

Contraceptive Practice and Protection of Women's Health

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Abstract

Family planning is an essential tool for reducing fertility rate. An increase in contraceptive prevalence results in reduction of population growth, which in turn contributes significantly to the improvement of maternal health. It is a cross-sectional study done during period of April-July 2007 in a large Medical Centre at Motijheel, Dhaka. Information on reproductive history was obtained to find out their contraceptive prevalence and regulation of fertility. Two hundred and thirty one (231) women (childbearing age) were selected randomly to find out their contraceptive prevalence. Eighty four (n=197) percent women needs family planning service. Among them 87.82 percent (N=173) use any method

of contraception. 79.76 % (N=138) women use modern method and 20.23 percent (N=35) couple use natural method. Thirty three (33.53 %) couple practice barrier method, twenty two (22.54%) percent use oral pill. Present study revealed that contraceptive practice and fertility rate both are low among servicing women. Contraception and fertility control is an underlying factor for the achievement of several Millennium Development Goals (MDGs). For reduction of infant mortality (4th MDG) and maternal mortality (5th MDG) contraception is essential. Finally it plays a role in combating poverty within the first MDG.

Introduction

Optimum period for child delivery, prevention of unwanted pregnancy by safe contraception and birth of wanted children are known to be the main directions in family planning. Family planning not only offer contraceptive benefit, it also ensure improvement in women's health, child health, decrease infant and maternal death, decrease population growth and ultimately enhance the socio economic development. Fertility status (fecundity) is largely determined by age at marriage, age at 1st child birth, birth space, and use of contraceptives. These variables are indirectly regulated by income, nutrition, housing, education and medical care of the people. There are evidences that conditional cash transfer or improvement in socio economic condition have unintended effect on fertility control.^{1,2}

Bangladesh's population estimated to be 143.91 million and is growing at a rate of 1.42% per annum.³ Bangladesh has achieved this progress against the backdrop of low literacy rate, low status of women and low income per capita and so on. Women of reproductive age group (15-49 years) represent 46% of the total female population and contraceptive prevalence (CPR) only 56%. But total fertility rates across the countries is 2.7 (ranges from 3.3-8.7) percent.^{4,5}

Total fertility rate in Bangladesh decline sharply over the last 37 years from 6.3 births per women in 1971-1975 to 2.7 births per women in 2004-2006.^{4,5} For reduction of total fertility rate, family planning plays crucial role.⁷ Contraceptive prevalence rate in Bangladesh increase slowly over the last 37 years from 8% in 1975 to 56% in -2007.⁴ During this period improvement in maternal malnutrition from (BMI less than 18.5 kg/sq m) 52% in 1996-97 to 23.5% in 2007.⁴ Changes in adult literacy rate, 51.6% in 2004 and increase in per capita income is 40%.⁷ By studying the reproductive history, size of family, son/ daughter preference, need for another child and contraceptives prevalence can be assessed and it would be helpful in formulating an intervention in order to decrease the fertility rate in Bangladesh. The present study aimed at exploring contraceptive practice and related issue among service holder. The reason for non using contraceptives and the experience they gained after using different contraceptives would indicate the pathway to lower fertility rate in the society. This study would help in planning a strategy that could raise CPR and reduce the total fertility rate.

Material and Methods

It is a cross-sectional study, done during the period of April-July 2007 in an institutional outpatient department at Motijheel. During this period 4015 patients visited for general health care, consultation, gynecological and ante natal care. Their reproductive history was taken in detail. All respondents were asked for age, duration of marriage, marital age of the women, age at 1st birth, number of living children, birth space,

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dead children, menstruation regulation and abortion, contraceptive methods, menstrual history, desire for future pregnancy and why they need another child. 231 women (childbearing age group) were selected randomly to find out their contraceptive prevalence/fertility control. Interviewer-administered structured questionnaire (Reproductive history) was used as research instrument for data collection. Collected data was then checked, cleaned, coding and editing was done properly. Finally data was entered into the computer for statistical analysis by using MS EXCEL. Patient's verbal permission was taken for publication.

Characteristics of population

The respondents are working in this institute and have regular income, housing, education, transport and medical facility. Respondents are categorized according to their basic Income & service.

≥ 10000/ taka (A= House wife, a= Servicing women)
 ≥ 7000/ taka (B=House wife, b= Servicing women)
 ≥ 5000/taka (C = House wife, c= Servicing women)
 ≥ 3500/taka (D= House wife, d= Servicing women)

They have health and family planning facilities, day care facility, limited emergency management facility, day care center for preschool children. Registered physician (10 doctors), registered nurse (3), medical assistant, pharmacist (10), family welfare visitor (1) are present there. Availability and utilization of private hospital care are more. Response of the couple about planned family indicated that 85% couple desired to keep family small.

Observation & Results

Among the respondents, about thirty percent (29.87%) women are service holder and 70.13% women are house wife. Table-I shows socio-demographic characteristics of the respondents. Mean age at

Table I

Socio-demographic characteristics of the respondents.

Indicators	Results(N=231)
Age (Year)	37 (18-49)years
Weight (Kg)	62.2 (84-36)kg
House wife	162(70.12%)
Servicing women	69(29.88%)
CPR (%)	79.76%
Average no. of living child/family	2.35 (2-6)/women
Mean age at marriage (Year)	18.24 (13-28)yrs
Mean age at 1st birth (Year)	21.46 (14-33)yrs
1st birth space (Year)	4.29 (2-10)yrs
2nd birth space (Year)	4.75 (1-11)yrs

marriage is 18.24(13-28) years. Mean age at first birth is 21.46(18-33) years. First birth space 4.29 years and second birth space is 4.75years. Average number of children per women is 2.35. Average number of children per house wife is 2.65 and per service holder women is 1.88.

Table-II shows the age specific distribution of women. The mean age of the respondents' was 37(18-49) years and 16.44 % of women belonged to age group 21-30years, 55.56% belonged to age group 31-40 years and 27.56% belonged to age group 41-49 years. Only 17.33 percent women belong to peak reproductive age group.

Table II

Age specific distribution of women.

Age range	Number of women
Less than 20yrs	2(0.89%)
21-30years	37(16.44%)
31-40years	125(55.56%)
41-49years	62(27.56%)
Total	231(100%)

Table-III shows number of living children of the respondents. 16.45% had one child, 41.56% had two children, 22.51% had three children and, 11.26 % had four children and 3.46% had five or more children.

Table III

Number of living children per women

No of children	Percentage of couples
1 child	16.45%
2 children	41.56%
3 children	21.51%
4 children	11.26%
5 or more children	3.46%

Table-IV shows distribution of children among servicing women and house wife. Eight couples have no child. Eleven percent couple have intention for another pregnancy due to incomplete family, son preference, daughter preference, company for sibling and protection of wealth. Some couples have no intention for another child though their family is incomplete because of maternal service, disease, maternal advanced age, second marriage and hysterectomy.

Table IV
Distribution of children among Servicing women and House wife.

Class		1 child	2 child	3 child	4 child	5 child					
a	A	5	12	18	24	3	21	0	10	0	2
b	B	3	10	20	16	4	8	1	6	0	1
c	C	2	4	1	4	3	7	0	0	0	2
d	D	0	2	2	11	2	4	0	9	0	6
1.87	2.56	38(16.45%)		96(41.56%)		52(21.51%)		26(11.26%)		11(3.46%)	

Table V
Age specific distribution of contraceptives

AGE	OCP	Condom	Injection	Sterilization	Natural	Cu -T	Total
21-30yrs	6	13	5	2	0	1	27
31-40yrs	26	42	5	7	22	2	104
41-49yrs	5	5	0	7	12	2	31
Total	37(22.54%)	60(33.53%)	10(7.58%)	16(9.25%)	34(20.23%)	5(2.31%)	162

Table-V shows age specific distribution of contraceptives. Women of 21-30 years group practice condom and oral pill, women of 31-40 years age group practice mainly condom, oral pill and natural method. Women of 41-49 years age group practice mainly natural method, then oral pill and condom. Few women took injection and sterilization. Some women are reluctant about the use of contraceptive because of their present life style offer protection. Only 30 (15.15%) women need 50 menstruation regulations. Prevalence of menstruation regulations and use of emergency pill is less.

Figure-1 shows distribution of contraceptive practice among respondents. Eight four percent (N-197) women need family planning service. About eighty eight percent (N-173) respondents use any method of contraception. Eighty (N-138) percent married couple use modern method and twenty percent(N-35) couples use natural method. Thirty three(33.53 %)percent couple use barrier method, twenty two(22.54%) percent use oral pill, female sterilization is 9.25 percent, injectable (DMPA) 5.78 percent and 7.97percent adopt mixed method. Figure-2 shows

comparison between present study and national findings.

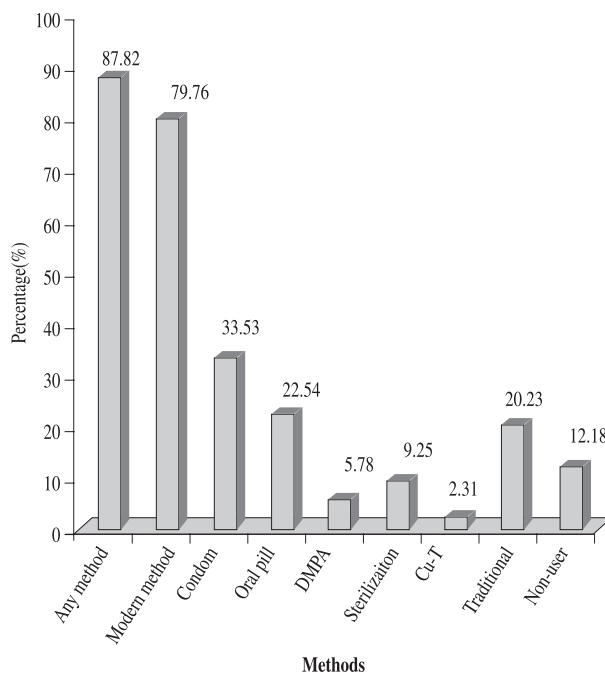


Fig.-1: Contraceptive prevalence among the Respondents.

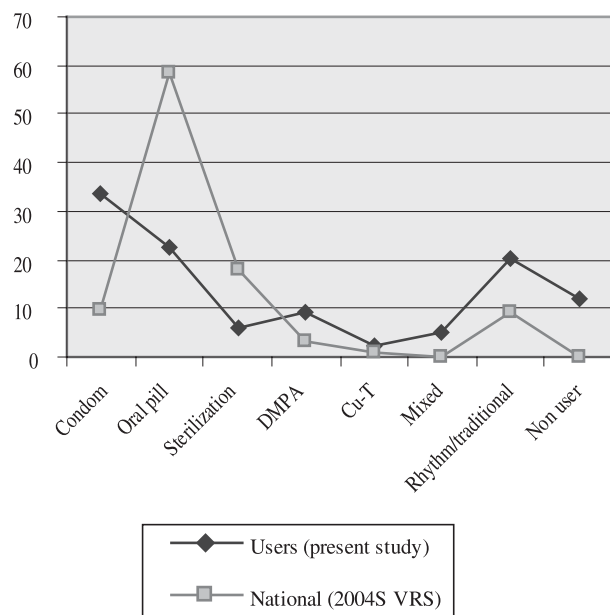


Fig.-2: Comparison between present study and national study

Discussion

A women's health is intricately entwined with her social status that in turn involves a complex set of interrelated factors. Those factors include her income, employment, education, health and fertility and society's perception of her role in the family and community.^{2,3} From this study it was found that mean age at marriage is 18.24(13-28) years. It is equal with legal age of marriage.⁷ This finding is similar to our national findings.^{7,9} Nationally 78% women are married by age 18 and 88% by age 20.4 Mean age at first birth is 21.46 (18-33) years. Comparison with data from sources show that the age at which Bangladeshi women have their first child has increased steadily over time. For example, in 1975, the median age at first birth among women age 20-24 was 16.8 years, rising to 18.0 years in 1991-1993, 18.4 years in 1996-97 and 18.7 years in 1998-2000.⁸ A rises in median age at first birth is typically a sign of transition to lower fertility levels. In this study, 31.58% women became pregnant for the first time between 15-19 years. Number of children per women 2.36 but number of children among servicing women is 1.87 and house wife is 2.56.⁷ Fertility rate is less among servicing women. In this study, 87.82% married women need a method of family planning. Modern methods are much more widely used (79.76% of married women) than natural method (20.35%). The 2001 BMMS indicates that 50% of currently married women in Bangladesh are using

a method of family planning, 44% women are using Modern method and 6% using natural method.⁸ In this study it is showed that 33.53 percent couple use barrier method of contraception and this is very popular in all age group but in Bangladesh 10.6 percent couple use barrier method of contraception.^{3,4} Probably continued publicity against HIV and AIDS and increasing awareness of the people make use of condom more popular and progressively increasing. OCP is the 2nd most popular method of contraception. Use of emergency contraceptive pill is also less. Only 71 couple received emergency contraceptive pill during the last 4 (four) years. One third users complaining of rupture of condom and others are non user. Number of menstruation regulations (MR) and fertility rate are more among house wife than servicing women. Couple have negative attitude towards pill because of scanty menstruation, weight gain and fear of malignancy.⁴

20.23 % couple practice natural method and among them incidence of MR are less. Natural method is not very much effective. But couples education and responsibility make the method more effective. Adherence with the methods offer best result. Long term contraceptive method is not much effective for fertility reduction as well as population control because of poor acceptance. Nationally only 21.1 percent couple practice permanent method.³ At present contraception and nature alone cannot control the population in developing countries. To achieve desired fertility rate (0 growth potential) women's education and empowerment is very essential. Urbanization, economic stability, educated environment and recreational facility helps the couple to keep family small. It improves family and social status. Women spent a large portion of their time in child caring. They are aware and try to avoid pregnancy. In this way, maternal and children morbidity and mortality (MDG 4th and 5th are achieved) are reduced. Contraceptive make couples more responsible and it promote better quality of life by helping families to use their resources for food, housing, schooling and medical care. Family planning provides alternative strategy to reduce maternal mortality.^{9,10} Hemorrhage, septic abortion, eclampsia, obstructed labor and infection are important cause of maternal death.^{10,11} It is the adverse outcome of repeated and unwanted pregnancy. Safe birth practice prevents only obstructed labor and labor related death. It is not sufficient to prevent total maternal mortality. To decrease MMR, (hemorrhage,

septic abortion, eclampsia, obstructed labor and infection) control of fertility and encouragement of contraceptive prevalence is very essential.

Population program costs are relatively modest, typically amounting to less than five percent of national health budgets, and less than 0.1 percent of government expenditures.² Women's empowerment and autonomy in reference to women's status have been interchangeably to denote women's independence at various levels. The assumption is common that education leads to autonomy, that it lets women to stand up to their husband and provides them with means to learn about fertility control and make effective use of health care delivery system.

Conclusion

Family planning helps to create favorable conditions for socioeconomic development. Regular income, housing, education and medical facility bring family stability and indirectly it affects fertility. Education and social position increase responsibility of a person. Servicing women (empowerment) are more cautious to keep family small. So contraception and fertility control is an underlying factor for the achievement of several Millennium Development Goals (MDGs). For reduction of infant mortality (4th MDG) and maternal mortality (5th MDG) contraception is essential. Finally it plays a role in poverty reduction (hunger/micronutrient deficiencies) within the first MDG.

References

1. Guy Stecklov, Paul winters, Jessica Todd and Ferdinando Regilia. Unintended effects of poverty programmes on childbearing in less developed countries: Experimental evidence from Latin America, *Population Studies, A Journal of Demography* 61(2):125-140. July 2007
2. Health, Population and Development in Asia and the Pacific: Asian Development Bank, Manila 1991, page 44.
3. Sample vital registration System (SVRS), BBS, 2006; 7,127.
4. Bangladesh Demographic and household survey 2007; 56, 62,70,77,98.
5. Begum S, Haque MM, Nasreen SA . Contraceptive Prevalence: Experience from rural Bangladesh . *Mymensingh Medical Journal*: July 2006 ; 15 : 2:124-127.
6. Bangladesh fertility survey 1989.
7. George C Zaidan ; The costs and benefits of family planning programs, pp43.
8. Bangladesh maternal health service and maternal mortality survey 2001; 98, 100.
9. *Journal of Obstet and Gynaecol Res.* August 2003; Vol. 29, no.4:268-275.
10. An alternative strategy to reduce maternal mortality; A Costello and others: Published on line September 28, 2006: DOI: 10.1016/S0140-7776(06)69388-4.
11. O M R Campbell and others; Strategies for reducing mortality: getting on with what works, *The Lancet*; Maternal Survival Series steering group, *Maternal Survival*, September, 2006; 25-40. Oona.campbell@ishtm.ac.uk.
12. Royston E, Armstrong S (editors). *Preventing maternal deaths.* Geneva: World Health Health organization, 1989; 45.