#### Women's Autonomy and Reproductive behavior in Bangladesh

#### Introduction

Recently, women's autonomy and its association with reproductive health and behavior have emerged as a focal point of investigations and interventions around the world. Particularly, since the Cairo International Conference on Population and Development in 1994, ICPD (United Nations 1994), women's role has been a priority area not only for sustainable development, but also in reproductive health. At the ICPD, a general consensus was reached to ameliorate women's status, along with the related goals of improving women's reproductive health and securing their reproductive rights, which represents a paradigm shift that emphasizes the reproductive autonomy of individuals.

Following the ICPD, there have been a number of recent studies that examine women's autonomy and its relationship with reproductive health and health outcomes (e.g., Kishor 2000, 2005; Bloom et al 2001; IUSSP 1997). Most of these studies found relationships between various aspects of autonomy and reproductive health and behavior, but there are many complexities and contradictory findings among them, with different aspects of autonomy showing unexpected relationships with reproductive health and preferences in different settings and under different research designs. For example, lower fertility and fertility desire was observed among women with higher levels of autonomy in Bangladesh (Balk 1994) and in many regions of India (Jejeebhoy 1991), and lower fertility was found to be associated with women's greater autonomy in Malaysia, the Philippines, and Thailand (Tfaily 2004). These findings are attributed primarily to higher modern contraceptive use among women with higher autonomy (Schuler and Hashemi 1994; Dharmalingam and Morgan 1996; Morgan and Niraula 1995). On the other hand, in their study of autonomy of women and trends in fertility and contraceptive use in Egypt and Bangladesh Amin and Lloyd (1997) found that a low level of female autonomy was not a barrier to fertility change and contraceptive use in Egypt.

Although women's autonomy is widely referred to in many studies, notably on reproductive status and health, the concept remains ill-defined and its relationship to demographic processes has not been well articulated, either theoretically or empirically (Presser and Sen 2000). There is no single accepted definition that represents it or that captures the multiple dimensions of women's position (Mason 1995). Alternative terms such as women's status, female position or role, closer ties to natal kin, control over resources, and prestige are all frequently used in the literature interchangeably to define women's status (Mason 1986; Bloom et al. 2001). Balk (1994) argues that women's status or autonomy can not be represented by one direct measure nor by one indirect proxy alone, and that different aspects of women's autonomy influence fertility differently, in terms of magnitude and direction. In most studies autonomy has been defined as the capacity to manipulate one's personal environment through control over resources and information in order to make decisions about one's own concerns or about close family members (Basu 1992, Dyson and Moore 1983). This involves an individual's capacity and freedom to act independently of the authority of others, for instance the ability to leave the house without asking anyone's permission, make personal decisions regarding contraceptive use or obtaining health care. Thus, women's autonomy can be conceptualized as the ability to make and execute independent decisions pertaining to personal matters of importance to their lives or their family, even though men and other people may be opposed to their wishes (Mason 1995).

In Bangladesh, women's autonomy variable has been included in the DHS surveys since 1993 when the number of female workers had just started increasing. Successive surveys have documented this variable regarding women's autonomy, recording her ability to spend her own income on her own or by taking joint decisions with husband or other family members.

This paper examines whether women's decision-making autonomy affects fertility preferences and contraceptive use in Bangladesh using data from the 2004 Bangladesh Demographic and Health Survey. For the purpose of this study, the measures of women's autonomy we consider here represent various

domains that have been identified in the literature as important for women's reproductive behavior. They include the extent to which women are autonomous in decision making regarding large and daily household purchases, their own health care, the degree to which they can go to visit families or relatives, their freedom of movement, and the extent of women's interactions/communications with their husbands regarding family planning.

We study the relation of those indicators with reproductive behavior. In particular, we hypothesize that women who are able to participate in household decisionmaking, who have the ability to discuss family planning with their partner, who have freedom to visit families and friends, are more likely to wish to limit childbearing and to use contraception than women who do not possess these freedoms.

#### **Data and methods**

The data used in this study come from the 2004 Bangladesh Demographic and Health Survey (BDHS). This is a two stage nationally representative survey. The 2004 BDHS sample is a stratified, multistaged cluster sample consisting of 361 primary sampling units (PSU), 122 in the urban area and 239 in the rural area. The PSUs were borrowed from a sampling frame created for the 2001 census of Bangladesh and which was termed enumeration areas (EA).All eligible woman aged 10-49, from the selected households were eligible respondents for this survey. This resulted in a total of 11440 women completed the female questionnaire.

To measure the impact of women's autonomy on fertility desire and use of contraception, Bivariate analyses are used. To examine the association between women's autonomy and desire for no more children, multivariate logistic regression model is used. The dependant variable here is the answer to the question, whether she wanting further children or not.

## **Bivariate Analysis:**

## Fertility Regulation and Women's Autonomy

Contraception use is the principal means by which the reduction in fertility can be achieved. The family planning in Bangladesh is often considered to be an example of an effective program in a country without a high level of socioeconomic development, often considered as a necessary precursor to successful family planning (Koening et al. 1987; Duza and Nag, 1993). With the help of the concerted efforts of the Government in conjunction with NGOs in the field, the national family planning program has achieved a remarkable success, attaining a contraceptive prevalence rate (CPR) of 58 percent in 2004. Such an achievement demonstrates that family planning can successful not only in the short run, but can achieve high and sustained levels of contraceptive use in a population with low levels of socio-economic development.

## Ever use of contraception

Result from the 2004 BDHS shows that among the ever-married women aged 10-49, four in five (80.2 percent) women reported ever having used any family planning method. The percentages of women ever used any method of contraception vary according to their decision about own health care.

Table 1: Percentage of ever-married women who have ever used contraception, by contraceptive method, according to women's decision-making about own health care, Bangladesh 2004.

Decision about own health care	Modern	Traditional	Any method
Respondent alone Jointly with husband or other	72.1 77.2	6.2 5.9	78.3 83.1
Husband or other in household	74.1	5.3	79.4
Total	74.5	5.7	80.2

Table 1 shows women who make decision jointly with their husband or others about their own health care, 83.1 percent of them have ever used any contraceptive method. This percentage is higher than that of women who alone have final say about their own health care (78.3). The percentage of women who have no say about their own health care have ever used any contraceptive method is 79.4.

Table 1 also presents the differentials for modern and traditional methods. Women who make decision jointly with their husband or others about their own health care are more likely to use modern methods (77.2 percent) as compared to others. Women who alone have final say about their own health care are more likely to use traditional methods (6.2 percent) as compared to others.

Table 2 : Percentage of ever-married women who have ever used contraception, by contraceptive method, according to women's Freedom of movement, Bangladesh 2004.

Goes or can go alone outside	Modern	Traditional	Any method
village/town/city or health			
center			
Yes (Unrestricted)	77.5	5.1	82.6
No (Restricted or No mobility)	71.9	6.1	78.0
Total	74.5	5.7	80.2

Table 2 shows the percentage of women with unrestricted mobility who have ever used contraception is higher than that of women who enjoy a restricted mobility or no mobility. The percentages for these two groups are 82.6 and 78.0 respectively. Differentials are marked for modern and traditional methods. Women who have unrestricted mobility are more likely to use modern methods (77.5 percent) and less likely to use traditional methods (5.1 percent) as compared to women with restricted mobility or no mobility.

## **Current use of contraception**

The percent distribution of currently married women aged 10-49 who are currently using any family planning method is shown in table 3. An attempt has been made to assess whether there is any association between current contraceptive use and autonomy of women. As expected, there is a close association between current contraceptive use and indicators of autonomy. Women who make decision jointly with their husband or others about their own health care, 61.3 percent of them reported currently using any contraceptive method. This percentage is higher than that of women who alone have final say about their own health care (52.5). The percentage of women who have no say about their own health care currently using any contraceptive method is 58.2.

Table 3 also presents the differentials for modern and traditional methods. Women who make decision jointly with their husband or others about their own health care are more likely to use currently modern methods (49.8 percent) and traditional methods (11.5 percent) as compared to others.

Table 3: Percentage of currently married women by contraceptive method
currently used, according to women's Autonomy indicators, Bangladesh
2004.

Autonomy indicators	Modern	Traditional	Any
			method
Decision about own health			
<b>care</b> Respondent alone	42.1	10.4	52.5
Jointly with husband or other	49.8	11.5	61.3
Husband or other in household	47.7	10.5	58.2
Goes or can go alone outside village/town/city or health center	50.0		
Yes (Unrestricted)	50.0	11.1	61.1
No (Restricted or No mobility)	45.0	10.5	55.5
Total	47.3	10.8	58.1

The association between current contraceptive use and the levels of mobility is also presented in table 3. Greater levels of mobility lead to higher rates of current contraceptive use of any method. The percentage of current use of contraception among women with unrestricted mobility is 61.1, which is 55.5 percent for women with restricted mobility or no mobility. Women who have unrestricted mobility are also more likely to use modern methods (50 percent) and traditional methods (11.1 percent) than others.

#### Fertility preferences by Women's Autonomy

One very important indicator of women's ability to limit their number of children and of the prospect for future fertility decline is their desire to cease childbearing (PRB, 2006). The main focus of this section is to make a preliminary assessment of the relationship between measures of women's autonomy and fertility preferences using bivariate analysis.

#### Autonomy and desired family size

In societies where fertility regulation is a relatively new concept, responses to hypothetical inquiries on desired family size might be erratic and meaningless. For this reason, non- numeric responses or ambiguous answers is a problem during the inquiries about family size preferences.

Table 4 illustrates the percentage of ever-married women aged 10-49 who gave a non-numeric response to question on desired family size, according to women's autonomy indicators. The percentage of the non-numeric response for women who alone have final say about their own health care is higher (4.2 percent) than that for women who jointly have final say (3.3 percent) and no say (3.7 percent). Table 4: Percentage of ever-married Women aged 10-49 who gave a Nonnumeric response to question on desired family size, according to women's Autonomy indicators, Bangladesh 2004.

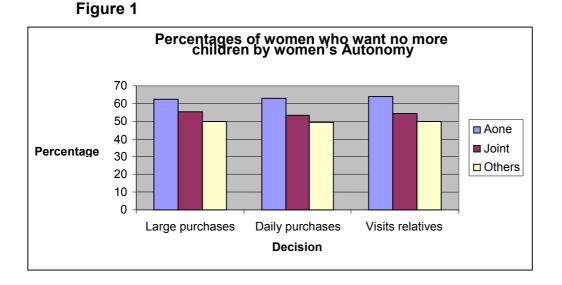
Autonomy indicators	Percentages
Decision about own health care	
Respondent alone	4.2
Jointly with husband or other	3.3
Husband or other in household	3.7
Goes or can go alone outside village/town/city or health center	
Yes (Unrestricted)	2.5
No (Restricted or No mobility)	4.7
Total	3.7

Table 4 also shows the percentage of the non-numeric response for women who have unrestricted mobility is substantially lower (2.5 percent) than that for women with restricted mobility or no mobility (4.7 percent).

## Table 5: Mean desired family size of ever-married Women aged 10-49,according to women's Autonomy indicators, Bangladesh 2004.

Autonomy indicators	Mean desired
	family size
Decision about own health care	
Respondent alone	2.43
Jointly with husband or other	2.41
Husband or other in household	2.42
Goes or can go alone outside village/town/city or health center	
Yes (Unrestricted)	2.33
No Restricted or No mobility)	2.50
Total	2.42

Table 5 shows the mean desired family size according to women's autonomy. Women who gave numeric responses generally want to have small families. According to table 5, the effect of women's autonomy on mean desired family size is negligible. The difference of the mean desired family sizes between women who have unrestricted mobility and who have no such mobility is small; the sizes are 2.33 and 2.50 respectively.



#### Autonomy and desire for no more children

Figure 1 presents the proportion of women who want no more children according to women's household decision-making autonomy. The figure shows that women who can alone make decision on large household purchases, 63 percent of them want no more children as compared with 56 percent women who make the decision jointly ( with their husbands or with others) and 50 percent women who do not participate at all.

For decision on daily household purchases, women who can make decision alone, 63 percent of them want no more children as compared with 54 percent women who make the decision jointly ( with their husbands or with others) and 50 percent women who do not participate at all.

For decision on visits family or relatives, women who can make decision alone, 64 percent of them want no more children as compared with 54 percent women who make the decision jointly ( with their husbands or with others) and 50 percent women who do not participate at all.



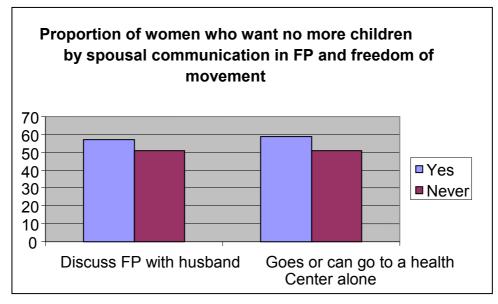


Figure 2 shows the proportion of women who want no more children by spousal communication in family planning and women's freedom of movement. Husbandwife discussion on family planning is significantly related to wanting no more children. Women who discussed family planning with their partner are more likely to wanting no more children (57 percent) than those who never discussed family planning (51 percent).

Figure 2 also presents that the proportion of women who said that they do not wish to have any more children increases as the level of mobility increases. Women who go or can go alone to a health center, 59 percent of them wish to have no more children compared with 51 percent women who have no such freedom of movement.

## Multivariate Analysis: Factors affecting the desire for no more children

The main question here is whether women's autonomy in decision-making has independent effects on the desire for no more children and if so, whether such effects are influenced by the other socio-demographic variables. In Table 6, the odds ratios from the logistic regression model are shown, in which the dichotomy of want no more / want more children is the dependent variable.

# Table 6: Logistic Regression of want no more children showing the effectof women's Autonomy after controlling for Background variables.

Variables	Coefficient (β)	Standard error of coefficient	Odds ratio
Decision on making large household purchases (Respondent)			1.00
Respondent jointly with husband or other	0.22	0.11	1.25**
Husband or other in household	0.14	0.17	1.15
Decision on making household purchases for daily needs (Respondent)			1.00
Respondent jointly with husband or other	-0.30	0.08	0.74***
Husband or other in household	-0.25	0.08	0.78***
<b>Decision for visiting</b> <b>families or relatives</b> (Respondent)			1.00
Respondent jointly with husband or other	-0.12	0.10	0.89
Husband or other in household	-0.18	0.10	0.83*
Discussed family planning with partner (Yes) Never Number of living children	-0.53	0.05	1.00 0.59***
0 1-2 3-4 (5+) <b>Residence</b>	-5.50 -1.82 -0.30	0.24 0.08 0.08	0.004*** 0.162*** 0.738*** 1.00
(Urban) Rural	-0.05	0.06	1.00 0.95

<b>Education</b> (No Education) Primary or less Secondary or Higher	-0.004 -0.352	0.06 0.07	1.00 0.996 0.703***
Wealth index			1.00
(Poorest)	0.13	0.07	1.13*
Poorer	0.09	0.07	1.09
Middle	0.27	0.08	1.31***
Richer	0.31	0.09	1.36***
Richest			
Employment			1.00
(Not employed ) Employed	0.20	0.06	1.21***

Notes: Reference categories are in the parenthesis. \*\*\* p<1% \*\* p<5% \* p<10%It is clear from Table 6 that, in the case of decisions on large household purchases, if women jointly with husband or others make the final decision, the odds of wanting no more children is about 25% higher than if women alone make the decision. Households where women alone make the final decision on household purchases for daily needs, the likelihood for wanting no more children is higher than where the decision is made jointly or by the husband/others. The odds ratios for decisions on visiting families or relatives indicate that if women alone make the final decision, the odds of wanting no more children is 17%higher than if the husband or someone else makes the decision.

Husband-wife discussion on family planning is significantly related to wanting no more children, where women who discussed family planning with their husbands are 41% more likely to want stop childbearing than those who never discussed. The odds of wanting no more children increase monotonically as the number of living children in the household increases. Residents in rural areas are less likely than residents of urban areas to want no more children. The desire for limiting childbearing is, somewhat surprisingly, the same between women with no education and those with primary or less education. There is a strong inverse relationship between desire for more children and household economic status. Employment implies a higher propensity wanting to cease childbearing. Women who are currently working, the likelihood for wanting no more children is 1.21 times higher than those who are not currently working.

## **Discussion and conclusion**

This study found that an increase in women's decision-making autonomy is recognized as important factor in reducing fertility through at least two main pathways: its negative association with desired family size and its positive association with women's ability to meet their own family size goals through the effective use of contraception.

The main objective of this study is to determine the effects of women's autonomy on fertility preferences and use of contraception in Bangladesh. This study shows that different dimensions of women's autonomy are important correlates of fertility preferences and use of contraception.

Fertility regulation which is one of the most important proximate determinants of fertility is affected by women's mobility. Percentage of women who can move alone are using contraceptive more than who have no mobility. Women who go or can go outside village or health center alone nearly 61 percent of them currently using any contraceptive method, as compared with 56 percent women who have no such mobility. We also found that fertility regulation is not influenced much by women's household decision-making autonomy.

The average age at first birth does not vary significantly by women's mobility and household decision-making autonomy. It is found that fertility is affected by women's mobility. The higher the freedom of movement of a woman the lower the fertility. The mean number of children ever born (women aged 40-49) for unrestricted women is 5 and which is 6 for women who have restricted mobility or no mobility. The average number of children varies slightly by women's decision-making.

One very important indicator of women's ability to limit their number of children and of the prospect for future fertility decline is their desire to cease childbearing (PRB, 2006). This study shows the relationship between measures of women's decision-making autonomy and fertility preferences. Mean desired family size is lower for women who enjoy an unrestricted mobility status (2.3) than who do not (2.5). Women who discussed family planning with their partner are also more likely to have lower ideal family size than those who did not discuss family planning. Overall, women's autonomy or final say in decision-making is weakly related to the mean ideal family size, and in most cases differences are not significant.

The proportion of women not wanting any more children is associated with almost all the indicators of women's empowerment. The proportion of women who said that they do not wish to have any more children increases as the level of mobility increases. Women who go or can go alone to a health center, 59 percent of them wish to have no more children compared with 51 percent women who have no such freedom of movement.

In terms of the autonomy variables women who can make domestic decisions alone are more likely to wish to limit childbearing than women who make the decisions jointly with their husbands or with others in the household or than women who do not participate at all. For example, women who can alone make decision on large household purchases, 63 percent of them want no more children as compared with 56 percent women who make the decision jointly and 50 percent who do not participate at all.

The study also shows that women who discuss family planning with their partner are more likely to wanting no more children (57 percent) than those who do not discuss family planning (51 percent). The results confirm that women's decisionmaking autonomy is important determinant of fertility preferences and contraceptive use. The results of this study have some implications on future family size, in that if women are empowered their desire for large family size will decline and hence fertility will decline.