How Negative is the Influence of Men On Contraceptive Use in Ghana?

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Abstract and Extended Abstract - PAA Paper Submission
September 10, 2009

Research analyzing Ghanaian couples has concluded that Ghanaian men have more control over family size and contraceptive use than women. Since entire portions of Ghanaian society seem resistant to decreasing fertility, this paper looks at couples' attitudes toward contraception and their resulting contraceptive use to test whether this male control involves prevention of contraceptive use. The analysis uses data pairing husbands' and wives' responses from the 2003 Ghana Demographic and Health Survey to determine how couples' concordant or discordant acceptance of contraception affects how they use modern family planning methods. This paper finds that the wife's acceptance of contraception along with her desires to prevent pregnancy best predict whether a couple uses contraception. It concludes that Ghanaian men apparently do not coercively prevent their wives from using modern contraception. It reverifies the theorem that contraception is far more prevalent when both spouses have positive attitudes toward its use.

Even though Ghanaian fertility levels have decreased from 6.4 children per woman in the late 1980s to 4.4 in 2003, rural fertility levels only decreased to 5.6 children per woman while northern Ghana stayed at a total fertility rate of 7.0 (Ghana Statistical Service 1989, 2004). Fertility levels remain high in many regions of Ghana; it appears that substantial portions of its society are resistant to decreasing fertility trends. From the 2003 Ghana Demographic and Health Survey, responses to questions regarding why some women do not use contraception seem to show that high fertility is due neither to Ghanaians lack of knowledge on contraception nor to their lack of desire to limit and space births. Over 99 percent of married men and 98 percent of married women know of at least one method of modern contraception and 59 percent of married women report demand for contraception to limit or space births (Westoff 2006). Also, couples have easy access to affordable contraception with only 0.6 percent of married women reporting unavailability and 1.2 percent reporting cost as their main reason for not using

a method (Westoff 2006). Yet only 19 percent of married couples currently use any modern methods (Ghana Statistical Service 2004, Westoff 2006). There is a significant discrepancy between the demand for contraception and its use; however this inconsistency varies depending on characteristics of husbands, wives, and the environment (Westoff 2006).

Research analyzing Ghanaian couples has concluded that Ghanaian men have more control over family size and contraceptive use than women, suggesting that men may be preventing the decline in fertility by preventing contraceptive use (Ezeh 1993; Avogo, Agadjanian, and Casterline 2008; DeRose and Dodoo 2006; Dodoo and Frost 2008). Quantitative studies have stated that a man's contraceptive preferences most accurately predict childbearing results (Ezeh 1993; Avogo, Agadjanian, and Casterline 2008; DeRose and Dodoo 2006). Qualitative studies have argued that many cultural practices, such as bridewealth payments, family pressures to continue childbearing, and polygamy, give control of fertility decisions to men as well as pressure Ghanaian couples to have numerous children (Ezeh 1993; Dodoo and Frost 2008). In many of these claims of husband control over childbearing, the research suggests that due to Ghanaians acceptance of husband dominance, a couple automatically chooses to fulfill the husband's desires. Since entire portions of Ghanaian society seem resistant to decreasing fertility, this analysis will look at couples' attitudes toward contraception, spouses' individual desire to have more children, and their resulting contraceptive use to test whether this male control involves direct coercion in the prevention of contraceptive use.

To understand men's role in family planning and the pace of fertility decline in Ghana, this paper uses Ansley Coale's fertility theory (as cited by Kohler, 2001). His theory states that there are three preconditions for decline in marital fertility: (1) fertility must be within the

calculus of conscious choice; (2) reduced fertility must be advantageous; and (3) effective techniques of fertility control must be available. In using this theory, I will be testing precondition (1) by looking at the individual characteristics of husbands and wives to find which spouse most influences the "calculus of conscious choice" when determining whether to use contraception. Do husbands and wives differ in how positively or negatively they view contraception? If they do, then will these differences influence how the couple rationalizes or calculates the option to use contraception? Of specific interest is the role of the husband in determining the marital couple's contraceptive use.

Recent research has attempted to determine men's role in family planning decisions. A study by Alex Ezeh (1993) investigated whether contraceptive use is a mutual decision for Ghanaian couples or whether husbands and wives independently control contraceptive use. He used data from the 1993 Ghana Demographic and Health Survey to find that women who are married to educated men or to men who approve of contraceptive use increased their odds of contraceptive approval by 80 percent. However, wives' education and approval of contraception did not alter their husbands' probability of using contraception. As noted by Ezeh, he could not determine from the Ghana Demographic and Health Survey data whether this result was due to partner selection in which men choose wives that will fulfill their fertility desires or to husbands' dominance over their wives. After conducting and analyzing focus-group discussions and personal interviews with married men and women throughout Ghana, he concluded, "spousal influence, rather than being mutual or reciprocal, is an exclusive right exercised only by the husband" (Ezeh 1993, p. 163). Ezeh's research suggests that for the 1993 Ghana Demographic and Health Survey, husbands strongly influence their wives' contraceptive use but wives do not alter their husbands' use of contraception.

Research by Laurie DeRose and Francis Dodoo (2006) supports the position that Ghanaian men more strongly influence childbearing. DeRose and Dodoo tested the hypothesis that a woman's increasing level of education leads to higher levels of contraceptive use contributing to Ghana's demographic transition to lower fertility. They analyzed paired couple data from the 1988, 1993, 1998, and 2003 Ghana Demographic and Health Surveys. They included men's desire to continue having children as a predictor variable to find out whether changes in fertility and contraceptive use might be attributable to a change in men's desires regarding having more children rather than women's increasing education. They found men's fertility desires to be the strongest predictors of contraceptive use, since the association between women's education and contraceptive use decreased during the period of the study from 1988 to 2003. This analysis examined the family planning preferences of husbands and wives and found that men most strongly influence whether women use contraception. However, by analyzing fertility desires and contraceptive outcomes and by not including spousal approval of contraception, DeRose and Dodoo cannot determine if a man's control of fertility and contraception prevents women who desire to use and approve of contraception from using it, which is the aim of this study.

In both the Ezeh (1993) and DeRose and Dodoo (2006) studies, it is unclear whether husbands directly prevent their wives from using contraception against their will or whether wives have attitudes similar to their husbands. This paper aims to test whether husbands' involvement in family planning coercively prevents contraception or indirectly influences contraception by being a part of wives' decision making, albeit still a negative influence.

This paper uses paired-couple data for both husbands and wives from the 2003 Ghana Demographic and Health Survey to determine how couples' concordant or discordant acceptance

of contraception affects whether they use modern family planning methods. The investigation will use multinomial logistic regression to test contraceptive approval and use based on a couple's degree of consensus. By using logistic models and by controlling for characteristics of the spouses and of the household, this analysis attempts to test Coale's theory stating that 1) fertility must be within the calculus of conscious choice as a precondition to marital fertility decline and explain whether the husband, wife, or environment best predict a couple's use of contraception. This paper hypothesizes that since men control fertility, men prevent their wives from using contraception, potentially causing a gap between the demand and use of contraception in Ghana (Westoff 2006). These methods will show whether a husband's involvement in family planning coercively prevents contraception, indirectly influences contraception by being a part of his wife's decision making, or whether environmental factors predict contraceptive use more than the characteristics of the couple.

Data and Methods

This study will use data on sexual behavior and contraceptive knowledge, attitudes, and use from the 2003 Ghana Demographic and Health Survey. This nationally representative survey selected 5,691 women age 15-49 and 5,015 men age 15-59 using a two-stage stratified sample based on the 2000 Ghana Population and Housing Census. This paper will focus on husbands' and wives' paired responses for 1,969 couples. The analysis will look at the outcome variable of modern contraceptive use by either spouse. The results will show whether couples use modern methods of contraception based on husbands' and wives' approval with variables added to control for characteristics of the husbands, wives, and households.

Models

This analysis uses multinomial logistic regressions to determine the odds ratios of using contraception for couples in which both spouses approve, both disapprove, and only the husband disapproves. Couples in which only the wife disapproves are treated as the reference group with an odds ratio of 1. Table 1 presents the percent distribution of the sample for various combinations of spousal approval. Three out of four couples concur that family planning is good and equal portions of husbands and wives disapprove of contraception.

This study includes three models, one controlling only for characteristics of the wife, another controlling only for characteristics of the husband, and the last model controlling only for regional characteristics. By controlling for spousal and household characteristics that may lead to differing contraceptive use, this study looks at how couples' contraception preferences determine use. Model 1 controls for characteristics of the wife including education level and if she either wants to space births by preventing a pregnancy from occurring within two years of the survey or wants to limit births and not have more children. In Model 2, the husband controls include his education level, his desire to limit or space births, as well as whether he is a Muslim and/or polygamous. The household controls in Model 3 consist of being rural, being the Northern region, and the level of wealth.

Model 1: $\ln(\theta_{ij}) = \beta_0 + \beta_i(\text{wife's education}) + \beta_j(\text{desire to limit or space births})$

Model 2: $\ln(\theta_{ijkl}) = \beta_0 + \beta_i(\text{husband's education}) + \beta_j(\text{desire to limit or space births}) + \beta_k(\text{husband is a Muslim}) + \beta_l(\text{husband is polygamous})$

Model 3: $\ln(\theta_{ijk}) = \beta_0 + \beta_i(\text{urban/rural}) + \beta_j(\text{Northern region}) + \beta_k(\text{wealth index})$

In short, Model 1 asks whether characteristics of wives alter which spouse controls contraception, Model 2 asks whether the husbands' characteristics alter who best predicts

contraceptive use, and Model 3 asks whether environmental characteristics may be influencing contraceptive use more than the desires of the spouses.

Results

As expected, this research finds that couples in which both spouses approve of contraception are more likely to use contraception than couples in which the wife, husband, or both disapprove. While 19 percent of the full DHS sample of 5,691 women use contraception (Ghana Statistical Service 2004), 26 percent of this study's subsample of married couples use modern methods to limit births. Couples in which both spouses approve of using contraception have the highest rate of contraceptive use at 31 percent, while couples that jointly disapprove have the lowest rate of use at 3 percent. When only the wife disapproves of contraception, 5 percent of couples use modern methods, while 14 percent of couples use contraception when only the husband disapproves (shown in Table 2). Merely from the descriptive statistics, one can see that couples in which the wife approves of contraception are most likely to use contraception, even though contraceptive use is low among all groups of Ghanaians. These data suggest that contraception use is nearly two times as prevalent when husbands and wives both approve of contraception than when husbands disapprove and their wives approve. There is little evidence that favorably disposed husbands compel their disapproving wives to use contraception.

Table 3 displays the odds ratios of contraceptive use for combinations of husband and wife approval of contraception including the three previously discussed models that control for husband, wife, and household characteristics. Without controls, couples in which the husband disapproves of contraception had 2.76 times the odds of contraceptive use compared to those in which only the wife disapproves ($p<.01$). When both spouses approve of contraception, they had 7.64 times the odds of using contraception ($p<.001$). However when both spouses disapprove,

the couple had 59 percent of the odds of using contraception, although this percentage is not statistically significant. Expectedly, couples in which spouses approve of contraception are more likely to use contraception than couples in which the wife, husband, or both disapprove. Since couples in which the wife approves of contraception are most likely to use contraception regardless of the husband's preferences, this indicates that the wife predominantly determines contraceptive use. Yet if the husband does not concur with his wife's approval, the probability of contraceptive use is much less than when both approve. Even though wives' attitudes toward contraception best predict use, men still negatively alter contraceptive use indicating husbands indirectly influence their wives' decision to use.

Once the control variables for wife's education and desire to limit or space births were added in Model 1, the odds ratios for couples in which the husband disapproves of contraception and the wife approves increased to 2.94 ($p<.01$) while the couples in which both spouses approve decreased from 7.64 to 6.09 ($p<.001$). Both wives' education and childbearing desires positively influence a couple's contraceptive use (Table 3). Many of the differences in a couple's approval of contraception are associated with differences in the wife's education and birthing desires. Once these differences are statistically controlled, the husband's disapproval of contraception becomes less important in predicting contraceptive use. Nevertheless, husband's opposition to contraception remains an inhibitor of a wife carrying out her positive contraceptive desires.

Similarly, differences in the husband's education and desire to prevent future childbirth explain some of the differences in spousal approval of contraception. In Model 2 once these husband characteristics are controlled along with being a Muslim and with being polygamous, the negative influence of the husband's disapproval on contraception diminished even more so than when the wife's characteristics were controlled. This model results in an odds ratio of 3.24

($p<.01$) for the husband's disapproval and wife's approval in predicting contraceptive use, up from 2.76 for the main effects model. Both a husband's desire to prevent births and his education level increases the likelihood of a couple using contraception with odds ratios of 1.65 ($p<.001$) and 1.29 ($p<.001$), respectively. Being a Muslim and being polygamous diminish the odds that a couple will use contraception. However, these associations are not statistically significant. In this model, couples in which the wife approves are still the most likely to use contraception while those in which the wife disapproves are least likely.

Not only do characteristics of a husband and a wife affect whether a couple decides to use contraception and control the timing of their births, but other characteristics of the household, such as their location and wealth, can determine the availability of contraceptives. In Model 3, wealth is positively associated with contraception (OR = 1.19, $p<.01$), while being in the Northern region and being rural are negatively associated with contraception (OR(Northern region) = .39, $p<.001$ and OR(rural) = .67, $p<.05$). This strong and statistically significant negative effect indicates minimal contraceptive use in the Northern region; however, it is unclear whether these results are due to different availability of contraception in the Northern region or to regional resistance to family planning. Controlling for the husbands' and wives' desire to limit or space births in addition to the household controls should clarify this uncertainty.

Once all controls are included, the wife's education and desire to control births remain predictive with odds ratios of 1.17 ($p<.001$) and 2.14 ($p<.001$), respectively. Also, rural location remains statistically significant and its negative effect on contraception strengthened with an odds ratio of 0.64 ($p<.01$). However, the magnitude of the odds ratios of the husband's desire to control births diminished from 1.65 ($p<.001$) to 1.36 ($p<.05$) and the effect of the husband's education diminished from 1.29 ($p<.001$) to 1.09, which rendered it statistically not significant.

The negative odds ratio effect of being in the Northern region diminished to 0.5 ($p<.01$), while the effect of wealth disappeared.

Controlling for all characteristics that may influence a couple's subsequent contraceptive use left the wife's approval of contraception as the strongest variable for predicting contraceptive use. Wife's education and family planning desires are the next strongest and most statistically significant predictors of contraceptive use. Living in rural environments and in the Northern region remain consistently predictive as control variables. Couples in which the husband and wife approve have an odds ratio of 5.61 ($p<.001$) and those in which only the wife approves have an odds ratio of 3.17 ($p<.001$). Couples in which the wife approves of contraception, regardless of the husband's beliefs, remain most likely to use contraception, while couples in which the wife disapproves are least likely to use contraception.

Couples in which the wife approves of contraception are most likely to use contraception regardless of the husband's preferences, indicating that contraceptive use is determined predominantly by the wife. Yet if the husband does not concur with his wife's approval, the probability of contraceptive use is much less than when both approve. Even though wives' attitudes toward contraception best predict use, men still negatively alter contraceptive use, indicating husbands indirectly influence the wives' decision to use. Many of the differences in a couple's approval of contraception are associated with differences in the wife's education and birthing desires. Once these differences are statistically controlled, the husband's disapproval of contraception becomes less important in predicting contraceptive use. Nevertheless, husband's opposition to contraception remains an inhibitor of a wife carrying out her positive contraceptive desires.

Husband Prevention of Contraception

Even though this analysis has shown that women tend to determine contraceptive use, it does not deny that some men may prevent their wives from using contraception. A husband's pronatalist desires and/or disapproval of the use of contraception can only be viewed as preventing his wife from using contraception when his wife wants to control (limit or space) births. If spouses agree whether they want to control births and whether they approve of contraception, then the husband's desires are in accordance with the wife's. He would not be forcing her to act against her wishes. Additionally, if the wife does not want to control births or does not approve of contraception, then her husband could not prevent her from using contraception, since she does not demand it. Only when a husband is against contraception or wants to have more children and his views conflict with his wife's does the situation arise when a husband could prevent his wife from using contraception. In these situations, the husband's desire to have more children or disapproval of contraception potentially outweighs the wife's desire to prevent pregnancy, causing couples to not use contraception.

Table 4 shows the percentage of couples' contraceptive use depending on spousal demand to limit or space births and on spousal approval of contraception. When both spouses approve of the use of contraception but only the wife wants to control births and the husband does not, 30.5 percent of couples use contraception. If only the husband wants to currently have children and only he disapproves of contraception use, the share using contraception declines to 12.8 percent. An estimated 15.7 percent of couples in which both spouses want to control births yet only the husband disagrees with contraception make use of modern birth control. Only for these three categories of couples can husbands be viewed as preventing their wives from using contraception.

At first glance, these low portions of contraceptive use by couples in which the husband could prevent his wife from using suggest that it is common for husbands' attitudes to trump their wives. This low use also suggests that Ghanaian husbands may be preventing their wives from using against their will. However when both spouses approve of contraception and both want to limit births, which is the situation most conducive to contraceptive use, only 34.1 percent of couples use. Ghana has very low contraceptive use regardless of couples' views of contraception and their need for family planning. Factors other than husbands controlling and preventing contraception may better explain why most Ghanaians do not use modern family planning methods.

Conclusion

This paper shows that female approval of contraception and characteristics of couples' desire to limit births better predict contraceptive use than male views and regional differences toward family planning. Negative male attitudes are only a little more prevalent than negative female attitudes. Our research shows that regardless of husband's attitudes towards contraception and regional differences in culture and access, women still primarily determine whether couples use contraception. When wives want to control fertility and approve of using contraception, they are more likely to use it. Ghana's low level of contraception cannot be explained exclusively by pronatalism or by male resistance to contraception. Research regarding both male and female family planning preferences as well as their individual beliefs on contraception may better determine why Ghanaians are not using contraception.

Due to low contraceptive use among couples with no impediments to using contraception, only a very small portion of husbands can be considered to prevent their wives from using contraception against their will. Understanding why couples in which both spouses

want to prevent pregnancy and neither opposes contraceptive use do not use contraception may help explain why Ghanaians seem resistant to contraceptive use. Then family planning agencies could better service the country's reproductive health needs and help Ghanaians jointly have their desired number of children.

Tables

Table 1. Sample Distribution (%) of Spousal Approval of Contraception

	Husband		
Wife	Approves	Disapproves	Total
Approves	78	10	88
Disapproves	9	3	12
Total	87	13	100

Note: **n=1,969**

Table 2. Percentage Contraceptive Use by Type of Spousal Approval

	Husband	
Wife	Approves	Disapproves
Approves	31	14
Disapproves	5	3

Note: **n=1,957**

Table 3. Odds Ratios of Contraceptive Use by Spousal Approval of Contraception

Spousal Approval of Contraception and Controls	No Controls	Model 1	Model 2	Model 3	All Controls
Husband and Wife Approve	7.64***	6.09***	6.39***	6.53***	5.61***
Husband and Wife Disapprove	0.59	0.71	0.72	0.65	0.75
Husband Disapproves and Wife Approves	2.76**	2.94**	3.24**	3.08**	3.17**
Wife Disapproves and Husband Approves	1.0	1.0	1.0	1.0	1.0
Wife Controls					
Education		1.41***			1.17***
Desire to Limit or Space Births		2.33***			2.14***
Husband Controls					
Education			1.29***		1.09
Desire to Limit or Space Births			1.65***		1.36*
Muslim			0.85		0.93
Polygamous			0.78		0.90
Household Controls					
Northern Region				0.39***	0.50**
Urban/Rural				0.67*	0.64**
Wealth				1.19**	1.05

Notes: ***denotes p<.05, **denotes p<.01, ***denotes p<.001, n=1,957**

Table 4. Percentage Contraceptive Use by Spousal Approval of Contraception and Spousal Desire to Control Births

	Approval of Contraception			
Desire to Control Births	Both Approve	Both Disapprove	Wife Approves/ Husband Disapproves	Husband Approves/ Wife Disapproves
Both Want to Control	34.1	7.7	15.7	5.1
Neither Want to Control	12.8	0.0	4.2	2.1
Wife Wants to Control/ Husband Does Not	30.5	0.0	12.8	18.8
Husband Wants to Control/ Wife Does Not	28.8	0.0	16.7	5.0

Note: **n=1,963**

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