



CONTRACEPTIVE USING TRENDS IN BANGLADESH

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Abstract

Bangladesh experienced a rapid decline in fertility by family planning program where contraceptive was considered as one of the control concepts for reducing maternal and child mortality. The aim of this study was to find the current situation of using trends of contraceptive and the interest of using temporary and permanent methods of modern contraceptive in Bangladesh. Data were collected from different secondary sources and time series study design applied for this study. The study found that family planning program of doorstep modern contraceptive methods delivery services reduced the total fertility rate in Bangladesh every year from 2007 to 2015. After all, temporary methods of contraceptive used more than permanent methods but data suggested that permanent methods were being increased day by day. The vasectomy and tubectomy using trends in Bangladesh from 2007 to 2015 are 4 times and 3 times more observed in 2014 respectively. As a result, there identified less induced abortion, miscarriage and stillbirth which were responsible to increase the number of maternal and child mortality because of well-planned contraceptive using trends in Bangladesh.

Key words: Contraceptive, Family Planning, Maternal and Child Health, Fertility, Population, Millennium Development Goal, Intrauterine Device.

Introduction

In health sector, maternal and child mortality are major problems of a developing country which are occurred because of higher fertility rates so that reducing fertility means the decline of mortality and fertility can be controlled by using contraceptive but unfortunately contraceptive prevalence rate (CPR) in Bangladesh was estimated to have increased from 8% of currently married women in 1975 to 25% in 1985 and there have been steady increased in method effectiveness (Kabir and Uddin, 1987). There are many reasons of less increasing contraceptive use; mostly people generally chose contraceptive methods that are normally used and are socially accepted in their area; but they reject the use of contraceptives which are restricted by social norms (Gayen and Raeside, 2010). Higher number of using contraceptive among younger women resulted low fertility rates but it has been observed that lower number of using contraceptives cannot be able to decline total fertility rate (TFR) in a short time (Ahmed and Ali, 1992) and the percentage of married women in reproductive ages using contraception has been rising steadily not only Bangladesh but also all over the world (Phillips et al., 1982).

Contraceptive plays a significant role to reduce maternal mortality so that increasing contraceptive use for reducing the incidence of induced abortion, miscarriage, stillbirth, improving the management of such outcomes and strengthening antenatal care in Bangladesh introduced family planning program similarly other developing countries of the world (Rahman et al., 2010). Interestingly, the program in Bangladesh has experienced a rapid decline in fertility in the past several decades, facilitated by proactive population policies, provision of contraceptives and broader societal shifts, encouraging smaller families and even use of contraceptive to achieve revised childbearing norms (Gipson et al., 2011). National family planning program and non-government organizations in Bangladesh are playing an important role in the effort to lower the fertility rate and to increase prevalence of contraceptive use (Rahman et al., 2011). Although family planning method use is remarkably equitable across most socio-economic group, unmet need for family planning decreases with household wealth and the state observed that Bangladesh has been cited as a success care in the developing world for popularizing its family planning services during the last 20 years (Greenspan, 1992). On the contrary, it can be said that Bangladesh has provided evidence favoring a community-based maternity-care delivery system and direct obstetric mortality declined (Ronsmans et al., 1997) and also TFR declined from 6.08 in 1983 to 4.63 children or woman in 1991: a decline of 24% in 8 years. Total marital fertility declined by 20.6% in 8 years. The CPR increased about 21% in 8 years to 39.9%. The proportions of single women aged 15-19 years and 20-24 years increased greatly in 1991 to 46.7% and 12.3% respectively but marriage has remained universal (Islam and Abedin, 1996). In Bangladesh, CPR among currently married non-pregnant women was 61%

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and the prevalence of modern methods was 49%. Oral pill and periodic abstinence were the most preferred modern and traditional methods, respectively. The doorstep delivery service of modern methods should be strengthened to further increase effective family planning that is required to reduce the TFR in Bangladesh (Kamal and Islam, 2010) but the situation is totally different in Pakistan where the current CPR in Bangladesh is 61%, which is double the rate observed in Pakistan, while the TFR is 2.3 children per woman (Streatfield and Kamal, 2013). Others, by utilizing family planning services; CPR has risen markedly in rural Bangladesh due in part to a doorstep-delivery system initiated by the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) (Clark et al., 2008).

Family planning program was initiated in part of Matlab in 1977, TFR in the intervention area declined from 4.8 in 1979 to 2.9 in 2000, while fertility in the comparison area dropped from 6.3 to 3.5. Over this period, contraceptive prevalence rose from 30% to 70% and from 16% to 50% in the two areas, respectively; meanwhile, the abortion ratio fell from 4.3 to 3.6 in the intervention area but rose from around two to 8.2 in the comparison area (Saha and Bairagi, 2007). Then the reducing maternal and child mortality were decreased in Bangladesh than other developing countries of the world where contraception had become a central concept in the family planning (Callahan and Becker, 2014). It was found that between 1975 and 1997 the use of family planning methods increased from 13.6% to 69.2%. Also, CPR increased by over 6 times during the same period, rising from 7.7% to 49.2%. The sharp increase in contraceptive prevalence led to an appreciable decline in fertility, with total fertility rate dropping from 6.3 during the period 1971-75 to 3.3 during the period 1994-96 (Roy and Rahman, 2000). However, the increase in contraceptive use was from 4 to 40% between 1969 and 1991. The following factors affected the extent of fertility decline: contraceptive use, reduced child mortality concomitant with extended lactation and amenorrhea, increased malnutrition, and improvements in child survival (Amin et al., 1993). Abortion rates were significantly lower in the areas with better family planning services compared with the comparison areas. Abortion of unintended pregnancies is similar in both areas but the higher levels of contraceptive use in the areas have led to lower levels of unintended pregnancy and abortion (Rahman et al., 2001). Anyway, Bangladesh has undergone a considerable decline in fertility, despite the absence of conditions believed to be necessary for such reproductive changes. Indeed, Bangladesh is the only one among the world's twenty poorest countries where such a change has occurred. The nature of fertility transition in Bangladesh looks at the trends in contraceptive use and fertility identifies the major factors accounted for the fertility decline in spite of having poor socio-economic conditions (Barkat and Hossain, 1996). Contraceptive using; especially condom use would need to be increased by 4 times from 2.2 million to 8.9 million in 10 years in order to reduce the TFR by 1 child. Oral pill use would have to be tripled to 6.9 million users by 2001. IUD and injection use or female sterilization would need to be tripled (Ahmed and Ali, 1992).

The Objectives of this study

- To explore the current situation of contraceptive using trends in Bangladesh
- To know the interest of using temporary and permanent methods of modern contraceptive

Materials and Methods

The study is on the basis of contraceptive using monthly data of Directorate General of Family Planning (DGFP), Bangladesh from January, 2007 to May, 2015. Data were collected from different primary and secondary sources using structured, semi-structured and open formed questionnaire. Time series study design applied for this study. After data collection, the data were analyzed by using time series analysis strategies and presented them as monthly to yearly data those were represented in the final analysis to fulfill the study objectives.

Findings and Result

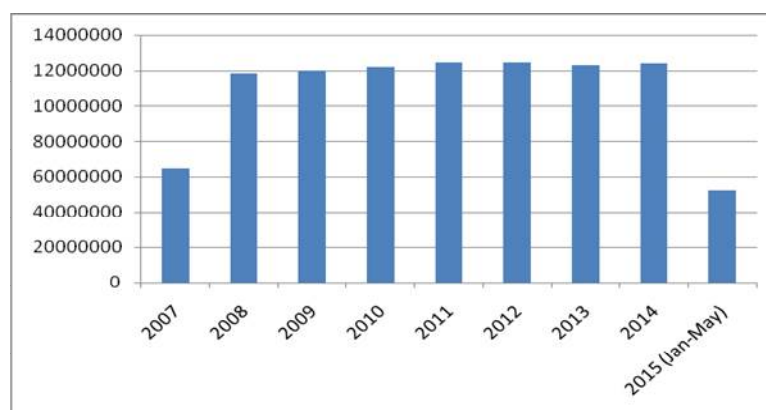


Figure 1: Oral Pill Using Trends 2007-2015 [Data Source: DGFP]

Figure 1 shows that the oral pill using trends from 2007 to 2015, it is in the increasing process from the starting of family planning program in Bangladesh among rural and urban oral pill service receivers but the notable point is here that in 2007 the using trends of oral pill were so much distinct than after 2008 and the uses of oral pill from January to May in 2015 were also remarkably highest; after all, the oral pill was the only contraceptive method started from the first under the family planning program.

Table 1: Condom Using Trends 2007-2015 [Data Source: DGFP]

Years	No. of received services
2007	8401925
2008	14971797
2009	16158018
2010	17879122
2011	19378572
2012	19995273
2013	20558220
2014	21277567
2015 (Jan-May)	9039937

Table 1 pointed that the condom using trends in Bangladesh from 2007 to 2015 where the uses of condom were lower firstly in 2007 but observing the data from 2008 to 2014, it noticed that the number of condom using services increases every year. In 2015 from January to May, there were comparatively more condom users found than other years.

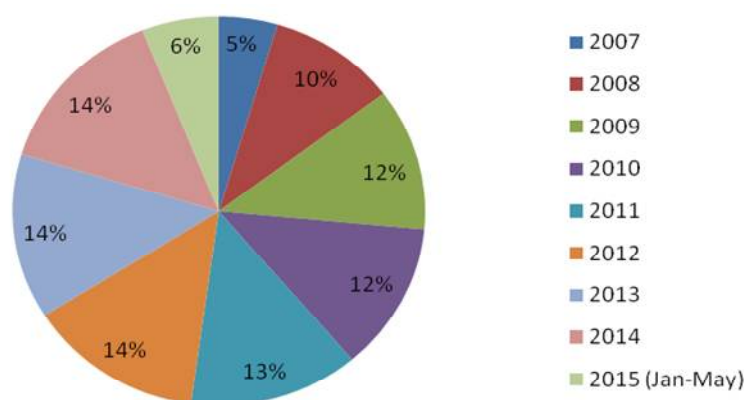


Figure 2: Injectables Using Trends 2007-2015 [Data Source: DGFP]

Figure 2 represents the total number of injectables used in Bangladesh by the accessibilities from 2007 to 2015 where the highest number of injectables received in 2012, 2013 and 2014 similarly; secondly the services received in the year of 2011, after all the trends from 2007 to 2015 it has been increasing every year using injectables.

Table 2: IUD and Implant Using Trends 2007-2015 [Data Source: DGFP]

Years	No. of IUD received	No. of Implant received
2007	3907946	1659671
2008	7719569	4264235
2009	8592611	4616326
2010	7989051	3984057
2011	8556732	5768915
2012	9062735	7386533
2013	8729812	8365746
2014	9067348	9542896
2015 (Jan-May)	3903480	4445270

Table 2 represents the Intrauterine Device (IUD) and Implant received using trends in Bangladesh; it has found that received IUD and Implant in 2007 were not very poor in numbers; but 2008 and 2009 respectively the received services were increased and in 2010 the uses both IUD and Implant decreases. Then IUD uses also decreased in 2013 but 2010 to 2015 (January -May) the uses were comparatively increasing every years. On the other hand, after 2010, receiving Implant services were in increasing trends in Bangladesh up to date.

Table 3: Vasectomy and Tubectomy Using Trends 2007-2015 [Data Source: DGFP]

Years	No. of Vasectomy received	No. of Tubectomy received
2007	2541098	10777173
2008	5137389	20740939
2009	5904264	21955389
2010	6577187	21663187
2011	7594473	22989368
2012	8713130	24388361
2013	8942310	24114439
2014	9491956	25096918
2015 (Jan-May)	4093858	10763618

Table 3 shows the vasectomy and tubectomy using trends in Bangladesh from 2007 to 2015 where it has found that using vasectomy in Bangladesh is in increasing trends from 2007 to 2015 (Jan-May) that means every year the received vasectomy is being increased than the previous year. On the contrary, receiving tubectomy service is also in increasing trends in Bangladesh every year from 2007 to 2015.

Discussion

Among developing countries of the world, Bangladesh has achieved a remarkable success of reducing maternal and child mortality that were possible because of increasing family planning services and their accessibilities, which played a significant role to decrease fertility. By the study of Roy and Rahman, (2000) observed that CPR declines the total fertility, which is associated with maternal and child mortality but family planning decreases the fertility. Others, another study pointed that family planning program decreases abortion and pregnancies so that maternal and child mortality reduced (Rahman et al., 2001) and also Saha and Bairagi, (2007) found that CPR reduces the number of abortion rate.

Bangladesh introduced seven birth control methods; they are oral pill, condom, injectable, IUD, implant, vasectomy and tubectomy. Among these methods five methods are for women and only two methods are for men. From 2007 to 2015 (Jan-May) in Bangladesh, the study found that using oral pill is in increasing process among rural and urban oral pill service receivers but the notable point is here that in 2007 the using trends of oral pill were so much distinct than after 2008 and the uses of oral pill were in 2015 and also using condoms were lower in 2007 but observing the data from 2008 to 2014, it has found that the number of condom uses increases every year with becoming very popular among other contraceptive methods. By the study of Kamal and Islam, (2010), it has found that CPR among currently married non-pregnant women was 61% and the prevalence of modern methods was 49% where the oral pill and the periodic abstinence were the most preferred modern and traditional methods respectively those work as effective family planning program to reduce the TFR in Bangladesh. On the other study of Phillips et al., (1982) pointed that contraceptive services including pills, condoms, IUDs, sterilization, and injectables are thirty three percent of eligible couples who are using contraception and as a result the overall fertility declines of about 25 percent.

On the other hand, the number of injectables is using in Bangladesh increasingly from 2007 to 2015 where the highest number of injectables received in 2012, 2013 and 2014 respectively but the study revealed that the injectables using trends have been increasing every year interestingly. And IUD and Implant using trends in Bangladesh, it found that using IUD and Implant contraceptive methods were lower numbers in received firstly but after few years they became dependable among the contraceptive receivers than other methods. Besides, vasectomy and tubectomy using trends in Bangladesh from 2007 to 2015 were also in increasing in numbers among rural and urban modern contraceptive methods acceptors. Rele, (1992) observed that the percentage of married women in reproductive ages using contraception has been rising steadily in all countries in the mid 1980s was 61.7% in Sri Lanka, 38.7% in India, 25.3% in Bangladesh, 15.1% in Nepal, and 9.1% in Pakistan.

Conclusion

Family planning program increases maternal and child health services in doorstep for all rural as well as urban people in Bangladesh. From 2007 to 2015, it has found by this study that contraceptive using acceptors are being increased every year comparatively than previous year so that the result of making health services and their accessibilities reduced maternal-child mortality and morbidity and also it resulted overall well-being of health status among the people of Bangladesh; after all, there are many steps, which should cross to get total health status accessible for all of the people in Bangladesh. Now it is observed by this study that Bangladesh belongs to comparatively better overall health and maternal health status than other many developing countries of the world and also found that contraceptive using trends in Bangladesh are in higher and sustainable condition because of good family planning program's monitoring and evaluation. Interestingly, the another finding of this study is that temporary methods are

used more than permanent contraceptive methods but day by day permanent methods are being increased both men and women.

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