

Understanding Contraception Use among Muslims of India, Pakistan and Bangladesh

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Introduction

Influence of religion in determining the social outcomes have long been a matter of academic interest for social scientists across the globe. Within social demography, religion is frequently cited as an important factor forming the basis of one's identity and hence being an indispensable part of the culture, religion often finds central place in the study of population dynamics. Religious differentials in fertility are, perhaps, the most debated issue in this regard. Various religious doctrines are expected to differ considerably with respect to their pro-natalist slant and acceptability of contraception and abortion (Bhat and Zavier, 2005). Values and practices placed on a list of demographic parameters like monogamy, celibacy, virginity, divorce, remarriage, marriageable age, sexual abstinence that could have intended and unintended effects on fertility may also differ across various religions communities. For example, Hindu-Muslim differentials in fertility, to an extent, may be attributable to widow remarriages and duration of sexual abstinence after childbirth (Bhat and Zavier, 2005). However, among all the predictors of Hindu-Muslim growth differentials, less use of contraceptives among eligible Muslim women has repeatedly been cited as the pivotal factor. Morgan *et al.* (2002) in their famous comparative study of fertility differentials among Muslims and non-Muslims in four Asian countries concluded that across most pairs of settings, Muslims have more children, are more likely to want another child, and even if they want no more children, are consistently less likely to use contraceptives. Bhat and Zavier (2005) also viewed that in India the differences in the use of contraception and in its method mix can explain almost all of the current difference in Hindu-Muslim fertility. A great deal of attention has been focused on the

influence of Islam on reproductive choices because high levels of fertility characterize the majority of Muslim communities (Ahmed, 1985; Bose, 2005; Bhagat and Praharaj, 2005; Chattopadhyay, Bhagat and Roy, 2004; Kulkarni and Alagrajan, 2005; Nagi, 1984; Obermeyer, 1994). This high growth rate of Muslim population has given a new political dimension to the whole family planning programme and draws the attention of the researchers on the practice of contraceptives in Islamic jurisprudence.

In common parlance, it is often argued that rejection of family planning by Muslims is mainly on the grounds of religious beliefs. The study conducted by Khan (1974) among the Muslim couples of the Kanpur City revealed that the less acceptance of family planning is mainly attributable to religion and not to any kind of ignorance and/or fear of those methods. They further observed that a substantial number of acceptors also believed that acceptance of family planning by them actually go against their religion.

Like many religions, Islamic doctrine takes an ambiguous stance regarding women's autonomy. While the sacred religious texts emphasize the equality of all believers before God, a clear differential exists between rights and duties of men and women in societies, which makes the process of interpretation complicated. Traditional interpretations emphasize those passages in the Quran that give women a lower valuation vis-à-vis man. Contrasting Islam with Buddhism and Hinduism, Caldwell (1986) opined that the poor performance of Islamic countries in terms of major demographic and health indicators is the result of the influence of their religion on the societal values related to women and children. A recent study conducted by Hakim, Salway and Mumtaz (2003) in Pakistan came out with the result that women's autonomy plays an important role in determining the uptake of contraception. However, the concept of "autonomy" is multidimensional and its definition varies among authors. Some have focused on "private concerns" (Dyson and Moore, 1983), others extend their definitions to include the capacity to act in the public realms of the labour market and social structures beyond the household (Jejeebhoy, 1995). In most of the Islamic societies women are confined to the household activities only and are bound to follow the "purdah" system. It exerts a clear negative impact on women's education including

awareness and use of contraception and receptivity to “new technologies”. The widespread illiteracy among people created superstitions and misconceptions in the society. The stereotype view of the community that only females were responsible for childlessness played a leading role in women’s status. According to Robinson (1996) childless women faced often-social opprobrium and almost all women’s status and her security are tied to her husband and sons. Thus the risk and uncertainty vested to women in the strong, patriarchal Islamic society reveals sufficient incentive for higher fertility and less use of contraceptives (Chattopadhyay and Goswami, 2006).

However, alternative evidences refuting the conventional thinking regarding the impact of Islam on reproductive choices are not negligible. Obermeyer (1994) was of the view that on the basis of religious dogma it would be difficult as well as unethical to substantiate the claims that Muslims are more pronatalists or less approving contraception than the other groups. He opined that the impact of Islam on reproduction is largely a function of political context in which the religious beliefs interact with the demographic one and decides the outcome. The ways in which the ethical codes of the religions are translated into policies have been determined by the ideology of the groups in power and influenced by changes in economic, political and social spheres. Another comparative study (Knodel *et al.*, 1999) of Muslims and Buddhists in Thailand has shown pretty high differentials regarding reproductive behaviour among Muslims by region and language group. On the other hand, striking similarities are found between groups sharing a common dialect and culture.

From the above discussion it seems to be very much clear that Muslims across the different parts of the world do not behave in any similar fashion. Of course, some influence of religion being there, the socio-political and policy environment determines the outcome. The circumstances have changed a lot in the recent past. Vigorous family planning programme is in the center stage of the policy environment in almost all the developing countries, irrespective of the dominant religion they have. Glaring example of this is Indonesia. In spite of being a Muslim dominated country, it has shown splendid performance in achieving the major demographic goals via that of contraception use. But the increase in contraceptive use over time within a particular

religious group residing at different places is the result of complex mechanism. It may be either due to change in propensity to use contraceptive or due to changes in composition of population, that is, all round development in the socio-economic and health sectors. However this mechanism of change associated with contraceptive use cannot be generalized on the basis of findings from numerous research undertaken elsewhere as it is very much region-religion specific. The magnitudes and directions of covariates explaining contraceptive use are also likely to vary within and between regions. To have a better understanding of covariates explaining contraceptive use we need to carry out region-religion specific analysis. It is towards this objective that we have taken up to investigate and explain the covariates responsible for contraceptive use among Muslim women in the three different regional settings of Bangladesh, India and Pakistan and also try to examine the differentials in the achievements in the light of their similar historical background of family planning program.

Background

Before going in-depth of these regional analyses, let us have a quick look of the historical and socio-political background as well as the background of the family planning in these three neighbouring settings. Undivided Pakistan came into existence in 1947 after attaining independence from the undivided union of India. This partition occurred mainly in the name of religion. Indian Muslims were supposed to get transferred to Pakistan. However, unlike Pakistan, India took a secular stance at that time and the result is that Muslim forms the second largest religious community in India. Until 1971, the undivided Pakistan has two separate wings known as East Pakistan and West Pakistan. These two wings shared the same governance and administrative structure and were bound by the common religion Islam. But language and other cultural differences created internal tensions from the very outset. The outcome was civil war in 1971 and further division of Pakistan into two parts- East (now known as Bangladesh) and West (known as Pakistan). The leading issue contributing to the partition of Pakistan into East and West Pakistan was language. Bengali dominated in East Pakistan by Bengali speaking Muslims while Urdu is the state language of the western wing.

Before partition, East and West Pakistan were the parts of a common socio-economic environment. Undivided Pakistan was a poor and predominantly rural country with an agrarian base of economy. Both the wings, lying on the periphery of the Indian sub continent served as suppliers of raw materials and was totally dependent on the industrial finished products produced in the economic centers of northern and western India. This economic backwardness leads forward to unsatisfactory performances in the social frontiers. Table 1 summarizes some of the major socio-demographic indicators of India, Pakistan and Bangladesh for the period 1975- 2005, which clearly points to the poorer performance of these countries at their infancy.

East and West Pakistan had a common population policy and family planning programme for the crucial first five years of 1965 to 1970. Though there were some differences in practices, the approach followed were the same and so is the outcome. From the mid 1970s the entire scenario was changing when Pakistan and Bangladesh took divergent demographic routes. In Bangladesh contraceptive prevalence rose and fertility started to decline steadily whereas in Pakistan contraceptive prevalence remained static at very low levels and fertility actually appeared to be rising. These divergences were more pronounced in the nineties. Fertility transition in Bangladesh is unique, both in terms of its onset and pace. It is the poorest country in this arc of Asian countries with declining fertility apparently catalyzed by the activities of a national family planning programme and indeed the poorest country in the world with sustained fertility decline (Barkat-e- Khuda et. al., 1996). Causal relationship of sharp fertility decline is really complex in a region like Bangladesh, especially considering the unfavourable socio-economic condition and the Islamic setting as the conventional understanding is that Islam does not allow family planning and also denies women from education and autonomy (Jejeebhoy and Sathar, 2001).

As revealed by Table 1, Pakistan's position, in terms of GDP per capita was far better compared to Bangladesh as well as India in the nineties. The country experienced a much faster growth in per capita income, broadening of the industrial base and a larger proportion of population living in urban areas. Despite of that fertility rates, although declining apparently, were much higher in relation to other South-Asian

nations and in relation to conventional measures of its socio-economic development such as income and urbanization (Tsui, 1996). Moreover, in Pakistan the gap between reproductive aspiration and reproductive outcomes remained relatively stable for a lengthy time period without any significant change in contraceptive prevalence.

Hence the two extreme cases of Bangladesh and Pakistan refuted the well-accepted declaration of 'Development is the Best Contraceptive'. Bangladesh is the example where without significant development in the social frontiers fertility regulation is practiced and Pakistan, on the other end, revealing poor agreement between economic and demographic indicators. Economic advancement in Pakistan is not translated into socio-demographic well being of its mass keeping the literacy rate and use of contraceptives almost stagnant at a very low level. Infant mortality being high, no incentive literally proved to be sufficient for fertility decline and higher acceptance of contraceptives. India stands in the mid-way of these two extreme cases the differential acceptance of the family planning among different religious groups has always been a well-debated issue in this land of diversities. Acceptance of fertility regulation is considerably less even in the demographically most advanced states of India. Being a secular country since independence, this scenario is quite disappointing even after more than fifty years of independence.

Table 1: Trends in socio-economic and demographic indicators of Pakistan, India and Bangladesh, 1978-2003.

Indicators	Pakistan				India				Bangladesh			
	1975-1980	1985-1990	1995-2000	2000-2005	1975-1980	1985-1990	1995-2000	2000-2005	1975-1980	1985-1990	1995-2000	2000-2005
Population size (millions) ^a	80.8	110.9	142.7	161.2	688.9	846.4	1016.9	1096.9	85.0	109.4	137.9	152.6
Population growth (percent per year)	2.79	3.06	2.62	2.44	2.08	2.04	1.76	1.51	2.46	2.48	2.23	2.02
Life expectancy at birth (years)	51.0	55.0	59.0	61.0	52.9	57.4	62.1	63.9	46.9	53.0	58.4	61.4
Total fertility rate	6.28	6.08	5.48	4.83	4.83	4.15	3.45	2.76	5.60	4.75	3.95	3.21
Infant mortality rate (deaths/1000 births)	132	114	95	87	129	93	72	64	138	104	78	64

Table 1: (Continued)

Indicators	Pakistan				India				Bangladesh			
	1975-1980	1985-1990	1995-2000	2000-2005	1975-1980	1985-1990	1995-2000	2000-2005	1975-1980	1985-1990	1995-2000	2000-2005
GDP per capita (PPPUS\$) ^b	(1862)	(2160)	(1715)	(2097)	(1072)	(1240)	(2077)	(2892)	(872)	(1290)	(1563)	(1770)
Adult literacy rate												
Total	(35.0)	(36.4)	(44.0)	(48.7)	(48.0)	(50.6)	(55.7)	(61.0)	(35.0)	(37.0)	(40.1)	(41.1)
Female ^c	(21.0)	(23.0)	(28.9)	(35.2)	(34.0)	(36.0)	(43.5)	(47.8)	(22.0)	(25.0)	(28.6)	(31.4)
Televisions per 1000 population ^d	(17)	(20)	(88)	(-)	(32)	(40)	(69)	(-)	(5)	(-)	(7)	(-)

Sources: World Population Prospects, 2002.

Human Development Report, 1993, 1996, 2000, and 2005.

a: Population size is presented at the end of the five years time period; 1980, 1990, 2000, and 2005.

b,c,d: Figures in parenthesis are given at the year 1990, 1993, 1998, and 2003.

It is necessary to remember in this regard that Muslim being a minority group in India, may not always be comparable with those of Bangladesh and Pakistan in terms of their behaviour and reactions towards reproductive choices. Social scientists, since long back, put forward certain hypotheses to explain the religious differential in fertility parameters. The observed differential may be due to differences in socio-economic characteristics (known as characteristics hypothesis) (Jones and Nortman, 1968; Goldscheider and Uhlenberg, 1969) or because of the theological prescriptions on demographic parameters (known as particularized theology hypothesis or 'pure religion' effect). Last but not the least, is the 'minority status hypothesis', which calls for a particular kind of fertility behaviour depending on the social acceptability of fertility regulation (Goldscheider and Uhlenberg, 1969). While some will restrict family size in order to enhance their competence vis-à-vis the majority by increasing the chances of social mobility, some may try to get rid of it by forging worldwide solidarity with members of their own clan (Bhat and Zavier, 2005). In the present setting it is expected that the pure religion effect will be much stronger in the Muslim dominated countries while Muslim fertility regulation is a matter of political concern in India. Still we have considered Indian Muslims along with those of Bangladesh and Pakistan keeping in mind the historical, political and cultural connections of these countries.

Islam on Family Planning

It is essential to have a brief description on the outlook towards family planning in the Islamic realm. Differential pattern of acceptance of contraceptives among Muslims in diverse socio-regional set of connections and even in identical religious set-up (like Bangladesh and Pakistan) calls for a discussion of the values that religion itself placed on family planning. The common perception that Islam does not allow family planning is highly misinterpreted in the light of several views put forth by the holy Quran, the highest source of Muslim law, which deals with the major aspects of human life. Population explosion is a recent phenomenon. During the evolution of Islam and the time when Quran came into existence, population growth was never considered as a hindrance to the development of the society and probably due to this importance of family planning was not realized. Perhaps this may be the plausible reason of why Quran was silent regarding the adoption of family planning measures. Islam is not only a religion, rather it is a comprehensive code of living. Family Planning as understood in the Islamic doctrine is, "the use by spouses, by mutual agreement and without compulsion, of safe and lawful means to delay or precipitate pregnancy in such a way as to suit their health, social and economic circumstances, within the framework of responsibility towards their children and themselves" (Conclusion of the Rabat Conference on Islam and Family Planning). It aims at promoting responsible parenthood by enabling couples to space their children through mutual agreement by all legitimate and safe means within the framework of Islam. Quran gives more emphasis on well-being of children rather than bearing of large number of children in order to enable countries to plan for their people so that they will have a high quality of life and thereby help to create happy, stable and healthy families. Religious doctrines on sensitive issues are little understood by the common mass. Often they are misguided by the misinterpreted versions of these subtle issues. The most common verses, which are frequently quoted in order to prohibit the adoption of family planning measures, are those where physical killing of children was forbidden. The Arabs used to kill their children for three reasons, viz. economic stringency, propitiating the gods and the self-imposed shame of searching for a son-in-law (applicable only in the case of girl killing) (Khan, 1974). In this backdrop of this cruel practice of Arabs this dictation of Quran

was advanced to abandon the physical killing not the conception. However, religious leaders often put their argument in the direction that adoption of family planning leads to minor infanticides. To satisfy their vested interests, people in power are often found to give the wrong impression about the theological content of religion and that is the case with most of the Islamic countries, which resulted in historically high growth of the community.

Methodology

To accomplish the desired objectives the data have been used from the Pakistan Demographic and Health Survey (PDHS-1990-91), Bangladesh Demographic and Health Survey (BDHS-1993-1994) and National Family Health Survey (NFHS) of (1992-93) for India. Since this study is based on Muslim women, only ever-married Muslim women aged 15-49 have been selected for this study from Pakistan, Bangladesh and India. The ultimate sample size for Pakistan, Bangladesh and India are 6,611, 8,430 and 9,485 women respectively. These surveys collected detailed information of socio-economic characteristics, maternity history and family planning attitudes of women. There is a series of question regarding the use of contraceptives by which it is easily accessible that which method women are currently using according to their different socio-economic and demographic characteristics.

A two-step choice model has been introduced in order to understand the dynamics of contraceptive use among Muslim women in these three neighbouring settings. At the first step of this two-step model, women decide whether or not to use contraceptive at all. The observed value of the response variable is to be one if the woman chooses to use contraception (without having yet decided which method) and zero otherwise. 'P' denoted the probability of using contraception. If the outcome is to use contraception, the second step involves the choice of a particular method. The second binary logit model is fitted to that subset of women who have already decided to use contraception in the first step. We defined the observed value of the response variable to be one if the woman chooses permanent methods (sterilization) and zero if a

woman decides to choose temporary methods (other methods). Defined P' which is the conditional probability of using “sterilization” given that woman has decided to use contraception irrespective of method. So, PP' is the probability that a woman in the original sample chooses to use contraception and then chooses sterilization and $P(1-P')$ is the probability that a woman chooses to use contraception and then chooses “temporary method”.

Now the choice of a particular method is a bit complex in Islamic societies in the light of the prevailing reservations against sterilization. The choice of permanent or spacing method is greatly affected by this judgment. The model has been employed keeping in view the distribution of Muslim population in three different settings and of course, the effectiveness of the model is limited by the contraceptive options available locally. For instance, at the worse if there were no spacing methods available, Muslim women would prefer to use traditional methods because of its popularity among Muslims. Around three, six and seven percent Muslims women are currently using this method in Pakistan, India and Bangladesh respectively. In the last, as reported by Retherford and Choe (1993) that the results obtained by one step process (multinomial logit regression) and two-step process do not differ very much.

Predictors of contraceptive use

Taking into account theoretical considerations as well as the results from a series of exploratory models, independent variables considered in the analysis were: residential status (rural/urban), women's present age (15-34/35-49), couple education (both non-literate/both are educated/either has some education), number of living sons and daughters (sons= daughters/ sons>daughters/ sons<daughters), experienced of child loss and parity (never experienced child loss and parity<=4/never experienced child loss and parity>=5/ever experienced child loss and parity<=4/ever experienced child loss and parity>=5), exposed to mass media (no/yes), working status (no/yes) and electricity in the house (no/yes).

Findings

Table 2 demonstrates the ever use of family planning methods in India, Pakistan and Bangladesh. More than sixty percent of the women in Bangladesh had reported the ever use of contraception at some point of time in their reproductive career whereas only two-fifths and one-fifths of the Muslim women had ever adopted contraception in India and Pakistan respectively. Among the ever-users of contraceptive, a substantially higher proportion of women (58%) had used any modern family planning method in Bangladesh, while a moderately lower (31%) and extremely lower proportion (16%) of Muslim women from India and Pakistan respectively fall in this category. However, it is interesting to note that the use of traditional method is highest among Indian Muslims women (11%) compared to their counterparts in other two settings.

Table 2: Percentages currently married Muslim women ever used contraception, circa 1990

Method	Pakistan	India	Bangladesh
Any method	20.4	40.9	64.2
Used modern method	16.0	30.8	57.9
Used only traditional method	4.4	10.1	6.3

Source: Pakistan: DHS-1990-91, India: NFHS-1992-93, Bangladesh: DHS-1993-94.

Table 3 depicts that current use of contraception by specific methods. As observed for ever use, current use is also highest in Bangladesh (42 percent), moderate in India (29 percent) and the lowest in Pakistan (11 percent). Women in Bangladesh were more prone to use modern spacing methods (pills, injectables, IUD) whereas their share was almost negligible in India and Pakistan. It also shows that female sterilization is the most dominant method in India (14 percent) whereas only 7 percent women in Bangladesh and less than 4 percent women in Pakistan are using it. Percentage of sterilized males is also higher in India. The fact that no male in Pakistan is sterilized

may indicate towards the less male involvement in family planning and more male dominated structure of the society. It may also be noted that the percentages of current users of traditional methods (mostly rhythm method) is about 6-7 per cent in India and Bangladesh while in Pakistan these are used by less than 3 per cent of the couples.

Table 3: Percentages currently married Muslim women currently using contraception, circa 1990

Method	Pakistan	India	Bangladesh
a. Any method	11.4	28.5	42.1
b. Any modern method	8.7	22.5	34.8
(i) Condom	2.6	3.0	3.2
(ii) Pill	0.7	1.8	16.7
(iii) Injectable	0.7	0.1	4.3
(iv) IUD	1.2	1.8	2.0
(v) Female sterilization	3.5	14.3	7.4
(vi) Male sterilization	0.0	1.5	1.2
c. Any traditional method	2.7	6.0	7.3
(i) Rhythm	1.2	4.0	4.3
(ii) Withdrawal	1.2	1.8	2.0
(iii) Other	0.3	0.2	1.0

Source: Pakistan: DHS-1990-91, India: NFHS-1992-93, Bangladesh: DHS-1993-94.

Table 4 which shows the current use of family planning methods among Muslim women, in all the three settings by a few selected background characteristics, clearly indicates that the current use of contraception is around two times higher among women residing in the urban areas of Bangladesh as compared to those of Pakistan (50% in Bangladesh and 25% in Pakistan). Again, women who have already completed their fertility or on the way towards completion are three times more likely to use contraceptives in Bangladesh compared to the Pakistani women in this age group (45% in Bangladesh and 15% in Pakistan), keeping Indian Muslim women in a moderate position (35%). Number of living sons is also expected to shape the attitude towards fertility regulation measures, especially given the South Asian context of 'son-

preference'. It is evident from our study that women with more number of living sons as compared to their counterparts with more number of living daughters are more prone to adopt family planning methods in all the three settings. However, women with equal number of living sons and daughters in Bangladesh have revealed more preference towards the acceptance of fertility regulation measures compared to their counterparts in other two settings. With the increase in the educational attainment of couples the use of contraceptives also increases and as per expectation it is highest when both are educated in a couple. However, what is interesting to note in this regard is that contraceptive prevalence is pretty high (37%) among non-literate couples in Bangladesh compared to those in Pakistan (6%) and India (22%). This may point towards the successful implementation of the Family Planning Programme in Bangladesh where the acceptability of the programme has trickled down to the socially deprived section of the community. Child mortality has always exerts strong influence on the fertility level. Our findings show that even after eliminating the impact of parity, the prevalence of contraceptive use was more among those women who had never experienced child loss. Considerable difference, as far as the use of family planning method is concerned, can be observed between women who were at parity five or more and who had experienced child loss compared to their counterparts in the same parity but did not experience child loss. Women, who were exposed to mass media and electricity, were more likely to adopt contraception. The causal relationship between use of contraceptives and working status is not revealing any conclusive pattern in the present study. No difference exists in the adoption of contraceptive among working and non-working Muslim women in India, whereas most of the working women were adopting contraception in Bangladesh and the result becomes reverse in the case of Pakistan.

Table 4: Distribution of currently married Muslim women who are practicing contraception by selected characteristics of Pakistan, India and Bangladesh

Variables	Pakistan		India		Bangladesh	
	Current Use (percent)	Total	Current Use (percent)	Total	Current Use (percent)	Total
Place of Residence						
Rural	5.6	4592	25.0	5930	40.8	7163
Urban	24.6	2019	34.5	3555	49.5	1267
Age						
15-34	8.9	4169	25.8	6520	40.9	6101
35-49	15.7	2442	34.6	2965	45.2	2329
Couple education						
Both no education	5.9	3083	21.5	4785	37.4	3207
Both are educated	27.1	1214	39.3	796	49.9	2864
Either has some education	10.5	2314	34.9	3904	39.0	2359
Number of living sons and daughters						
No. of living sons = No. of living daughters	9.0	1892	22.0	2784	35.0	2582
No. of living sons > No. of living daughters	13.0	2489	34.6	3553	47.4	3097
No. of living sons < No. of living daughters	11.7	2230	27.5	3148	42.8	2751
Experienced of child loss and parity						
Never experienced child loss and parity <=4	8.4	3321	26.9	5491	41.4	4624
Never experienced child loss and parity >=5	19.2	1338	37.3	1361	52.1	662
Ever experienced child loss and parity <=4	6.5	571	22.3	940	35.8	1281
Ever experienced child loss and parity >=5	13.0	1381	30.2	1693	44.6	1863
Exposed to mass media						
No	5.1	3869	20.3	4571	38.2	4668
Yes	20.3	2742	36.2	4914	47.0	3762
Working status						
No	12.0	5500	28.3	7892	41.0	7080
Yes	8.5	1111	29.6	1593	47.9	1350
Electricity						
No	2.9	2518	22.2	4434	40.3	6809
Yes	16.7	4093	34.1	5051	49.9	1621

Table 5 depicts the distribution of users by methods (permanent/temporary methods) in different sub categories. This table clearly indicates that unlike India, most of the women are using spacing methods in Bangladesh and Pakistan. Use of spacing method is higher irrespective of place of residence, age, couples' educational attainment, number of living sons and daughters, work status etc. For some categories, even if, the use of temporary methods are higher, the gap in the use of permanent and temporary

methods are quite less in India whereas the same is quite considerable in Bangladesh and Pakistan. This may indicate towards the fact that the scope of temporary methods is yet to be explored in India.

Table 5: Distribution of users by different method among currently married Muslim women according to selected characteristics of Pakistan, India and Bangladesh

Variables	Pakistan			India			Bangladesh		
	Current use (percent)		Total	Current use (percent)		Total	Current use (percent)		Total
	Permanent methods	Temporary methods		Permanent methods	Temporary methods		Permanent methods	Temporary methods	
Place of Residence									
Rural	32.8	67.2	256	54.8	45.2	1480	21.7	78.3	2923
Urban	28.8	71.2	498	55.7	44.3	1227	14.2	85.8	627
Age									
15-34	13.3	86.7	369	45.6	54.4	1681	13.5	86.5	2497
35-49	46.4	53.6	385	70.9	29.1	1026	36.6	63.4	1053
Couple education									
Both no education	42.0	58.0	181	59.5	40.5	1030	34.1	65.9	1199
Both are educated	20.4	79.6	329	58.8	41.2	313	9.3	90.7	1430
Either has some education	35.0	65.0	244	51.1	48.9	1364	19.7	80.3	921
Number of living sons and daughters									
No. of living sons = No. of living daughters	31.2	68.8	170	51.8	48.2	612	20.2	79.8	904
No. of living sons > No. of living daughters	33.4	66.6	323	59.3	40.7	1228	22.2	77.8	1469
No. of living sons < No. of living daughters	25.4	74.6	261	51.8	48.2	867	18.2	81.8	1177
Experienced of child loss and parity									
Never experienced child loss and parity <=4	12.9	87.1	280	49.2	50.8	1479	15.9	84.1	1916
Never experienced child loss and parity >=5	40.1	59.9	257	67.3	32.7	507	21.2	78.8	345
Ever experienced child loss and parity <=4	30.6	69.4	37	56.7	43.3	210	27.2	72.8	459
Ever experienced child loss and parity >=5	42.8	57.2	180	60.1	39.9	511	26.6	73.4	830
Exposed to mass media									
No	35.7	64.3	196	53.6	46.4	926	24.4	75.6	1781
Yes	28.3	71.7	558	56.0	44.0	1781	16.3	83.7	1769
Working status									
No	30.5	69.5	660	51.6	48.4	2236	17.7	82.3	2904
Yes	28.7	71.3	94	72.4	27.6	471	32.5	67.5	646
Electricity									
No	36.1	63.9	72	48.4	51.6	983	23.1	76.9	2741
Yes	29.5	70.5	682	59.0	41.0	1724	11.0	89.0	809

Table 6 reveals the adjusted odds ratios of current contraceptive use versus non-use and using sterilization method versus other method among currently married Muslim women by selected background characteristics in Pakistan, India and Bangladesh. Two intermediate multiple classification analysis (MCA) tables (not

shown) have been constructed with the help of two binary logit models as reported in Table 6.

Table 6: Adjusted odds ratio of current contraceptive use versus non-use and using sterilization method versus other method among currently married Muslim women by selected background characteristics in Pakistan, India and Bangladesh

Variables	Pakistan		India		Bangladesh	
	Odds Ratio		Odds Ratio		Odds Ratio	
	Contraceptive use versus non use	Using sterilization method versus other method	Contraceptive use versus non use	Using sterilization method versus other method	Contraceptive use versus non use	Using sterilization method versus other method
Place of Residence						
Rural @						
Urban	2.35*	1.23	1.13*	0.85**	1.15**	0.97
Age						
15-34 @						
35-49	1.42*	4.54*	1.33*	2.64*	1.01	5.83*
Couple education						
Both no education @						
Both are educated	2.66*	0.51*	2.02*	1.02	1.54*	0.23*
Either has some education	1.32*	0.77	1.67*	0.70*	1.06	0.51*
Number of living sons and daughters						
No. of living sons = No. of living daughters @						
No. of living sons > No. of living daughters	1.22**	0.84	1.80*	1.21**	1.63*	0.99
No. of living sons < No. of living daughters	0.98	0.45*	1.24*	0.80**	1.34*	0.74*
Experienced of child loss and parity						
Never experienced child loss and parity <=4 @						
Never experienced child loss and parity >=5	2.75*	2.60*	1.52*	1.50*	1.50*	0.51*
Ever experienced child loss and parity <=4	0.96	4.02*	0.90	1.29	0.82*	1.39*
Ever experienced child loss and parity >=5	1.99*	2.67*	1.28*	1.08	1.18*	0.54*
Exposed to mass media						
No @						
Yes	1.91*	1.19	1.86*	1.16	1.26*	0.98
Working status						
No @						
Yes	0.80**	0.82	1.19*	2.43*	1.41*	2.19*
Electricity						
No @						
Yes	2.36*	0.72	1.22*	1.73*	1.11	0.62*

Note: * P<= 0.05.

** P <=0.10.

@ denotes reference category.

Table 7, the combined MCA results, shows the adjusted percentage of using contraception by permanent and temporary methods among currently married Muslim women of Pakistan, India and Bangladesh. The use of temporary methods was high as compared to permanent method in Pakistan and Bangladesh whereas this trend was reverse for India. There was persisting rural- urban differential in using of contraceptives and women who were residing in the urban areas had higher chances of using both methods in these countries. However, the differential in the probability of using spacing methods was much higher compared to that of permanent (sterilization) method even after controlling a series of socio-economic and demographic variables. Interestingly, the older women of Bangladesh were more prone to use temporary methods as compared to younger women from India and Pakistan. In a couple, if both husband and wife are educated, the chance of using temporary methods is found to be very high as compared to their counterparts where both have no education or either has some education. This is true for permanent method also in India and Pakistan but the chances of using this method is inversely related with the educational attainment of couples in Bangladesh. If one of them has some education in Bangladesh, the probability of using permanent method becomes very less as compared to couples where both are non-literate. So, it can be inferred that in Bangladesh education provides better opportunity to use temporary methods. Number of living sons was important predictor of contraceptive use in these countries. After controlling all the important factors, women who had more number of living sons as compared to women with equal number of sons and daughters or more number of living daughters, were more likely to go for sterilization as well as temporary methods in all the three countries. But in Bangladesh, the gap between the proportions of women using temporary methods and permanent methods is far more wide compared to that in the other two countries.

Women, irrespective of their parity, who had ever experienced child loss, were more likely to use temporary methods in Pakistan and Bangladesh and as compared to those who had experienced at least one child loss. The possible explanation may be that women adopted permanent measures only when they reached their desired fertility level. Studies on the relationship between contraceptive use and child mortality yield contradictory results. But this findings are consistent with earlier studies that

couples who have experienced the loss of one or more children are less likely to use permanent contraception than those who have not (Heer, 1983; Tuldhar, 1985). Again, van de Walle and Knodel (1980) argue that prior child loss may be a sign of an unmet need for contraception. So, women with prior child loss may be highly motivated to practice temporary methods as happened in the countries of Pakistan and Bangladesh. However, Indian Muslim women who have ever experienced child loss were more likely to adopt permanent methods may be the lack of availability of other methods being the reason.

Exposure to mass media increases awareness, acceptability, and access to family planning services, which in turn may lead to positive attitude towards fertility regulation. In all the three countries women's exposure to mass medias have been playing a definite role in determining the use of fertility regulation measures. Availability of electricity in the household is also considered as a proxy variable for determining socio-economic status of women in the society. Women, who had the facility of electricity, were using more spacing methods as compared to their counterparts of those women who had not been using these facilities in Pakistan and Bangladesh. However, in India, women belonging to electrified households were found be more prone to use permanent methods, the preponderance of this method may be the reason for that. There is no significant difference of the use of temporary methods between working and non-working women in Pakistan whereas in Bangladesh most of the working women were using temporary methods as compared to their counter part of those women who were not working. Unlike Bangladesh, most of the working women in India are using permanent methods.

Table 7: Combined probabilities (in percent) for the two-step choice model of using contraception among currently married Muslim women by selected background characteristics of Pakistan, India and Bangladesh

Variables	Pakistan			India			Bangladesh		
	Permanent methods	Temporary methods	No method	Permanent methods	Temporary methods	No method	Permanent methods	Temporary methods	No method
Place of Residence									
Rural @	1.22	4.12	94.66	14.97	10.84	74.19	6.61	34.80	58.60
Urban	3.12	8.57	88.32	15.25	13.02	71.72	6.95	37.88	55.16
Age									
15-34 @	0.82	5.24	93.94	11.75	13.25	75.00	4.18	37.63	58.18
35-49	3.49	4.91	91.59	21.55	9.21	69.24	16.59	25.57	57.84
Couple education									
Both no education @	1.75	3.54	94.70	13.19	8.64	78.17	10.91	27.08	62.02
Both are educated	2.62	10.32	87.07	21.95	14.11	63.94	4.16	44.38	51.46
Either has some education	1.89	4.99	93.12	16.44	15.34	68.22	6.72	32.72	60.57
Number of living sons and daughters									
No. of living sons = No. of living daughters @	2.09	4.32	93.59	11.97	9.49	78.54	6.12	29.22	64.66
No. of living sons > No. of living daughters	2.24	5.49	92.27	19.90	13.00	67.10	8.06	39.06	52.88
No. of living sons < No. of living daughters	1.12	5.19	93.69	12.74	12.60	74.66	5.70	36.61	57.69
Experienced of child loss and parity									
Never experienced child loss and parity <=4 @	0.76	4.20	95.05	13.33	11.63	75.04	7.49	33.48	59.03
Never experienced child loss and parity >=5	4.00	8.52	87.48	21.19	12.35	66.46	5.18	45.76	49.06
Ever experienced child loss and parity <=4	2.00	2.77	95.23	13.68	9.28	77.04	8.61	27.76	63.63
Ever experienced child loss and parity >=5	3.06	6.36	90.59	16.50	13.28	70.22	4.80	40.16	55.04
Exposed to mass media									
No @	1.22	4.11	94.66	11.22	9.64	79.14	6.32	33.13	60.55
Yes	2.54	7.17	90.29	18.91	14.04	67.05	7.08	37.90	55.02
Working status									
No @	1.83	5.26	92.91	13.70	12.42	73.87	5.72	34.87	59.41
Yes	1.27	4.48	94.25	21.59	8.07	70.34	12.94	36.08	50.98
Electricity									
No @	1.30	2.84	95.86	11.71	12.97	75.32	7.21	34.25	58.55
Yes	2.28	6.96	90.76	17.43	11.16	71.41	5.08	38.81	56.10

Note: @ denotes reference category.

Discussion

The present paper clearly shows that the theological content of Islam is not always the determining factor of any demographic outcome. If religion is the only factor then at least Muslims of Pakistan and Bangladesh may reflect the same performance following the guidelines of their religion (if not Indian Muslims as they are the minority class associated with the perceived insecurities attached to that group). But in reality the scenario is completely different. Bangladesh being one of the poor countries of the

world has reduced fertility much faster than even Indian Hindus (Swaminathan, 2004). It is not very easy to understand the dynamics of sudden and sustained increase in the use of contraceptive in Bangladesh in isolation. In order to understand how Bangladesh came out as the successful one and Pakistan as a confusing failure along with India being successful only in the case of permanent methods, let us look into the divergent demographic paths adopted by these countries.

The dramatic fertility decline in Bangladesh has been attributed primarily to the country's family planning programme. Family Planning was introduced in the country in the early 1950s through the voluntary efforts of social and medical workers and more specifically community based family planning motivators and distributors (popularly known as Local Family Welfare Assistants). Since mid-1970s family planning service delivery has experienced an impressive progress. Cleland *et al.* (1994) pointed out that a strong commitment to develop a good family planning programme 'extends logistical and psychological support for fertility regulation that does not otherwise arise'. The success of temporary methods as a long-term family planning strategy proved to be one of the efficient means to change the fertility scenario.

In most of the developing countries including India permanent method, especially female sterilization is the most propagated method. But Islam has some reservation against sterilization and the impact of religion is the strongest against the same (Amin, Diamond and Steele, 1996). Our findings show that women in Bangladesh are using more spacing method as compared to the irreversible methods. As per Islam, Allah decides the ultimate family size and so this is one of the possible reasons for using more spacing method. It seems that women and their husband are trying to solve the ethical problem by using temporary method rather than permanent methods of contraception. At that time it was good indicative from the program point of view in Bangladesh as women started to bless at least the spacing method.

However, Das Gupta and Narayana (1996) were of the view that fertility decline in Bangladesh is not entirely driven by the family planning programme, rather many significant changes have taken place in the country's society and economy, which

have contributed towards reduced demand for children. These broader structural changes like substantial decline in mortality and mounting population pressure (Kabeer, 1994), growing links between villages and the outside world (Cleland *et al.*, 1994), the major shift in labour force composition away from agriculture and towards a greater diversity of livelihoods may well have facilitated a reappraisal of desired number of children.

Another important dimension of women's status was unfolded with the increase in the proportion of female teachers from 7 percent in 1977-78 to 19 percent in 1991-92 (Bangladesh Bureau of Statistics, 1993). The increase in female teachers made it much easier for female literacy to continue to spread rapidly (Das Gupta and Narayana, 1996).

Moreover, the presence of a large number of non-governmental organizations operating in the rural areas of the country, targeting the population of active women (aged 15 and over) belonging to the functionally landless households, has contributed towards the better performance of the country as a whole in terms of fertility parameters. Some 7000 organizations are registered with the Ministry of Social Welfare. These organizations perform a wide range of activities ranging from agrarian improvement to women's education and employment. Larger rural development groups, such as Bangladesh Rural Advancement Committee (BRAC) or the Grameen Bank came forward from time to time to include family planning and other social welfare component in their programme (Cleland *et al.*, 1994). They designed some programme in order to empower women economically and thus change the traditional attitudes regarding women's role and responsibilities in the society. The activities of Grameen Bank enhance the scope for women to actively participate in the labour force. Thus, economic well being in turn contributes towards the better socio-demographic performance of women by opening up a new era of modernization and increasing the acceptance towards family planning.

The influence of conservative religious leader on personal freedom, female employment often cannot be ignored as it can affect policy framework and the

demographic outcomes of any country in concern. However, sometimes, it is possible to over- estimate the importance of this factor (Robinson, 1996). Many studies showed that in Bangladesh religious leadership has not been very aggressive. As reported by Barkat-e-Khuda *et al.* (1996) that imams had regularly been paid lecture fees for making statements about family planning at the Friday mosque. Nevertheless, mass medias were also used in a very efficient manner since as early as 1975. In stead of waiting for demographic innovators to appear within the community and gradually unfold the success of their new strategies, the innovations were introduced through the media and their success was quickly manifest (Das Gupta and Narayana, 1996). Radio Bangladesh has given 65 minutes daily to population and family planning issues on its national service and 30 minutes on its regional programmes, while television started allocating 120 minutes weekly.

Compared to Bangladesh, Muslims of both India and Pakistan are showing poorer performance as far as the acceptance of family planning is concerned. Despite of having a similar socio-religious set up and better performance in the economic parameters, the poor performance of the country of Pakistan towards the acceptance of contraceptives is disappointing. The first and foremost reason is the existing fertility demand, which acts as a fundamental force limiting contraceptive prevalence. The Pakistan Demographic and Health Survey and other survey data from time to time indicate that Pakistani women still want to have around four to five children, on average. As long as this family size ideal prevails, fertility will not fall to low levels in Pakistan and contraceptive prevalence will not attain the relatively high levels now observed in most countries in the South-Asian arc (Sathar & Casterline, 1998). However, even if the current pattern of fertility demand persists, ample scope exists for substantial increase in contraceptive prevalence because a larger fraction of Pakistani women are not practicing contraceptive despite of their keen desire to avoid pregnancy. In other words, there exists huge unmet need in the world (Shelton *et al.*, 1999).

Pakistan launched its first national family planning program in the year 1956. The main limitation of the family planning programme was the 'Cafeteria approach' where couples had choices over number of methods. The most available methods at that

time were mainly surgical contraception both female and male, the IUD, the oral pill, female barrier and spermicidal methods and the condom. However, only first two methods were popular and other methods were more 'clinical' in nature and require trained medical personnel for giving advices regarding the proper usage. But at that time the country had inadequate human resources to support the entire programme. The availability and accessibility of medical staffs and contraceptives was restricted predominantly in the urban centers and methods were more popular with its misconceptions and side effects. Surprisingly, couples were under impression that vasectomy means removal of testicles. Ultimately, all these had affected family planning program adversely and kept contraception use at extremely lower levels. Our results also indicate towards less male involvement in fertility regulation. Husband's opposition always remained a major obstacle in the practice of contraception (Casterline *et al.*, 2001). However, a discernible transformation of men's views towards fertility regulation is underway in Pakistan, which is appeared to be fruitful in narrowing down the gap of husbands' and wives' preferences. Nearly one half of couples are practicing contraception that requires male cooperation (condom, periodic abstinence, withdrawal) (NIPS, 1998).

However, weak management, low coverage and poor quality care etc. have always been highlighted as the pivotal factor leading to the pathetic failure of the earlier attempts to promote family planning in Pakistan. Religious leadership is much more aggressive as well as conservative in this area. Also, unlike Bangladesh, religious authorities were never involved in the promotion of the programme.

Above all the factors, the mischievous social forces have repeatedly been identified as the main obstacle in the acceptance of contraception (Casterline, 2001). Pakistan is basically a class society with strong prevalence of patriarchy in every sphere of life. There are clear segregation of domains of women and men with reproduction clearly falling into the sphere of women (Kazi and Sathar, 1997). Women are still associated with the traditional roles and responsibilities. Their economic activity outside the periphery of homestead is still looked down upon in Royal families. Women who are basically compelled to work because of their economic stringencies are from the

lower stratum of the society. Most of them are unskilled labourers and are bound to take low profile jobs, which do not add anything to their current status. Our study also supports the same argument when it shows that most of the working women in Pakistan are not practicing family planning as fertility regulation comes in the forefront only when income reaches a threshold level. Given this social structure and the poor performance of the supply parameters of family planning services, both the social and economic cost of contraception is high, resulting in very low acceptance of family planning in Pakistan.

To improve the quality of services of family planning, two parallel schemes, one under the Ministry of Health and one under the Ministry of Population Welfare (MoPW) have been started recently. This have been undertaken to establish a network of community-based female workers providing family planning services to women in their homes has been started and the effort is beginning to pay off. Moreover, the National Programme of Family Planning and Primary health care, commonly referred to as the Lady Health Worker Programme (LHWP)- was launched under the Eighth Five Year Plan (1993-98). Lady Health Workers deliver a range of family planning services such as motivating women to practice family planning, providing pills and condoms and referring for injections, IUD and sterilization. Recently government has tried to deliver family planning message by a TV programme “soap opera”. Such type of program is the need of the hour and should be repeated in the near future.

In India, the problem is again something different. As we already know, despite being the first country in the world to adopt family planning it has not shown remarkably better performance as expected from the pioneering one. The knowledge of contraceptive, as evident from the NFHS-2 (1998-99), is nearly universal in the country; almost 99 percent of the currently married women know at least about one modern family planning method. But when it comes to practice, there exists a huge gap. Family Planning efforts in India are limited by a petite basket of choice. Data suggests that sterilization, more specifically, female sterilization is the most propagated method in the Indian Family Planning Programme. Nearly thirty four percent of the currently married women are sterilized. The use of modern spacing methods is remarkably lower in the

country. Given this near-exclusive emphasis on sterilization in the contraceptive method-mix, it is quite natural that the uptake of family planning will be lower among the Muslim women due to religious beliefs. Still our results indicate the highest incidence of sterilized Muslim women in India compared to the other two settings. This is perhaps more due to the lack of the availability of the other temporary methods than the religious tolerance of the Indian Muslim. The use of traditional methods is also higher because of this reason.

Again, Muslims in India are the minority group. Hence their attitude towards limiting the family size is often guided by the political considerations. Sterilization being an irreversible method, women tend to adopt the method only after they have achieved their desired family size. Son preference is also have strong negative impact on the adoption of contraceptives in the Indian society. However, the extent of son preference is expected to be lower among Muslims (Bhat and Zavier, 2005). Government of India has been using electronic and other mass media efficiently to promote family planning. In order to popularize the adoption of contraceptives among the mass in general and among Muslims in particular, the expansion of the basket of choice is of primal importance and appropriate steps should be taken to enhance the use of modern spacing methods. Improvements can be made in the various directions of service deliveries.

Conclusion

Our attempt in the present paper was to examine how the demographic differential in case of a particular indicator, that is, uptake of contraception among women belonging to the same religious community, that is, Muslim in three different regions can be explained. After an in-depth scrutiny of the socio-economic background as well the efforts to increase the acceptability of contraception among the mass, it can be safely asserted that healthy wishes of the concerned authorities are enable to change the conventional outlook even when the ambience is not that supportive (as is the case with Bangladesh). The achievement of Bangladesh brings a very clear-cut question in

the forefront that whether the experiences of Bangladesh can be replicated for the Muslims of India and Pakistan.

The pre-requisite to adopt the 'Bangladesh Model' in a country like Pakistan is the attitudinal change of the society itself. What the activities of non-governmental organizations and the Grameen Bank have done in Bangladesh will be quite unlikely in Pakistan if it takes the existing conservative stance in the name of social status. In Bangladesh, women, irrespective of their social status and religion have come forward to accept the new changes occurring in their surroundings. That is the reason why we find the practice of contraceptives is comparatively much higher even among illiterate couples in the country as against their counterpart in the other two regions. Unless and until the shackles of this class structure are broken no model will be helpful.

Again, a cause specific analysis will clearly show that the resistance against contraceptives is not that high as it is against sterilization. Both in India and Pakistan there remain a wide potential to spread the temporary methods. It requires a reappraisal of the existing method-mix.

Moreover, it is very necessary to empower women to negotiate reproductive choices and to weaken the predominant role of men in reproductive decision-making. Although the gender balance of power may follow from larger social change, encompassing expansion of schooling and paid employment, the expansion and improvement in the reproductive services that among other thing provide women with knowledge about how, when and where family planning methods can be obtained the need of the hour (Casterline et al., 2001).

Focused IEC campaigns, through the mass media and local efforts should be conducted in order to eradicate the individual and social obstacles of practicing family planning. This will also be directed to lessen the religious misconceptions in this regard. These will make people understand that practicing contraception is not contrary to religion, rather it indicates an ethically sound behaviour and guided by the best interests of women.

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