Factors Associated with Unmet Need of Family Planning and Its Impact on Population Growth in Bangladesh

During the last decade, contraceptive prevalence in Bangladesh has increased 11 percentage points (from 45 percent in 1993-94 to 56 percent in 2007), whereas the proportion of currently married women who wish to regulate childbearing has increased 8 percentage points (from 65 percent in 1993-94 to 73 percent in 2007). The unmet need has declined from 19 percent in 1993-94 to 17.1 percent in 2007.

Although fertility rate is still high (2.7) compared to other South Asian countries, the total wanted fertility is only 2.3, which clearly shows that average 0.4 pregnancies are unwanted. In Bangladesh, women with unwanted pregnancy are more likely to seek unsafe abortion and it is one of the important causes of maternal mortality and morbidity (Ahmed et al. 2005). The main objective of this study is to assess the extent of unmet need for family planning among married women of reproductive age group in Bangladesh and to study the factors related to it. This paper also assesses the impact of unmet need of family planning on future population growth in Bangladesh.

Data and Methods
The study uses data from the Bangladesh Demographic and Health Survey (BDHS) 2007. This is a probability sample of 10996 ever married women of reproductive age. Typically, the BDHSs used two stage sampling design. We also used chi-square tests to compare proportions of women categorized by their characteristics, intentions and behaviors. Logistic regression analyses were used to examine the effect of women’s characteristics on the likelihood of inconsistency in childbearing and contraceptive behavior.

Definitions of unmet need
Sexually active women who are not currently using a method of family planning and want to stop or postpone child bearing are defined to have an unmet need for family planning. A currently married woman who is not using a method of contraception is defined as an unmet need for spacing births (to postpone pregnancy at least 2 years) if the current pregnancy or last birth was mistimed, or if she is fecund and wants to wait having the next child. A currently married woman who is not using a method of contraception is defined as an unmet need for limiting births (stopping or avoiding childbearing entirely) if the current pregnancy or last birth was unwanted, or if she is fecund and wants no more children. Total unmet need is the sum of unmet need for spacing and for limiting. Total demand for family planning is the sum of total unmet need and total current contraceptive use. No demand for contraception is defined as desired birth within 2 year or infecund and menopausal. In this article poor contraception is defined as the women using less effective method (condom) or using natural family planning (periodic abstinence) or using natural family planning (withdrawal). Similarly, health-risk unmet need of non-users is defined as women not using contraception, but already had more than 4 live births or not using contraception, but short birth interval (last birth less than 15 months) or not using contraception, but too young (age less than 20 years) or not using contraception, but too old (age more than 35 years).
Results
The unmet need for family planning has increased from over 11.3 percent in 2004 BDHS to little over 17 percent in 2007 BDHS. The unmet need for contraception is also classified by poor contraception of unmet need of users and unmet need for health risk of non-users. And these two components also increased between the last two survey periods. Considering the poor contraception and health risk, the actual unmet need increased 32.8 percent to 43.8 percent during the last two survey periods.

As evident with the increase in age of the respondents, the unmet need for family planning also declines. Unmet need is the highest for the women age group 15-19 years. Unmet need is high among women in Sylhet division and Chittagong division respectively. There is difference in the unmet need for family planning between poorest and richest quintiles. The percentage of need for limiting that is unmet shows greater variation with respect to the predictor variables than does the percentage of need for spacing that is unmet.

The study used multinomial logistic regression because the dependent variable i.e. unmet need for contraception is categorical. Since many individual characteristics are interrelated, the study investigates specific effects of independent variables on different categories of unmet needs through a regression model. For predicting four categories of unmet need a new category for no unmet need has been considered as a reference category. The regression coefficient shows that age, age at first marriage, husband-wife communication, sex compositions and visitation status of satellite clinic appear to be significant predictor for limiting unmet need. Unmet need for spacing is significantly low in Khulna compared to the Sylhet division. Similarly, age, level of education, wealth quintile, division, place of residence, exposure to TV, visitation of field workers, visit to the satellite clinic, husband wife communication, and sex composition are important correlates of poor contraception. Compared with the younger women, poor contraception unmet need is more among women age 25 years and above. Women who have both boy and girl or only have a boy or a girl are significantly associated with poor contraceptive unmet need. As expected, health risk unmet need for contraception is significantly low among women who are aged 25 years and above. Husband-wife communication about family planning has significant negative effect on health –risk unmet need. Women who have sex composition of either a boy or a girl have less likely to have health risk compared to women who have one boy and one girl. Women who are visited by the workers are less likely to have a health risk.

We introduced some more independent variables such as desire for more children, occurrence of births prior to three years preceding the survey. Both the variables are significantly associated with the unmet need for contraception. Rural women are 1.4 times more likely to have unmet need than urban women. Women resided in the area where family planning worker’s visits regularly have less unmet need of family planning than their counterparts. Religion affiliation indicates that Muslims are 1.4 times higher likelihood of unmet need than the other religions such as Hindus and Buddhist.
Discussion and Conclusion
The findings of the study revealed that little over seventeen percent of currently married women of reproductive age in Bangladesh have an unmet need for contraception. This unmet need, accounts for 23.5% of the total need for contraception (met plus unmet). When we investigate how need varies by respondent’s demographic characteristics, we see that the percentage of total need that is unmet need is high among younger women and women with few living children. By socio-economic characteristics, the percentage of total need that is unmet is high among rural women, Muslim women and women with no exposure to media message on family planning. Similarly, unmet need for spacing varies considerably by age and number of living children. The regression analysis of this study confirmed that age, husband-wife communication, sex composition and visitation status of satellite clinic appear to be significant predictor for limiting unmet need. The desire for more children and occurrence of births three years preceding the survey are significantly associated with the unmet need for contraception. The findings indicate that the lower is the desire for more children the higher is the likelihood of having unmet need for contraception.

In Bangladesh, conventional limiting and spacing unmet needs and unconventional health risk unmet need vary significantly across geographical divisions. In all respects Sylhet and Chittagong divisions have higher unmet need possibly due to low contraceptive use in these two divisions. New program strategies are required to fulfill the conventional demand for family planning in Sylhet and Chittagong respectively. Although there are attempts to fulfill the conventional unmet need, but choice of method is a critical issue in Bangladesh. BDHS 2007 shows that although 56% currently married women want to limit child bearing, but only 6% are using permanent methods. In this respect, choice of method is an important issue that should be taken into consideration while fulfilling the demand for conventional unmet need for contraception. If it is not brought into the policy, the goal of reaching replacement level fertility will not be achieved. This is because women may experience unwanted and mistimed pregnancy which is comparatively high (one third of all births) in Bangladesh.

Unmet Need and Its Impact on Population Growth
Among the women 17% mentioned that they have unmet need for contraception. If they can be converted to users the contraceptive use rate will be about 72.9%. If this can be achieved Bangladesh will be able to achieve replacement fertility immediately. If we put this CPR in the regression line TFR = 7.15 - 0.0688 CPR then TFR will be 2.1 children per woman (which is the replacement fertility) and corresponding population growth will be zero percent (zero population growth). If we can implement 10% of the unmet need into users then CPR will be 66% and the corresponding TFR will be 2.5 and the population growth will be about 0.81 % (about one percent). Once we achieve replacement fertility then population growth will be zero theoretically although momentum effect will continue for some time because of high fertility in the past. Therefore, unmet need for contraception should be given priority to achieve zero population growth. This indicates that reduction of unmet need for contraception has significant impact on future population growth. The intensified promotion of temporary methods may reduce unmet need for spacing as well as unmet need limiting. Moreover,
some women who begin to use by spacing may shift to limiting at a lower number of living children than they would if they did not space.

Unmet need has direct impact on total fertility rate. It is believed that if unmet need were eliminated, fertility would decline substantially. From a policy perspective, reducing unmet need for family planning is important for both achieving demographic goals and enhancing individual rights. From a demographic standpoint, reducing unmet need can lower fertility in Bangladesh struggling to cope with rapid population growth. Despite the extensive family planning program in Bangladesh, the unmet need for family planning program is still high among women. If the women with unmet need use family planning methods, the country will achieve replacement fertility as well as millennium development goal by 2015.