

Power Relations and Contraceptive Use:

Gender Differentials in Bangladesh

RAPPORT DE FORCE ET UTILISATION DE CONTRACEPTIF:

DIFFÉRENCES DE SEXE AU BANGLADESH

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Abstract: Previous research tends to ignore men and women's contraceptive use based on existing power relations at the household level. Male role theory and power theory suggest that although men dominate at the household level and influence all the decisions that have taken place, these men become really invisible when it comes to contraceptive use. The present study attempts to explain the impact of power relations on differential contraceptive use among men and women in Bangladesh. Since the main objective of this research is to see differentials based on gender, men's and women's data from the Bangladesh Demographic and Health Survey 2000 have been matched based on cluster number, household number, and line number and merged to get sample size of 2249. The results suggest that power relations at the household level have a significant impact in transcending barriers to contraceptive use.

Key words: gender differential; contraceptive use; power relations; and hierarchical linear model

Résumé: Les recherches antérieures ont une tendance d'ignorer l'utilisation de contraceptif des hommes et des femmes, basée sur le rapport de force existant au niveau familial. La théorie du rôle masculin et la théorie du pouvoir suggère que même si les hommes dominent sur les femmes au niveau familial et qu'ils exercent une influence sur toutes les décisions, ils deviennent invisibles quand il s'agit de l'utilisation de contraceptifs. L'étude présente cherche à expliquer l'effet du rapport de force sur l'utilisation de contraceptifs chez les hommes et les femmes au Bangladesh. L'objectif de cette recherche est de dévoiler les différences chez les deux

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sexes. Les données sur les hommes et les femmes venant de l'enquête de la démographie et de la santé du Bangladesh en 2000 sont bien assorties pour avoir un échantillon de 2249 personnes. Le résultat montre que le rapport de force au niveau familial a une influence significative sur l'utilisation de contraceptifs.

Mots-Clés: différences de sexe; utilisation de contraceptifs; rapport de force; modèle linéaire hiérarchique

1. INTRODUCTION

Bangladesh has been known as one of the poorest countries with a high success rate in contraceptive acceptance. The total fertility rate went down from 7.1 in 1964 to 3.0 in 2004. The contraceptive prevalence rate went up from 7.7 to 53.8 percent³. Most of the credit goes to the family planning program, which was implemented in the country in the 1950s⁴. The traditional approach of this program has been to emphasize women as potential clients for adoption of contraceptives. Women's predominance in fertility and contraceptive use has tended to draw attention away from men's role in fertility and family planning⁵. From the very beginning, the main goal of the Bangladeshi nationwide population control program was to inform women about family planning methods and to distribute contraceptives among women. Men have been ignored by the family planning programs, by the policy makers, and by the researchers in general. The present study attempts to remedy this in part by examining the relationship between power relations at the household level and contraceptive use among men and women in Bangladesh.

In practice, women's contraceptive attitudes depend not only on their individual characteristics but also on their husbands' characteristics. Evidence from several studies shows that if a program targets men as potential clients of family planning programs. It will achieve more success than if it targets women alone⁶. One reason for this is that men have more power than women in many countries. If men are ignored, it will slow down the fertility transition. This has major implications for countries' socio-economic development.

Although evidence shows that a husband's desires or plans influence a couple's contraceptive practice, still fertility research continues to pay less attention to the views of men⁷. Studies have shown that men have more knowledge about regulating fertility, men do prefer to use contraceptives at certain points and also men are a major reason for non-use of contraceptives among women⁸. Interest in men's

3 National Institute of Population Research and Training. Bangladesh demographic and health survey. 2004.

Dhaka: National Institute of Population Research and Training. 2005. p. 63.

⁴ Carty, W. P., Yinger, N.V. and Rosov, A. 1993. *Success in a challenging environment: Fertility decline Bangladesh* (pp. 1-5). Washington, D.C.: Population Reference Bureau.

Cleland, J.C., J.F. Phillips, S. Amin, and G. M. Kamal. 1994. The determinants of reproductive change in Bangladesh- success in a challenging environment. In *World Bank Regional and Sectoral Studies* (pp. 83-130). Washington, DC: The World Bank.

⁵ Greene, M. E. and Biddlecom, A. E. 2000. Absent and problematic men: demographic accounts of male reproductive roles. *Population and Development Review*, 26(1), 81-115.

⁶ Ahmad, A. *Women and Fertility in Bangladesh*. 1991. pp. 14-35. Newbury Park, California: Sage Publications Inc..

Ezeh, A. C. 1993. The influence of spouses over each other's contraceptive attitudes in Ghana. *Studies in Family Planning*, 24, 163-174.

Thompson, E. 1997. Couple childbearing desires, intentions and births. *Demography*, 34, 343-354.

Mason, K. O. and Smith, H. L. 2000. Husbands' versus wives' fertility goals and use of contraception: The influence of gender context in five Asian countries. *Demography*, 37, 299-311.

⁷ Thompson, E. 1997. Couple childbearing desires, intentions and births. *Demography*, 34, 343-354.

⁸ Dodoo, F.N., Luo, Y. and Panayotova, E. 1997. Do male reproductive preference really point to a need to refocus fertility policy? *Population Research and Policy Review*, 16, 447-455.

Ngom, P. 1997. Men's unmet need for family planning: Implications for African fertility transitions. *Studies in*

involvement in reproductive behavior gained importance as feminist thinkers started their work on the role of women in childbearing and safe reproductive health of women. The women's health movement has also brought attention to men's roles. As a result, the International Conference on Population and Development (1995) leaned toward women's issues, prompting several criticisms by both demographers and non-demographers⁹. This research is an attempt to fill the gaps in the existing research by taking into account determinants of both men's and women's contraceptive use.

Men receive power, position, and privilege due to existing gender differentiation in society. Women rarely have the opportunity to control resources¹⁰. Theoretically, the assumption is that in a relationship, both people in the relationship behave rationally, have sufficient skills in bargaining, and are aware of each other's tastes and preferences. In these circumstances, individuals can increase mutual benefits in multiple ways. If they have a common goal and equal bargaining power, a solution that is satisfactory to both can be attained¹¹. The equation would not be the same if there were unequal bargaining powers or skills.

In traditional societies, men have more bargaining power and decision making power that can influence a unique solution for using contraceptives or not using contraceptives-this basically involves power relations at the family level. Usually, bargaining theory reconciles apparent differences between individuals in an economic exchange but not in a social situation¹². Because of this, men and women act differently when it comes to their contraceptive behavior, reproductive behavior, and decision-making behavior. In most cases, women's economic and social conditions impede them from raising their voices against men, which tend to translate into non-use of contraceptives. This is reinforced by the dominant roles played by men. Briefly, power imbalances at the family level usually favor men, which may have implications for both men and women's contraceptive use¹³.

The elements that give men a more active role than women are rooted in culture through patriarchy. These include achievement, motivation, skills, and risk taking behavior. All of these elements are viewed as more valuable and scarce. As a result, individuals as well as society value men's task performance. In contrast, it is believed that women's work can be done very easily and help is widely available. Since men's work has been seen as scarce and valuable and in most cases help is not easily available, men's work has become more valued and has a greater price compared to women's work. Society has rewarded men's work and gives more power and prestige to men, as compared to women. Traditionally division of labor has been appreciated and cultural norms have rewarded men by defining their role as superior to women's. These rewards also include the legitimization of the unequal relationship between men and women¹⁴.

Patriarchy values men's dominance over women and Bangladeshi culture is no exception in this regard. Patriarchy also values sons over daughters. In a predominantly rural society, sons are considered as a potential source of power, labor, and old age security. The more children a man has, the more powerful the man is considered to be. Because of that men want more sons, and tend not to use

Family Planning, 28, 192-202.

Hulton, L. and J. Falkingham. 1996. Male contraceptive knowledge and practice: What do we know? *Reproductive Health Matters*, 7, 90-98.

Ezeh, A. C. 1993. The influence of spouses over each other's contraceptive attitudes in Ghana. *Studies in Family Planning*, 24, 163-174.

Beckman, L. J. 1984. Husband's and wives relative influence on fertility decisions and outcomes. *Population and Environment*, 7(3), 182-197.

⁹ Greene, M. E. and Biddlecom, A. E. 2000. Absent and problematic men: Demographic accounts of male reproductive roles. *Population and Development Review*, 26(1), 81-115.

¹⁰ Marini, M. M. 1990. Sex and gender: What do we know? *Sociological Forum*, 5(1), 95-120.

¹¹ Nash, J.F. Jr. 1950. The bargaining problem. *Econometrica*, 18(1), 155-162.

¹² Manser, M. and Brown, M. 1980. Marriage and household-decision making: A bargaining analysis. *International Economic Review*, 21(1), 31-44.

¹³ Sharan, M. and Valente, T. W. 2002. Spousal communication and family planning adoption: Effects of a radio drama serial in Nepal. *International Family Planning Perspectives*, 28(1), 16-25.

¹⁴ Parker, S. and Parker, H. 1979. The myth of male superiority: Rise and demise. *American Anthropologists*, 81(2), 289-309.

contraceptives. In contrast, women are the one who bear children, and who also take responsibility for rearing children; they may want to use contraceptives. Since men are the primary actors determining contraceptive use, men who believe women should have a say in the family are more likely to use contraceptives, as these men are more likely to share their power with women. The present research attempts to examine the association between men's and women's contraceptive use and power relations in the family. Moreover, the specific objective is to see whether men who think women should have a say in household level decision making are more likely to have attitudes about contraception similar to those of their wives compared to men who think women should not participate in household decision making. More precisely, this research examines whether there is any discrepancy between men's opinion about power of women and women's experience of power at the household level. Both individual and households characteristic are used as explanatory variables, since individuals are nested within households.

2. MATERIALS AND METHODS

This research uses data from the men and women's model of the Demographic and Health Survey 2000 of Bangladesh (BDHS), collected by Bangladesh's National Institute of Population Research and Training. Since the main objectives of this research is to compare men and women's reporting, husbands' and wives' data have been matched based on their cluster number and household number and then cross-checked for any duplication. A new identification for both husbands and wives has been created. While crosschecking identification numbers, men whose wives were not been included in the survey, those were deleted from the analysis.

The final data set, which included all men whose wives were also interviewed, matched the BDHS couple data set. The number of couples in this data set and the BDHS data set are the same. The total number of husbands is 2249. Out of the original 2556 men, 66 husbands and 210 wives were excluded and there were 31 missing cases. Finally, the two files (husbands and wives) have been merged based on ID to create a new data set with variables from both the men and women's data sets. The present research only takes into account of men and women of reproductive ages.

The present research requires measuring power at the household level. However, measuring power is not an easy task. One approach to measure power is based on outcomes of decision-making¹⁵. Usually, spousal responses are combined and family power is classified into three broad categories - husband dominant, wife dominant, and joint or egalitarian. The assumption is that a satisfactory solution about using contraceptives can be implemented if husband and wife share equal power at the family level.

In family research, relative power in a family has been taken as a main component in defining power. Some have argued that since power relations in the family involve two individuals, the interaction between two persons needs to be addressed rather than the relative power¹⁶. As Cartwright mentioned, "power is a relationship between two agents; it is not an absolute attribute of a single individual" (1959:213)¹⁷. Others have argued that the concept of power can only be defined in relation to conflict. This means that if there had been a conflict between two partners in reaching a goal, that state can adequately capture power relations in the households. The rationale was that if both behaved the same way, then the concept of power merely exists.

Wolfe (1959) stated that at least two conditions were needed to explain power: first, there had to be a goal and one person needed another person in order to achieve that goal and second, one person had to

¹⁵ Hollerbach, P. E. 1980. Power in families, communication, and fertility decision-making. *Population and Environment*, 3(2), 146-173.

¹⁶ Rollins, B.C. and Bahr, S.J. 1976. A theory of power relationships in marriage. *Journal of Marriage and the Family*, 38(4), 619-627.

¹⁷ Cartwright, D. 1959. A field theoretical conception of power. In D. Cartwright (Ed.), *Studies in Social Power* (pp. 183-220). Ann Arbor: Institute for Social Research.

have more resources than the other person¹⁸. Rollins and Bahr (1976) argued that five key components should be included in the analysis while proposing theories about power. These are: authority, resources, power, control attempts, and control. However, this could vary in different societies. They admitted there are regional variations of the key components of power dimensions and how power will be exercised in different parts of the world. Although power imbalance is not an uncommon phenomenon among couples, over time social and ideological changes in society also bringing changes in power relations in the family. Further, the development of markets also helps skewing in the power relations in the family in favor of men¹⁹.

Ideally, a data set would include indicators such as those used by Mason and Smith (2000) who examined women's influence in the family while doing research on intermediate fertility determinants²⁰. Since the BDHS did not include any indicators of women's power relative to men, the present research used two measures from the men's data set to measure power at the household level based on the premises that husbands' attitudes toward women reflects power relations at the household level, which could affect contraceptive use and reproductive goals of both men and women. The indicators that are used in the current research to measure power at the household level are – (1) whether women should have a say about large household expenses and, (2) whether women should have a say about visiting family or friends. These two indicators are of crucial importance in a traditional society like Bangladesh.

Since men are the head of the household and the breadwinner of the family, they control resources and assets at the household level. Women rarely have an opportunity to control resources. Usually women have jewelry, which is considered as an asset for security²¹. If their husbands think that women should have a say about large household expenses that is significant for women in Bangladesh. The other indicator also has a significant impact on women's lives. Women have never been encouraged to go outside the home without getting permission from their husbands. In addition, purdah practices in Bangladesh limit women from getting the help they need for their reproductive goals and contraceptive use. If they are allowed to decide about visits friends and family, their contraceptive behavior could be affected.

The present study uses several control variables, including place of residence. Rural people usually have more conservative attitudes about fertility behavior and contraceptive use than urban people. A second control variable is whether they have sons or not. More sons mean more labor power, more earnings in the future and more old-age security. Whether a man has sons and how many sons he has could influence his reproductive goals and the intention to use contraceptives. Women also need sons for long-term security. The present research also includes literacy as a control variable. The underlying thought is that a majority of the population of Bangladesh continues to live in rural area and more than half of the population is illiterate²². Being literate or illiterate could significantly affect an individual's perception of fertility preferences, reproductive goals, contraceptive use, and power relations etc. Since land is a very important source of wealth in rural Bangladesh, the present research uses possession of land as a household characteristic, which may have implications for contraceptive use among men and women. The dependent variable, contraceptive use is being measured by whether they are using any contraceptive methods.

¹⁸ Wolfe, D.M. 1959. Power and authority in the family. In D. Cartwright (Ed.), *Studies in Social Power* (pp. 99-118). Ann Arbor: Institute for Social Research.

¹⁹ Margolis, D. R. 1989. Considering women's experience a reformulation of power theory. *Theory and Society*, 18, 387-416.

²⁰ Mason, K. O. and Smith, H. L. 2000. Husbands' versus wives' fertility goals and use of contraception: The influence of gender context in five Asian countries. *Demography*, 37, 299-311.

²¹ Ahmad, A. 1991. *Women and Fertility in Bangladesh*. pp. 14-35. Newbury Park, California: Sage Publications Inc..

²² Bangladesh Bureau of Statistics. 2003. *Statistical Pocketbook of Bangladesh*.

Dhaka: Planning Division, Ministry of Planning, Government of the People's Republic of Bangladesh. 2005. p. 361.

3. STATISTICS

To identify the relationship between power relations at the household level and contraceptive use, a general description of the sample is provided. The second stage of analysis involves multivariate analysis. The dependent variable in this study is dichotomous in nature, whereas many of the independent variables are measured at other levels. Logistic regression examines the effects of a set of independent variables on a dichotomous dependent variable and we will lose minimal information without any statistical bias²³. The equation for men's and women's contraceptive use is:

$$\text{Logit}(p_i) = \text{Log} \left(\frac{p_i}{1 - p_i} \right) = \sum b_i x_i$$

For men and women, we regress contraceptive use based on large household expense, visiting family or friends, place of residence, whether they have son or not, and literacy.

In order to see whether there are any differences in power relations and contraceptive use based on household characteristics, logistic regression analysis will not be of much help: as this is a multi-level data issue. In the data set, which has been used for the present study, individuals are nested within the households. This implies that data are hierarchical in nature. Using a hierarchical linear model allows researchers to build separate models for each level²⁴. A two-level model is used to examine the effect of the household characteristics, ownership of land.

For each data set, the estimation started with an unconditional model to assess the initial proportion of variance at each level. The null model did not include any predictors at any level. After entering the predictors at each level, the deviance test compares the null model with the model with predictors and helps the researchers in concluding which model fits better. The equation for the null model is as follows:

$$\text{Log}_n[\text{odds}(Y_{ij} = 1)] = \beta_{0,i}$$

The fully unconditional model provides estimation of variability associated with two levels -individual, and household. However, some of the relationships at the household and individual level can vary randomly among these units. When considering an explanatory model, we add variables at each level. The conditional model provides regression slopes that could vary across individuals and across households.

The equation for the within-person model is:

$$\text{Log}_n[\text{odds}(Y_{ij} = 1)] = \beta_{0,i} + \beta_{1,i} T_{ij} + \beta_{2,i} X_{ij} + \dots$$

For the second level model, we consider household characteristics. Here, the parameters from the level 1 model are considered as independent variables. This implies that it will lead to a separate equation for each level. The equation for level 2 is:

$$\beta_{0,i} = \gamma_{00}$$

$$\beta_{1,i} = \gamma_{10}$$

$$\beta_{2,i} = \gamma_{20}$$

²³ Walsh, A. 1990. *Statistics for the Social Sciences with Computer Applications*. pp. 322-328. New York: Harper & Row Publishers, Inc..

²⁴ Raudenbush, S.W. and Bryk, A. S. 2002. *Hierarchical Linear Models Applications and Data Analysis Methods* (2nd ed.). pp. 16-37. Thousand Oaks, CA: Sage Publications.

4. RESULTS

4.1 Descriptive results

Most of the respondents hail from rural areas. Rural folks comprise 68.7 percent of the respondents (table 4.1.1). Almost one fourth of couples do not have any sons and three fourths have sons. As couples, 36 percent still do not use any contraceptives compared to 64 percent of couples who do not contracept. More than half of women are illiterate. However, when considering men and women independently, men are more likely to be contraceptive users than females. The men's data show that 65 percent of men use contraceptives whereas 55 percent of women use contraceptives. Compared to women, over 50 percent of men are literate. The mean age of men and women is 38.5 years and 29.3 years respectively not presented in table 4.1.1). A majority of men valued women's say in large household expenses. Almost 90 percent of men do not have any problem if women contribute to decisions about major household expenses, which reflect liberal attitudes on the part of men. They also believe women should have a major say about visiting family or friends (Table 4.1.1). Almost 19 percent of households do not have any land compared to 81 percent of households that have land.

Table 4.1.1 Percent distribution of men and women based on selected characteristics

characteristics		percentage
Contraceptive Use (Couple)	Not Using	36.0
	Using	64.0
M	Not Using	35.0
	Using	65.0
Women	Not using	44.6
	Using	55.4
Place of Residence	Rural men	69.3
	Urban men	30.7
	Rural women	75.3
	Urban women	24.7
Sons	No sons	24.2
	Have sons	75.8
Literacy	Illiterate men	43.7
	Literate men	56.3
	Illiterate women	56.0
	Literate women	44.0
Large expense	No	10.8
	Yes	89.2
Visiting family or friends	No	16.2
	Yes	83.8
Land possession	No	18.9
	Yes	81.1

4.2 Logistic regression model

Table 4.2.1 contains the logistic regression models of men's contraceptive use. Model 1 presents the simple bivariate relationship between men's contraceptive use and men's opinion about whether women should have a say in large household expenses or visiting family or friends. Men are 42 percent more likely to use contraceptives if they think women should have a say in large household expenses (significant at the .05 level). If men think positively about women's say in visiting family or friends, those men are 55 percent more likely to use contraceptives. The result is significant at the .01 level. Model 2 includes place of residence in the analysis. The relationship between men's attitude toward women's say in large household expenses and visiting family or friends still persists. However, rural men are 26 percent less likely ($e^b=0.723$) to use contraceptives than their urban counterparts.

Table 4.2.1 Logistic regression model for men

haracteristics	odel 1		odel 2		odel 3		odel 4		n
		b		b		b		b	
arge expense	.353*	.423	.344*	.410	.320*	.378	.320*	.378	
isiting family or friends	.437**	.548	.426**	.531	.381**	.464	.389**	.476	
lace of residence			0.324**	.723	0.251*	.778	0.294**	.745	
iteracy					.367***	.443	.397***	.487	
umber of Sons							.748***	.114	
ntercept	0.057		.513		.246		0.260		
2LL	882.63		871.72		855.13		802.25		
hi-square	0.64		1.54		7.27		10.15		
f									
	249		249		249		249		

*significant at .05 level, ** significant at .01 level and *** significant at .001 level

Model 3 includes a new variable, literacy, along with other variables. The strength and direction of the relationship between men's contraceptive use and other variables is statistically significant. It also shows that literate men are more likely to use contraceptives. The final model suggest that men are more likely to use contraceptives if they are literate, if they live in urban areas, if they have sons, and if they have

positive perceptions about women's say at the household level. The final model shows that if men have more sons, they are more likely to use contraceptives. This implies that when men have the desired number of sons, they start using contraceptives. This is suggestive of men's strong preference for sons in Bangladesh. The final model fits better than the other models, as -2LL decreases from Model 1 to Model 4 and the chi-square test is significant for adding each additional variable.

Table 4.2.2 presents the logistic regression model of women's contraceptive use. The first model shows the relationship between women's contraceptive use and men's perception about whether women should have a say in large household expense and visiting family or friends. Women's say about large expenses, visiting family or friends, place of residence, literacy, and whether women have sons or not have been included consecutively in Model 1, 2, 3, and 4. Literacy is consistently significant explaining women's contraceptive use. If women are literate, they are 35 percent more likely to use contraceptives than those who are not.

Table 4.2.2 Logistic regression model for women

characteristics	odel 1		odel 2		odel 3		odel 4	
		b		b		b		b
Large expense	0.077	.080	.068	.071	.054	.055	0.054	.055
Visiting family or friends	.180	.197	.188	.207	0.203	.225	0.203	.225
Place of residence			0.102	.903	-0.039	.962	0.039	.926
Literacy					.301**	.351	.300**	.350
Number of Sons							0.032	.969
Intercept	- 0.001		0.178		0.064		-0.041	
-2LL	087.77		086.70		073.71		073.60	
Chi-square	3.70		4.77		6.58		16.68	
df	2		3		4		5	
N	249		249		249		249	

*Significant at .05 level, ** significant at .01 level and *** significant at .001 level

Theoretically, if women are literate, they are more likely to exercise some power at the household level, are able to have a say about large expenses and visiting family or friends, more likely to be able to talk with their husbands about contraceptive use, and more likely to use contraceptives. However, men's

perceptions of women's say in large household expenses and women's say about visiting family or friends did not have any effect on their contraceptive use at all. It is possible that when men have been asked about their opinions regarding women's say in large household expense, they may report positively but in reality, their wives may not have experienced the same power their husbands describe.

Men may have positive opinions, but they may not execute their opinions about women's say in large expenses and visiting family or friends at their households. However, even having sons did not encourage women to use contraceptives. Previous research shows that in patriarchal societies women always want more sons because of old age security²⁵. Women also use sons to contact the outside world. Living in a rural area or an urban area does not affect women's contraceptive use which implies that if women have no power at the household level, living in an urban area does not matter at all.

The overall result suggests that for men equal power relations at the household level in terms of having a say in large household expenses and visiting family or friends have an impact in transcending traditional barriers to contraceptive use. Men who said that women should have a say in large expenses, and in visiting family or friends are more likely to use contraceptives compared to those who do not. If one individual has more power than the other and also if men want more children, unwanted consequences are more likely to happen, such as an unwanted pregnancy, illness, and additional births. However, to make a decision about fertility issues is different from other family decisions. In contrast, if husband and wife share equal power at the household level, they may reach a mutual agreement. They may also seek alternative suggestions or help from experts. This process leads them to form alliances, which enhance social support for the decisions they make regarding fertility behavior and contraceptive use. If unilateral decisions take place at the household level, communication between spouses rarely can be expected which invariably affects contraceptive behavior²⁶.

4.3 Multi-level model

Table 4.3.1 presents the results for multilevel models for men's contraceptive use. The first model does not include any predictors from the individual level or household level. Since no predictors have been added in the null model, after including predictors at the both level, the models with the predictors will provide the difference in results among models. The result of the null model shows that the estimated average of contraceptive use among men is 0.61. The deviance of this model is 2905.12. The next model includes all of the individual level characteristics in the model.

The men's model suggests that men who said that women should have a say in major decision-making processes and when to visit family or friends, are 37 percent and 48 percent more likely to use contraceptives respectively. Men who live in rural areas, are 26 percent less likely to use contraceptives. Literate men are 49 percent more likely to use contraceptives. Men, who have sons, are 2.11 times more likely to use contraceptives. The deviance of this model is 2794.36 which means this model fits better than the null model. The last model includes both level-1 and level-2 predictors.

The result suggests that all individual level characteristics still significantly affect men's contraceptive use even after adding household characteristics at the second level. Men who said women should have a say in major decision making and visiting family or friends, men who have sons and men who are literate are still more likely to use contraceptives. Men who live in rural areas are still less likely to use contraceptives. The second level predictor, have land or no land, significantly contributes to men's contraceptive use. If a household has land, men of those households are 12 percent more likely to use contraceptives than those who do not. Possession of land did not bring any significant changes in individual level characteristics. This model fits better than the null model and the first model, as the deviance statistic is the lowest in this model.

²⁵ Raudenbush, S.W. and Bryk, A. S. 2002. *Hierarchical Linear Models Applications and Data Analysis Methods* (2nd ed.). pp. 16-37. Thousand Oaks, CA: Sage Publications.

²⁶ Kamal, N. 1999. Inter-spousal communication on family planning as a determinant of the use of modern contraception in Bangladesh. *The Journal of Family Welfare*, 45(1), 31-43.

Table 4.3.1 Multi-level model for men's contraceptive use

characteristics	null model		model 2		model 3	
		dds ratio		dds ratio		dds ratio
	.613845	.85				
Level-1 Predictors						
Large expense			.313305	.37***	.313951	.37***
Visiting family or friends			.395202	.48***	.395989	.49***
Place of residence			0.295691	.74***	0.302487	.74***
Literacy			.401079	.49***	.398032	.49***
Number of Sons			.750494	.12***	.752057	.12***
Level-2 Predictors						
Land					.111434	.12*
Intercept			0.261729		0.341105	
Deviance	905.12		794.36		793.44	
No. of parameters						

*significant at .05 level, ** significant at .01 level and *** significant at .001 level

Table 4.3.2 presents the multi-level model for women's contraceptive use. The null model for women's contraceptive use suggests that average use of contraceptives among women is 0.22 percent. The deviance in this model is 3080.28. The second model includes all of the individual level variables but does not include the household level variable. Women whose husbands think women should have a say in visiting family or friends are 24 percent more likely to use contraceptives. Although, the results suggest that if men think women should have a say in major decisions, those women are 6 percent more likely to use contraceptives, and the result is not statistically significant. If women are literate, they are 36 percent more likely to use contraceptives. Having sons and living in a rural area does not significantly affect women's contraceptive use.

The final model includes both level-1 and level-2 predictors. The level-1 predictors, which were significant in the last model, remain significant in this model. The predictors that did not have a significant affect on women's contraceptive use still remain non-significant. Like the men's model, women of those households that have land are more likely to use contraceptives. Women of those households are 32 percent more likely to use contraceptives than women who belong to households that do not have any land. This model fits better than the last model. The deviance statistic is 3056.38, which is the lowest among three models.

Table 4.3.2 Multi-level model for women's contraceptive use

characteristics	null model		model 2		model 3	
		dds ratio		dds ratio		dds ratio
	.217723	.24***				
Level-1 Predictors						
Large expense			.053712	.06	.055888	.06
Visiting family or friends			.214268	.24**	.213445	.24**
Place of residence			.069591	.07	.056443	.06
Literacy			.307248	.36***	.277881	.32***
Number of Sons			0.028691	.97		
Level-2 Predictors						
Land					.276982	.32***
Intercept			0.239246		0.431662	
Deviance	080.28		062.74		056.38	
No. of parameters						

*significant at .05 level, ** significant at .01 level and *** significant at .001 level

5. DISCUSSION

The present research examines how power relations affect men and women's contraceptive use. Men's opinions about issues like wives participation in large household expenses or visiting family or friends have significant connotations for further research and fertility related policy. Although a significant amount of men said that women should have a say at the household level, they may not support this women's right within their homes. The results from this study suggest that men's words are not fully translated into a power balance in the family. Men still perpetuate existing social norms about gender-differentiation and power imbalance. Interestingly, these men also report more contraceptive use compared to women. Misreporting on the part of men is highly likely.

It is also possible that men may have thought that giving an opinion on issues like power relations in the household does not necessarily mean that they have to execute this power balance in their own family. In that case, those men's contraceptive use has a significant relationship with what they thought.

However, this also means that men's attitudes toward women's rights have been changing. This may liberalize men's long-standing beliefs about women. May be at some point in their life they might think this through and attempt to balance power relations in the family. This would have major consequences for fertility transition and women's health in Bangladesh.

For women, power balance at the family level means no dependency on sons for making contact with the outside world, and ability to make own decisions about contraceptive behavior and reproductive goals. Although wives say about large expenses and visiting family or friends did not come out as significant, there exists a positive relationship between women's contraceptive use and power relations. This implies that further research is needed to find out how other variables may interact with power relations at the household level to impact women's contraceptive use.

Traditional and conservative societies and the overwhelming power of men as household heads and major earners make the situation worse for women. In most cases, women have no say in major decision making activities. In traditional households, even in some modern households, the concept of "our family" merely exists. This could partially explain the reasons why women's say about large expenses and visiting family or friends did not significantly affect women's contraceptive use. This also portrays the discrepancy between men's opinions about women's say in large expenses and visiting family or friends and women's experience of power at the household level.

The results show that women's literacy can offset the effect of imbalanced power relations at the household level. This implies that women who are more literate have greater motivation to use contraception to reach desired levels of family size. In the socio-economic and cultural contexts of Bangladesh, it is important for women to listen what their husband say and obey the rules their husbands set for contraceptive use, but things can get better if they have a minimal amount of education. Even though women may experience unequal power distribution at the household level, the probability is that the overall improvement in terms of women's education may improve their situation at the household levels, with positive implications for contraceptive use.

Both men's and women's contraceptive prevalence rate is high if households own land. According to the land-security hypothesis, land has been viewed as an important source of wealth. Individuals with more land will have fewer children because land is the source of security instead of children. Thailand, the Philippine, Iran, Egypt, India and Mexico are some of the example of this hypothesis²⁷. Land is an asset for both the urban and rural households. Since the 1960s, the average land size per family has been declining. Around 70 percent of the households can be described as owners of small land size. In rural areas, even though small land size does not help survival of rural folks, still land is considered as one of the major sources of securities. Urban folks also wanted to own a piece of land, as non-farm source of income has never been viewed as an option of security. Owning land has implications for the level of fertility and use of contraceptives²⁸.

Traditionally, men are considered as providers and women as passive nurturers. It is believed that a man treasures values and norms of the society. The male role in using contraceptives and in making reproductive decisions has been seen as women's failure to reach their reproductive goals²⁹. Some researchers argue that since conception involves two persons, placing more importance on either of the partners will not be fruitful. Further there remain substantial variations among men and women in fertility preferences³⁰. Dodoo (1995) also mentions that traditional demographic theories emphasize women's characteristics, and ignore men's characteristics all together. However, "men in patrilineal

²⁷ Thomas, N. 1991. Land, fertility, and the population establishment. *Population Studies*, 45, 379-397.

²⁸ Cleland, J.C., Phillips, J. F., Amin, S. and Kamal, G. M. 1994. The determinants of reproductive change in Bangladesh- success in a challenging environment. *World Bank Regional and Sectoral Studies* (pp. 58-82). Washington, DC: The World Bank.

²⁹ Dodoo, F.N. 1998. Men matter: Additive and interactive gendered preferences and reproductive behavior in Kenya. *Demography*, 35(2), 229-242.

³⁰ Dodoo, F. N. and Seal, A. 1994. Explaining spousal differences in reproductive preferences: A gender inequality approach. *Population and Environment*, 15(5), 379-394.

Ezeh, A. C. 1993. The influence of spouses over each other's contraceptive attitudes in Ghana. *Studies in Family Planning*, 24, 163-174.

societies may have more of an inclination to ensure that their preferences are translated into decision making” (1995: 26)³¹.

Since men play a major role in the family, men’s role needs to be addressed in considering fertility related issues. They dominate decisions that have been taken by women in developing countries. Since culturally men are superior, any organized effort of family planning program needs to realize men’s role while making reproductive decision and thereby ultimate success of the family planning programs depends on men’s involvement in the family planning program³².

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³¹ Dodoo, F. N. 1995. Explaining contraceptive use differences: Do men play a role? *African Population Studies*, 10, 15-37.

³² Stokes, B. 1980. *Men and Family Planning*. pp. 1-15. Washington, D.C.: World Watch Institute.

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