *** p<0.01*

analytic sample is a little above 15; this indicates that women in the sample are generally liberal.

Women's ages range from 17 to 49 years, indicating that the sample comprises of women largely in their childbearing years. The average age of women is 37 years. About 87% of women report that they are engaged in some productive venture. These include working as paid employees, being a business owner or contributor, as well as being a farm owner or contributor. With respect to their highest educational attainment, 42% of women have not received any formal education, while 43% have a basic school training (i.e., primary school or junior secondary school training). Ten percent of women have attended secondary school while only 6% have a post-secondary school education.

With respect to their current fertility, women, on average, have had about 4 children in their lifetime with the maximum number of children ever born being 12. The average number of boys and girls is about 2, with slightly more boys than girls. Although the maximum number of child deaths is 4, the average woman in the sample has not experienced many child deaths, with the average number of child deaths being less than 1. The average household has 5 members, and ranges from 1 to 14 members, suggesting that not all women live with their spouses. Indeed, only about 72% of women report their spouses being present in the household. With respect to religion, over 90% of women are Christians, while the remainder are Muslims. Women who report belonging to no religious group and those who are traditionalists make up less than 3% of the analytic sample and are therefore excluded from the analyses. With respect to ethnicity, 58% of the sample is made up of Akans, 8% are Gas, 16% belong to Ewe ethnic groups while 18% belong to the northern ethnic groups.

With respect to asset ownership about 70% and 60% of women report owning television sets and radios in the household, respectively. Access to mass media, beyond being an indicator of household resources, may also have an effect on fertility desires through a number of channels- people may be too engaged with television to bother

with socialising (Putnam, 1995); increased contact with foreign cultures which encourage smaller family sizes; education and communication about contraceptives and the benefits of limited fertility (NRC, 2001).

With respect to geographical location, about 46% of women are resident in urban areas, while about 11% live in the northern parts of the country (i.e., Northern, Upper East and Upper West); the remainder of women reside in the southern regions of the country (i.e., Greater Accra, Ashanti, Western, Eastern, Central, Volta and Brong Ahafo).

Bivariate relationships between Women's IPN and Background characteristics

There are significant differences in the background characteristics of women who have been classified as having highly internalized patriarchal norms (i.e., conservative) and those who have been classified as having low internalization of these norms (i.e., liberal). Conservative women appear to have stronger pronatalist tendencies- 51% of these women would like to have a(nother) baby now, compared to 43% of more liberal women. These differences are highly significant. Conservative women are also more likely to envision themselves with more boys in the future, compared to more liberal women. Conservative women are generally less educated, compared to liberal counterparts. They have also had higher fertility, and have more living girls on average, compared to liberal women. Finally, conservative women are more likely to reside in rural parts of the country. (Table 3)

In summary, conservative women are, on average, more pronatalist and less educated than their liberal counterparts. Conservative women are also more likely to be resident in rural parts of the country, areas typically associated with higher poverty levels.

Regression results

This section provides regression results from the empirical specifications outlined in equations (1), (2), and (3) above. Odds ratios are presented from regressions of women's fertility on their internalized patriarchal norms (IPN), their assumptions of their partners' preferences for children, and a host of other variables. Results show that women with greater internalization of patriarchal norms had higher odds of wanting a baby now and saw themselves having more male children in the future. Results are supported by existing work[8,29]. The strong link between motherhood and patriarchy has been noted in the literature, where social control over woman's reproductive capacity represents an important component of patriarchy[33].

Other regression results showed that women who were of the view that their partners wanted a child now were likely to report that they had similar preferences. This suggests that presumptions of their partners' preferences appear to be reinforcing women's own fertility intentions in Ghana, a finding which finds some support in the existing literature. For instance, in Uganda, the belief that their male partners wanted more children reinforced women's fertility intentions[34]. The finding is supported by others[35-37]. However, using qualitative data on Kenyan couples, it was observed that women's presumptions about their male partners' preferences were not always accurate. In some of the cases, male partners actually disagreed with wives' assumptions that they wanted more children, suggesting that there may be unintended fertility outcomes as a result of ineffective communication about reproductive health and fertility between women and their male partners[37]. Although a high correlation was observed between women's immediate fertility desires and their reported assumptions of men's desires in this paper, a limitation of these findings is the ambiguity in determining how women came by these impressions (e.g., conversations, negotiations, or just general "feelings").

While Kenyan women who assumed that their male partners who wanted more children also preferred male children[37], this does not seem to be the case in Ghana. This is because in specifications II and III of Table 4, women were equally likely to see themselves with more girls as with boys in the future when they assumed that their partners wanted more children.

Other results are worth mentioning: women's immediate desired fertility increased with age, beyond a certain age however, they declined, as expected, given women's biological abilities[38-40]. Education was found to be important for women's fertility intentions. Compared to women with no education, women with secondary and post-secondary school qualifications had lower odds of

Table 4: Results from logistic regression model specifications I, II and III (GSEPS, 2018/19)

	I Wants child now	II Wants more boys	III Wants more girls
Women IPN Score	**1.015*** **	**1.014** **	**1.007**
	(3.08)	**(2.26)**	**(1.48)**
Partner preferences	**20.92*** **	**3.838*** **	**4.613*** **
(Wants child now)	**(8.15)**	**(3.75)**	**(4.33)**
Age	1.606***	1.18	1.054
	(2.71)	(1.46)	(0.47)
Age (squared)	0.992***	0.996**	0.998
	(-3.47)	(-2.36)	(-1.51)
Employed	1.303	1.133	1.408
	(1.25)	(0.45)	(1.33)
Basic education	1.219	0.774	0.793
	(0.36)	(-0.70)	(-0.79)
Secondary	0.621	0.401***	0.949
	(-0.90)	(-2.95)	(-0.14)
Post-secondary	1.239	0.613**	0.986
	(0.38)	(-2.21)	(-0.04)
Children ever born	0.497***	-	-
	(-3.98)	-	-
# Living girls	-	0.721**	0.382***
	-	(-2.33)	(-6.28)
# Living boys	-	0.395***	0.821*
	-	(-3.21)	(-1.84)
Child deaths	1.708*	2.259***	2.076***
	(1.71)	(3.65)	(2.91)
Household size	0.978	1.044	1.014
	(-0.38)	(0.71)	(0.20)
Spouse resident in household	1.749*	1.572***	1.038
	(1.84)	(2.73)	(0.30)
Christian	0.477*	0.341**	0.321**
	(-1.87)	(-2.32)	(-2.16)
Akan	1.289	0.676	0.755
	(0.87)	(-1.47)	(-0.96)
Ga	0.612	0.614	0.979
	(-1.17)	(-1.19)	(-0.11)
Ewe	1.32	0.737	0.962
	(0.43)	(-0.79)	(-0.11)
Owns TV	0.454**	0.843	0.688
	(-2.10)	(-0.94)	(-1.64)
Owns radio	1.554*	0.996	1.012
	(1.70)	(-0.01)	-0.03
Urban	0.78	0.686*	0.654
	(-0.66)	(-1.81)	(-1.37)
North	4.448***	2.699***	2.042***
	(3.85)	(2.82)	(2.88)
N	749	749	749

*T-statistics in Parenthesis: * p<0.10, ** p<0.05, *** p<0.01*
Odds ratios reported
Errors clustered at regional level

seeing themselves with more children (i.e., boys) in the future. This is expected as education and family are often seen as incompatible activities[31,40]. Current fertility was a strong determinant of future fertility and increasing numbers of children ever born were associated with a lower odds of women seeing themselves with more children (girls and boys) now and in the future, likely because desired family sizes had been reached[2]. With higher number of living boys and girls, women had lower odds of seeing themselves with more of either in the future. Child deaths however had the opposite effect and increasing child deaths were associated with women's higher odds of wanting a child now, and

seeing themselves with more girls and boys in the future likely as a strategy to replace lost children[1,28,42]. When spouses were resident in the household, women had higher odds of reporting that they wanted a child in the near children, and also had higher odds of seeing themselves with more boys. (Table 4)

With respect to religion, Christian women were less likely to see themselves with more girls and boys in the future, compared to their Muslim counterparts. Ownership of television sets significantly lowered the odds that women wanted a child in the immediate future. Owenership of radios increased the odds, but this was only marginaly significant. Women who resided in urban areas also had lower odds of seeing themselves with more boys in the future. Finally, women who resided in the northern parts of the country had higher odds of wanting a(nother) child now and saw themselves with more boys and girls in the future.

Conclusion

Social change is likely a necessary condition for fertility change. In this paper, the links between internalized patriarchal norms and married women's fertility intentions in Ghana are explored, in addition to women's presumptions of their male partners' fertility desires. From the research, it is evident that the prevalence of patriarchal norms and attitudes are important for women's fertility intentions. These cultural norms are often reinforced through different actors and institutions, suggesting that family planning programs and interventions that engage this same set of relevant actors (e.g., mothers-in-law, religious leaders, community elders, etc.) could be more successful. The key to success with these programs, therefore, may be to rely on information gleaned from the local culture, in the design of various messages. Interventions that support more equitable gender norms can contribute to better reproductive health outcomes for women and children. The finding that women's fertility intentions is significantly dependent on the assumed preferences of their spouses is critical. This implies that women may act on these assumptions whether they are accurate, in reality, or not. It signals the importance of effective spousal communications, therefore, to ensure that women are not misreading their partners and erroneously aligning their reproductive health behaviours towards having more children. One reason that couples may not discuss their intentions for (future) childbirths is that each person may be informed by existing social and cultural views and expectations. Historically, great value was placed on women having large family sizes and composed mainly of boys; an expectation many women may still feel they ought to live up to. Additionally, historically, large families were a testament to the power of the man and increased his prestige within the community. Despite these social and cultural views however, given the effects of modernization and increasing social and economic costs of having children, husband's preferences may be changing. Without improved spousal communication, women may continue to tailor their fertility intentions to erroneous preferences of their male partners for large family sizes, with negative implications for the health of mother and child. Family planning programs that continue to assume that reproduction and childbearing are within women's sole remit without acknowledging and/or addressing the role that male partners, the larger community and gendered norms play, may be ill-equipped to deal adequately with health needs of women and men. A number of other socio-economic and demographic factors were found to be important predictors of the desire for more children among women in Ghana.

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