

Inconsistencies in Qualitative and Quantitative Reports Of Fertility Preferences among Couples in Rural Bangladesh

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Abstract

Fertility preferences are used in many national-level surveys to assess prevalence of unintended pregnancy, a key measure of women's status and an indication of couples' success in achieving their childbearing goals. This study compares fertility preferences from a 1998 survey with pregnancy surveillance data (1998-2004) for 20 couples living in rural Bangladesh. A qualitative component was conducted with these same couples in 2005 to further explore the discrepancies between their stated preferences and subsequent fertility. These data indicate a high level of discordance between fertility preferences and subsequent fertility, especially among couples who disagreed in 1998. Further investigation of the qualitative data revealed a range of circumstances that prompted shifts in fertility preferences or led to the acceptance of a subsequent pregnancy, including child sickness or death, child sex composition, fatalism, ineffective contraceptive use, and covert actions by spouses. This study confirms the importance of incorporating data from both husbands and wives in fertility measures by illustrating the differential motivations and benefits of childbearing for men and women. Findings from this study emphasize the need for family planning programs to work in combination with larger-scale development projects aimed at the improvement of women's status in Bangladesh. Future research should consider new ways to assess fertility preferences and improve upon current estimates of unintended pregnancy by recognizing that fertility preferences are dynamic and highly influenced by temporal and contextual factors.

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Introduction

Fertility preferences are used in many national-level surveys to assess prevalence of unintended pregnancy, a key measure of women's status and an indication of couples' success in achieving their childbearing goals. These indicators are also used to assess the effectiveness of national family planning programs, to gauge the achievement of global demographic goals, and to provide a means of determining the degree to which an individual's or a couple's intentions are achieved, a stipulation of the 1994 International Conference on Population and Development (ICPD) in Cairo (United Nations International Conference on Population and Development, 1994).

Despite the importance of assessing fertility preferences, there are numerous difficulties in obtaining valid and reliable measurements. A range of issues plague researchers' efforts to effectively measure fertility preferences, including instability of prospective measurements over time, omission of partner perspectives, and difficulties in capturing the complex concept of pregnancy intention via quantitative surveys (Santelli, Rochat, Hatfield-Timajchy, Gilbert, Curtis, Cabral et al., 2003). Additional limitations arise from retrospective assessments of fertility preferences, such as those used in the DHS, since respondents are less likely to characterize a pregnancy as unwanted after the birth of the child (Koenig, Acharya, Roy, & Singh, 2005; Williams & Abma, 2000). Qualitative studies have further described barriers to measuring fertility preferences, highlighting the roles that sociocultural and partner influences play, as well as the fluidity in the characterization of pregnancy intention across groups and even among individuals (Barrett & Wellings, 2002; Kendall, Afafe-Munsuz, Speizer, Avery, Schmidt, & Santelli, 2005). Their findings illustrate the limitations of quantitative survey instruments in attempting to explain and depict such an inherently complex issue as pregnancy intention.

In an effort to assess the degree to which closed-ended questions adequately represent fertility preferences, a qualitative study was conducted in rural Bangladesh with couples who had previously participated in a quantitative survey. Responses to fertility preference questions from quantitative survey data were extracted for 20 couples and compared to interview data from these same couples. A comparison of these two data sources is presented, along with a description of the cultural and contextual circumstances that contributed to the discrepancies between the qualitative and quantitative assessments. This is followed by a discussion of the findings and implications for future fertility preference measurements and reproductive health programs in lesser developed settings.

Setting

Bangladesh has had remarkable success in reducing fertility and increasing contraceptive use over the past three decades. In the 1970's the total fertility rate (TFR) was just under 7 births per woman, with 8% of women using contraception (World Health Organization, 2000). Current levels, as measured by the 1999-2000 Bangladesh DHS, indicate that 54% of women are using contraception and have a TFR of 3.3 (National Institute of Population Research and Training (NIPORT)). However, despite the significant fertility decline, the TFR has stagnated over the past decade and is 50% higher than it would be if unwanted births were avoided (Mitra, Al-Sabir,

Cross, & Jamil, 1997; Mitra, Nawab Ali, Islam, Cross, & Saha, 1994; National Institute of Population Research and Training (NIPORT)). According to the 1999-2000 DHS, one-third of births occurring up to five years prior to the survey were unintended, with 19% reported as mistimed and 14% reported as unwanted (National Institute of Population Research and Training (NIPORT)).

Bangladesh represents a somewhat unique case, given the high level of commitment to family planning from both governmental and non-governmental organizations, and the achievement of this rapid fertility decline without concurrent improvements in other development indicators. Despite recent improvements in girls' schooling and in the promotion of development programs such as microcredit schemes, Bangladesh is characterized by low levels of education and widespread poverty. It is estimated that only 31% of adult women are literate and that nearly one-half of its 135 million inhabitants live below the poverty line (National Institute of Population Research and Training (NIPORT), ; World Bank, 2002). Additionally, Bangladesh is a predominantly Muslim country and one which is characterized by patriarchal practices including *purdah*, which encourages the seclusion of women and restriction of mobility to the *bari*, or family compound. These practices affect the status of women in the limitation of educational and employment opportunities, little or no decision-making power within the household, decreased political participation, and limited roles for women within the society apart from their reproductive capacities (Asian Development Bank, 2001).

Methods

Quantitative Data - Overview of the Sample Registration System (SRS)

This study utilizes surveillance data from the Abhoynagar Sample Registration System (SRS) maintained since 1982 by the International Centre for Health and Population Research, Bangladesh (ICDDR,B). Located on the Indian border in southwestern district of Jessore, Abhoynagar is considered to be less conservative, characterized by higher female mobility and lower fertility than other areas of Bangladesh (Balk, 1997; International Centre for Health and Population Research, 2004). The SRS surveillance data, comprised of demographic events such as pregnancy and marital status, is gathered on a quarterly basis from approximately 5,100 households (Mozumder, Koenig, Phillips, & Murad, 1990). In addition to ongoing demographic surveillance, periodic Knowledge, Attitudes, and Practice (KAP) surveys were administered in 1982, 1985, 1990, 1993, and 1998 to currently married women of reproductive age in the SRS population. Two of the five surveys, in 1985 and 1998, also included husbands of the female respondents.

This analysis focuses on responses from the husbands' and wives' surveys from 1998 and the subsequent fertility registered in the SRS surveillance. The fertility preference question from the 1998 male and female surveys asked "Do you want any more children?" In total 2,375 couples participated in the 1998 Abhoynagar survey, with 63% of couples stating that they both did not want any more children, 25% of couples stating that they both wanted more children, 8% were couples in which only the wife wanted more children, and 4% were couples in which only the husband wanted more children.

Qualitative Fieldwork and Data Collection

Qualitative fieldwork was conducted to better understand the sociocultural context that contributes to the formation and implementation of fertility preferences. A subgroup of informants were selected from the pool of couples who participated in the 1998 KAP survey, who answered the fertility preference questions, and who remained under surveillance through September 30, 2004. This subgroup was further narrowed to currently married, Muslim couples in which neither partner had a vasectomy or tubal ligation at the time of the 1998 KAP survey. Three main groups of couples were purposively sampled based on their responses to the 1998 fertility preference questions: 1) Couples in which neither spouse reported that they wanted more children ($n = 8$), 2) Couples in which only the wife reported that she wanted more children ($n = 6$), and 3) Couples in which only the husband reported that he wanted more children ($n = 6$). These groups were further divided into couples who had experienced, or who had not experienced, a subsequent pregnancy between the 1998 survey and September 30, 2004.

The fieldwork consisted of 84 semi-structured interviews with 20 couples over a three-month period.¹ The research protocol and instruments were translated, reviewed and approved by the ethical review committees at both of the aforementioned institutions. Trained interviewers conducted the interviews with informants of the same sex. Husbands and wives were interviewed separately and privately after obtaining informed oral consent from each partner. All of the interviews were digitally recorded, unless the informant opposed, in which case the interviewers took written notes. The transcripts were translated into English and imported into QSR NVivo Version 2.0.163© software to assist in processing and coding the data. Daily meetings with the interviewer team and periodic memos drafted throughout the fieldwork stage facilitated the processing and exploration of data, as well as highlighting themes to explore further in subsequent interviews.

Comparison and Discussion of Data Discrepancies

[Insert Table 1]

Table 1 summarizes the survey and interview responses from the 20 couples, as well as the incidence of a pregnancy outcome between the 1998 survey and the September 30, 2004 SRS data collection. Overall, there is little concordance between the survey data and the in-depth data. The level of disagreement is more pronounced in the latter two groups, couples who were discordant in the 1998 survey, as compared to the first group, couples who agreed that they did not want to have any more children. When asked about the fertility preferences they stated in the 1998 survey, some informants remembered responding to the interview and could explain why their preferences had remained or changed from the 1998 survey. One husband directly refuted his responses in the 1998 survey (Couple 4). Other informants were ambivalent, fatalistic, or did not make a clear distinction between wanting another child and not wanting another child (Couples 7, 10, 14, and 17). In some cases, there seemed to be an ambivalence or acceptance of

¹ One husband was unable to be interviewed.

pregnancy (Couples 7, 9, 10), while other women used induced miscarriage (INM) or menstrual regulation (MR) to prevent the birth (Couples 16 and 18).²

The shifts in both individual and couple-level fertility preferences demonstrated by Table 1 highlight the instability of preferences measured in a quantitative survey. The qualitative component provided a deeper understanding of these inconsistencies, illuminating several domains which help to explain the discordance between the qualitative and quantitative data and the difficulty in measuring fertility preferences, in general.

Sex composition

There is a large literature on son preference in South Asia (Das Gupta, 1987; Pande, 2003). Similar to other studies, we found that the reasons for having a male child continue to figure very prominently in couples' fertility decision-making; however, several couples also expressed a strong desire to have at least one daughter (Chowdhury, Bairagi, & Koenig, 1993; Rahman M & Da Vanzo J, 1993). Many of the discrepancies in Table 1 resulted from couples attempting to achieve a specific composition of sons and daughters. The interviews provided vivid and concrete descriptions of the roles ascribed to men and women, and how these roles continue to influence sex-specific preferences and family composition.

In this patriarchal society, the benefits of having sons are many. Sons are perceived to carry on the family name and bloodline, contribute to the family income, and are the 'stick of a father with which he can walk strongly'. Sons also have sole rights to bury their parents when they die, and, when married, bring their wife to their home to help with domestic duties. Additionally, the division of labor and strict social norms according to gender translates to clear-cut differences in the activities that men can participate in, and women cannot.

The benefits of having sons are compounded by the perceived disadvantages of having a daughter. The patrilocal system in Bangladesh dictates that, upon marriage, girls leave their natal home to live with their husbands' families. Additionally, dowry given by the bride's family to the groom's family exacts a substantial cost to families, especially if they have more than one daughter. Couples also mentioned the tension they feel to protect the honor of their daughter's reputation before marriage. Daughters are particularly susceptible to rumors and gossip that may 'spot' their family's honor, and thereby make the search for a son-in-law more difficult and costly. Some women also mentioned their desire not to have daughters because they worried about the suffering and disrespect that their daughters would be subject to upon moving to their in-laws' homes:

You know, women's lives are not easy. We suffer in our father's house and also in our in-law's house. I guess I did not prefer to have daughters because women's lives are full of suffering. I would not want to have a

² Menstrual regulation is a legal procedure in Bangladesh that can be employed up to 10 weeks after the expected date of a missed menstruation (Akhter, 1988). Several informants reported accessing MR services through the hospital. Other women reported taking pills or liquid from their local kobiraj or pharmacist to abort a suspected pregnancy. For a more detailed description of MR and abortion in Bangladesh, see (Bart Johnston, 2001) and (Dixon-Mueller, 1988).

daughter because I would think that my daughter's life could be like my life.

(Wife, Couple 12)

Several couples also mentioned the benefits of having a daughter. Daughters are considered the 'helping hand' of their mothers since they stay in the household, assisting in daily chores and caring for younger children. Additionally, several husbands mentioned the benefit of visiting their daughters at their in-laws' homes for recreation, whereas some female informants mentioned the advantage of having a son-in-law who could potentially contribute to their household and care for them in their old age. Daughters are also perceived to be more emotionally invested with their parents and are more likely to be counted on in times of need. In addition to the physical or financial benefits that are associated with having a daughter, several husbands and wives lost their mothers at young ages and hoped for a daughter to fulfill an emotional need.

Though several informants noted changes in the educational and occupational opportunities now available for women, husbands and wives talked openly about their prevailing sex-specific preferences. Several couples acknowledged that they had exceeded, or would exceed, their expected family size in an effort to achieve a specific combination of daughters and sons:

If I was not able to have a son, then I would have to change my expected number of children because I would not stop taking babies. If I could get two or three sons, that would be best.

(Wife, Couple 11)

After my first daughter, when she was pregnant again, I told her that if this time it is not a son I will send you to your parent's house forever. Because I had one daughter already. I needed one son then. I loved to have a son. If it was not a son, then I would have to take another child.

(Husband, Couple 7)

As shown in Table 1, although they originally wanted only 2 children, Couple 12 conceived 13 pregnancies in their desperation to have a son. The husband mentioned their dire economic situation, but invested their meager resources in three sonograms during his wife's pregnancy to ensure that the baby was male. Conversely, couples who achieved their desired composition of children within their expected family size seemed to adhere more rigidly to their original fertility preferences. In a few cases, however, couples noted the influence of extended family members and unexpected circumstances that prompted them to alter their preferences.

Sickness and Death of Children

If a son grows up, takes proper education, then dies at last it is really an unexpected situation for any parents. Last year during Ramadan that boy (her nephew) died. To see this unexpected event I decided I would take a third child. When I took this decision, I stopped taking pills.

(Wife, Couple 6)

Though she and her husband were originally content with having just one daughter and one son, this wife wanted to have another child when her teenage nephew died in an accident. She convinced her husband that by only having one son they, too, were at risk of losing their only son and jeopardizing their family's future.

Despite declining infant mortality rates in Bangladesh, sickness and death of children continue to figure prominently in couples' fertility decisions. Of the twenty couples in our sample, 25% had at least one child death. Many of the husbands and wives directly linked their desire to have more children or a specific composition of children (e.g., 2 sons) to 'protect' themselves. The loss of a son, in particular, seemed to be particularly devastating for families, given the added financial impact that the death of a son means for a family. For one couple who had a son with a disability (Couple 11), having another son was important to ensure financial stability both for the family, as well as for the child that had special needs. Several couples mentioned being pressured by family members to have another child, or to have more than one son, as there is no 'certainty' to life.

The sickness or death of a child may also have an indirect impact on fertility, in the case of the non-use of contraception. Several couples, who stated that they did not want to have any more children, mentioned the fear of child death as a barrier to adopting permanent contraceptive methods. Many of these couples had experienced an unintended pregnancy; however, they were still reluctant to relinquish their future potential to have children by adopting a permanent method.

Fatalism

Fate and religion emerged in various forms throughout the interviews – in beliefs regarding family size and composition, the ability to control fertility through contraception, and in attempting to explain unforeseen circumstances such as the sex of children, child death, and pregnancies that occurred despite contraceptive use. Although fate and religion were consistently mentioned by couples, the strength of and reliance upon these beliefs varied greatly across and between couples in our sample.

One husband seemed more fatalistic than the others:

Nowadays, people are saying more children are not good for the family, but I want to tell you, it depends on Allah whether you get a child or not. Humans have no control in these matters – birth, death, marriage, or children. Allah gives us children and Allah gives us food so we can survive.

(Husband, Couple 4)

This husband was the oldest respondent of the sample (age 67) and the age gap between he and his wife was the largest of all the couples interviewed (30 years). In total this man had 13 children – 7 from his first wife, and 6 from his second. The above quote from the first interview was followed by a discussion in the second interview in which he admitted that he and his wife

are now using contraception to prevent another birth. At this point in their lives, and now especially since their children are married, another child would be ‘shameful’. His story mirrors the transition that many couples mentioned as they progress through their reproductive lifespan, and the overall transition that has occurred in Bangladesh as active control of fertility through contraception has become more accepted. His story is also similar to other couples in that it reflects a shift away from fatalism as family size and household expenditures increased:

When I got my daughter I thought, Allah has fulfilled my wish, yet I didn't want that. I tried to convince myself to say that. But I could also realize that my family expenses had increased day-by-day as new family members were joining.

(Husband, Couple 2 commenting on LIB 2004)

Other couples seemed more fatalistic when faced with an uncertain or unexpected situation; for example, when trying to conceive a specific sex of child or when realizing that a pregnancy occurred in spite of contraceptive use. Several wives, especially, talked about their efforts to prevent pregnancy but, due to side effects, had to abandon or intermittently use contraception (e.g., Couples 7, 10, 17). Without a suitable contraceptive method, women were forced to rely solely upon what ‘Allah wanted’ for them. Conversely, women who were unable to or had difficulties becoming pregnant also mentioned their reliance upon Allah to ‘give them’ more children (Couple 14). Couples who had problems conceiving their first child made great efforts to overcome the problem; however, if the fertility problems continued after the birth of the first or second child, couples seemed to be more willing to accept their fertility problems as fate or what ‘Allah wanted’.

Ineffective Contraceptive Use and Lack of Knowledge Regarding Fertility

Most informants mentioned using short-term contraceptives to prevent or to delay childbearing; however, many couples also described the side effects and difficulties they endured in finding a suitable method. Moreover, several informants were misinformed about the proper use of contraception and had misconceptions about the long-term effects of contraceptive use. As shown in Table 1, several pregnancies occurred when women were unable to overcome the side effects and either discontinued or intermittently used contraception. Several women spoke of their quest to find a suitable contraceptive, and one that could be easily and consistently acquired from health facilities or the market. Some women who became pregnant due to contraceptive discontinuation or failure chose to continue with the pregnancy, while others opted to end the pregnancy via menstrual regulation or induced miscarriage (Couples 2, 3, 10, 16, and 18). In addition, several informants mentioned having an unintended pregnancy immediately following the birth of another child, thinking that they were not at risk of becoming pregnant so soon after giving birth. The following quote is from a wife whose story illustrates several of these points:

We did not want more children after our third son. First I took pills provided by the government. I had nausea and sometimes I had so much bleeding during menstruation. Then my husband brought me pills from the market, but sometimes he forgot them. Then I had to take pills from the government, and I again had the bleeding problem. I stopped taking

pills and got pregnant with a son. It has been one year that the son has died. In the month when my son died, I conceived. After my son's death, I did not have menstruation. That time I was so upset, how could I use any method? I got pregnant again.

(Wife, Couple 2)

Spousal Discussion and Deception

All of the couples were asked about discussions with their spouses and family members regarding contraception and childbearing. When initially asked, a few couples had said that they never discussed how many children they would have, or whether they would use contraception. However, in follow-up interviews they talked more openly about discussions with their spouses. Though the frequency and character of the discussions varied, all of the informants eventually said they had discussed childbearing with their spouses at some point in their marriage, usually after the birth of the first or second child.

Several couples disagreed with one another regarding the number and/or the composition of children. The motivations for having more children or having a son or daughter, specifically, were often different for one spouse than they were for the other. Both husbands and wives cited pressure from family members, child death, and financial security in their older age as reasons to have another child. Husbands and wives both mentioned their concerns about the family's economic stability and the wife's health as reasons to stop or delay childbearing.

Disagreement between spouses about contraception or childbearing was resolved in a variety of ways, and depended on the couple's existing number and composition of children. For discordant couples with fewer children and who did not have at least one son and one daughter, couples seemed more likely to have a subsequent pregnancy. However, as discussed earlier, after a certain number of children and increasing household expenses, couples seemed less likely to have an additional child to fulfill the desires of either or both spouses.

As reported by couples in the interviews, there were more couples in which wives wanted more children, but their husbands did not (Couples 2, 3, 6, 10, 11, 12, and 13). In all of these cases, the wives were highly motivated to have a child for one or more of the following reasons: the wife's children were from her husband's previous marriage (Couples 3 and 13), she wanted a child of a particular sex (Couples 2 and 12), or she wanted to have another child in the case of death or sickness of a child (Couples 6, 10, and 11).

For some wives who did not want more children but their husbands did, they were able to secretly obtain and use contraception or MR to prevent a subsequent birth. Some women traveled with a family member or neighbor to nearby health facilities, while other women relied on family members or home visits by health workers to provide them with contraception:

If I conceive a baby again for my irregularity in taking pills, then, I may take it (baby) out. My neighbor told me that if someone takes red shukhi tablets regularly, then a baby comes out. So I'll take the red ones regularly, and my husband will not know about the pregnancy.

(Wife, Couple 7)

Some women who disagreed with their husbands and wanted more children would secretly stop using contraception:

We had 2 children then, but my wife had a desire in her mind that she will take another child. But I did not know that. She was taking pills at that time. She made a trick (chalaki kore) with me and stopped taking pills. After 1 or 2 months, she told me that she was pregnant.

(Husband, Couple 3)

Though most stories of covert use were from wives, one husband did report tricking his wife:

I made a trick. I sometimes tore the front of the condom. She did not realize this. Like this, she got pregnant once. She said, 'How could it be possible that I got pregnant?' Sometimes she realized that the condom leaked, but she did not realize that I did that intentionally. Like this my last daughter was born.

(Husband, Couple 19)

Covert use or non-use of contraception, abortion, or menstrual regulation was reported by many of the wives. Many husbands, though they did not want more children, accepted the wish of their wives to have more children, acknowledging that if their wife wanted more, they were powerless to prevent it given that it was the wife's choice whether to use contraception.

Subfertility and sickness

Couples who reported chronic illnesses or infertility represent another perspective on fertility preferences. In these cases, couples had fewer children than they had originally anticipated, or were less likely to be at risk for subsequent unintended pregnancies than other couples in our sample. Some couples reported difficulties conceiving due to *badhok barem*, menstrual pain that women associated with decreased fertility, and often visited local doctors, or *kobiraj*, to seek remedies for their problems.

Several female informants mentioned their difficulties conceiving and how they had to eventually accept that they may not be able to reach their (or their partner's) fertility goals. The inability or difficulty to conceive forced some couples to accept a smaller family size than they had originally desired (Couples 7, 8, 14, 19, and 20). Whereas a few wives mentioned threats by their husbands to divorce them if they did not conceive, if the wife was able to produce at least one child, especially a boy, the husband was more willing to accept a smaller family size than what was originally expected.

Difficulty in conceiving also presented an opportunity for couples to space their children, either from the onset of marriage or later in their marriage. The couples who reported difficulties had a

larger window of opportunity to make a choice about contraception. One couple visited a kobiraj before each of their two children:

We got 2 children trying hard. We were not having children, then my wife went to a kobiraj. She took that and we got our first child 5 years after our marriage. If we want to take another one then we have to take her (again) to the kobiraj. She has to take medicine. So we don't want the trouble. What we have, we are happy with that.

(Husband, Couple 14)

Problems with infertility were not limited to the wives in our sample; two older husbands also reported difficulties (Couples 4 and 8). Some couples also reported that problematic pregnancies and deliveries in the past left them weakened and suffering from ongoing health problems, preventing them from conceiving or wanting to conceive. Women were concerned that their health would deteriorate further during pregnancy and were also fearful of dying in childbirth, two concerns that prompted them not to want any more children (Couples 8, 15, 19):

Discussion

The comparison of qualitative and quantitative assessments of fertility preferences from this sample of married, Muslim couples in rural Bangladesh illustrates the difficulties in measuring fertility preferences via quantitative surveys. The inconsistencies between the two data sources point to the inherently dynamic nature of fertility preferences, and the range of intervening circumstances that may alter previously stated preferences, such as death of a child and partner's preferences. The qualitative interviews also provided insight into the multiple levels of influence that affect couples' reproductive decision-making, ranging from the proximal concerns of the couple's health, economic situation and preferences of their extended family, to the distal influences such as sociocultural norms of family size and composition. Couples in this study also noted the influence of the national family planning messages as a force that helped to shape their demand for and access to contraception. It is in the midst of these combined, and sometimes competing, influences that individuals and couples are making fertility choices.

The dynamic nature of fertility preferences and overall inconsistency in the reporting of fertility preferences contradicted the rationale for the qualitative fieldwork sampling strategy, which was based on the assumption that couples' stated fertility preferences were valid and reliable assessments of subsequent childbearing and would thus differentiate the groups from one another. An elementary, yet important, finding is that given the myriad of factors that spontaneously and universally affected members of each of the groups, the selective sampling from each of these groups seems to be unnecessary.

Based on past evidence of the influence of husbands on reproductive decision-making, especially within more patriarchal areas, this study incorporated the individual reports of husbands (Koenig, Simmons, & Misra, 1984; Salway, 1994). A similar study comparing husband and wife fertility preferences in the Philippines highlighted the importance of including male data (Williams, Sobieszczyk, & Perez, 2001). In past studies, however, proxy reports from the wife have been used (Razzaque A, 1999). Findings from this study support the notion that husbands provide

critical information and should be interviewed in addition to their wives. The preferences of both spouses are needed to better understand the couple dynamics of decision-making, and provide more insight into the reasons for subsequent fertility, given that overall fertility is likely to be higher if either partner wants more children (Bongaarts J, 1990).

In this sample, more wives were pronatalist than husbands, which echoes the results of the 1999-2000 Bangladesh Demographic and Health Survey (DHS), where, among discordant couples, a greater proportion of wives, as compared to husbands, wanted more children (7% versus 4%, respectively) (National Institute of Population Research and Training (NIPORT)). This is in stark contrast to many other countries, where the husband is more often pronatalist (Bankole A, 1995; DHS, 2005). Though it may be argued that the status of women has improved in recent years in Bangladesh, a highly dominant theme in the interview data was the continuing pressure to have healthy sons. There are more educational and occupational opportunities open to women now than in the past; however, longstanding traditions such as patrilocal residence, limitations on mobility, and old-age security through sons perpetuate sex preferences and the desire for larger families among women, in particular.

The interview data revealed that contraception and fertility are often thought of as a woman's domain. As illustrated above, the decision to use, or not use, contraception was often made by the wife alone, and often without the knowledge of her husband. From a feminist viewpoint and from a 'women's empowerment' perspective, the idea of a woman making an autonomous choice about contraception may seem promising. However, the appeal of this is tempered when a woman's choice is made within an overarching patriarchal system, one in which her value as a woman may be derived primarily from her reproductive capacities (Das Gupta M, 1995). As noted by other studies, even with universal knowledge of and access to contraception, the desire for more children will not decrease unless the sociocultural motivations for having more children or for having sons are addressed (Germain, 1975; Malhotra, Vanneman, & Kishor, 1995; Mason & Taj, 1987).

Though most couples discussed contraception together, several husbands seemed to be omitted from this decision-making process altogether. The national family planning program, with its focus on women, has been criticized for exacerbating the isolation of women and for furthering the idea that the costs of fertility fall primarily on women (Schuler, Hashemi, & Jenkins, 1995). In addition, the predominance of female-controlled methods in this area further removes men from the process of choosing and using contraception (International Centre for Health and Population Research, 2004). Clearly, the use of vasectomy and condoms could increase the level of male involvement, as was negatively exemplified by the husband in Couple #19; however, many of the husbands and wives voiced strong opposition to both of these methods. Some of the barriers to using these methods evolved from misinformation. In addition, it is also more difficult for men to access vasectomy services in Bangladesh now than in the past. Bangladesh has had decreasing numbers of vasectomies since 1987, when the target-driven system for sterilizations was abolished (Piet-Pelon Nancy J., 1999). Though clearly a positive move towards a more client-centered approach, vasectomies remain one of the least utilized and most inaccessible methods of contraception. Efforts are needed to address both the psychological and logistical barriers to male contraceptive use.

Additional programmatic efforts are needed to address the barriers to contraceptive use voiced by older couples or couples who do not want to have more children. For older couples, the added stigma of an unintended pregnancy later in life can be especially traumatic for them and for their children. Efforts should be focused on improving the quality of care, including counseling, education, and adequate method mix, to facilitate the switching of methods and to minimize side effects. Additionally, given the pressure on couples and on women, in particular, to produce children, the number of infertile/subfertile couples in our sample is alarming given both the physical and psychological implications. Though these couples are often overlooked in demographic research and in reproductive health programs, efforts should be made to assist couples who have difficulty in achieving their reproductive intentions.

Though this study provided valuable insight into the measurement of fertility preferences, there are some limitations that should be noted. The SRS collects household information on a quarterly basis; however, there is the possibility that sensitive information, such as menstrual regulations and abortions, is not accurately reported to the SRS field workers. Also, due to cultural perceptions of the start of pregnancy and availability of MR, all pregnancies may not necessarily be reported. Additionally, since the ICCDR,B and the Bangladeshi government work together in the provision and monitoring of family planning services in the Abhoynagar area, it is possible that the study participants were more likely to give socially acceptable answers, or at least answers that were more likely to match national family planning program messages.

Despite the limitations of this study, there are several key findings. Despite high levels of knowledge about modern contraception (77-100%), couples are often unclear about the menstrual cycle and their susceptibility to pregnancy, particularly after birth and at later ages (National Institute of Population Research and Training (NIPORT)). For the majority of couples in this study, the 1998 fertility preferences did not match their subsequent fertility, nor the preferences stated in the qualitative interviews due to the influence of several temporal and contextual issues including the number and sex of living children, subfertility, and spousal preferences. Data from both spouses provide valuable insight into how individual preferences are negotiated within the context of the couple, and if divergent, whose preferences dominate. Especially in patriarchal contexts such as Bangladesh, decisions regarding contraception and childbearing have different implications for men than for women. Though some husbands were more pronatalist than their wives, in many cases, the wife either secretly discontinued contraception or convinced her husband to have more children in the hopes of reaching a certain family size or composition. The majority of couples in this study had more children than they had originally anticipated or had reported wanting in the 1998 survey. This study points to the difficulties in measuring fertility preferences through cross-sectional surveys given the highly dynamic nature of preferences, and encourages further exploration of alternate means of assessing fertility preferences and related indicators, such as unmet need and unintended pregnancy.

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Table 1: Characteristics and Qualitative Data from Sample Couples

	Qualitative Reports: Before and After 1998 Quantitative Survey	1998 Quantitative Survey		Pregnancies and Child Mortality (1998 – 2004)
		Husband	Wife	
1	Before: Had 1 son. Pregnant with second child at the time of survey. After: Second son was born December 1998. Both spouses wanted a daughter.	No	No	LJB ³ : 2000 (M) LJB: 2003 (M)
2	Before: Had 2 living/1 deceased son. After: Wife wanted a daughter and was ‘negligent’ with pills. Husband wanted only 2 children.	No	No	INM ⁴ : 1999 LJB: 2002 (M); died 2003 LJB: 2004 (F)
3	Before: Husband had 3 children from previous marriage and did not want more. Wife had an MR after experiencing side effects from pills. She later had first child (son). Second child (daughter) was born within 1 year, before resuming contraception. After: Both partners said that they do not want more children. Husband said his wife went to the hospital for an abortion 8-9 months ago. Wife only reported the earlier MR.	No	No	INM: 2001
4	Before: Had 6 children – 2 living sons/1 deceased son/3 daughters. After: Couple had 3 more children; however 2 sons died. Husband said he wanted more children, including his last child. Wife did not know she would get pregnant without using contraception.	No	No	LJB: 1999 (M); died 2001 LJB: 2000 (F) LJB: 2003 (M); died 2003
5	Before: Had 2 sons. After: Both partners said they do not want more children. Wife uses the pill.	No	No	None
6	Before: Had 1 son/1 daughter/1 deceased daughter. After: Couple had a daughter 6 days before interview (not yet recorded by SRS). Wife wanted another child after her nephew died.	No	No	None → Yes LJB: 2005
7	Before: Had 1 son/1 daughter. After: Husband wants 2 children. Wife has had difficulty conceiving. “Still I don’t want anymore, but as sometimes I cannot take pills, then if a new baby is born, it will be okay.”	No	No	None
8	Before: Husband said his first wife could not have children. His second wife also reported problems conceiving, but eventually had a son. After: Because of their poverty and the wife’s sickness after the birth of her son, she does not want more. Husband says he cannot have more children (infertile).	No	No	None
9	Before: Had 1 son. After: Husband wanted another child. The wife reported, “My second child was born when I got sick taking pills and gave them up. So I got another child, though it was my wish also.”	Yes	No	LJB: 2001 (F)
10	Before: Had 1 son/1 daughter. After: Husband wanted 2 children, but was ‘happy’ with the third. The wife said pressure from relatives and discontinuation due to side effects were responsible for their third child.	Yes	No	INM: 2001 LJB: 2003
11	Before: Had 1 stillbirth/1 son/1 daughter. After: Husband wanted 2 children; third child was unwanted for him. Wife wants 4 children in total and says her husband also agrees with her now. “Our neighbors and elders told us that as the first son is sick (paralyzed), you can take another (third) child.”	Yes	No	LJB: 1999

³ LJB: live birth;

⁴ INM: induced miscarriage

12	<p>Before: Had 12 pregnancies – 6 spontaneous miscarriages/3 stillbirths/3 living daughters. After: Husband changed his mind due to his wife's preference for a son. They finally had a son from the 13th pregnancy.</p>	Yes	No	LJB: 2001 (M)
13	<p>Before: Husband married previously and had 3 sons. Has 1 son with his current wife. After: Husband said he changed his mind due to his wife's preferences for children. The wife said she wants a daughter in the future.</p>	Yes	No	None
14	<p>Before: Wife reported she had problems conceiving, but eventually had 2 daughters. After: Both spouses said that due to finances and wife's difficulty conceiving, they wouldn't have more children. The wife said, "But if Allah gives us without taking medicine he will welcome the baby."</p>	Yes	No	None
15	<p>Before: 1 living son/1 deceased son. After: Husband wanted one boy and one girl. After the death of the second son, they decided to take another chance for a girl. The wife had difficulty in childbirth, so she is not willing to have any more children.</p>	No	Yes	LJB: 2002 (M)
16	<p>Before: 1 newborn death (M)/1 spontaneous miscarriage/1 living daughter/1 living son/1 recently deceased daughter. After: Wife said, "I took the third child and that was an accident due to failure of method." Both spouses say that they will not have more than 2 children due to their poverty and wife's illness.</p>	No	Yes	INM: 2001 INM: 2002 LJB: 2004 (F); died 2004
17	<p>Before: Had 1 son (1994). After: Husband wants another son. Wife said that she does not want anymore children. "If Allah wants to give me another child, then what can I do? But, willingly, I don't want any more."</p>	No	Yes	LJB: 2004 (M)
18	<p>Before: Had 2 sons, then, due to husband's urging, they tried for a daughter, but had another son. Wife said she had to discontinue taking pills due to side effects, then "unexpectedly" became pregnant with their third child. Unbeknownst to her husband, she tried to abort the pregnancy, but it did not work. After: Both spouses say they do not want any more children. Wife says she is taking pills regularly.</p>	No	Yes	None
19	<p>Before: Had 2 daughters. After: Husband first said he does not want any more children, then contradicted himself later, "Everyone wants a boy, but Allah did not give me. I will take a child later when I can afford it." Wife says that she is content with her 2 daughters. Due to severe side effects and health problems, she is not using contraception, "I do not want anymore children and he does. If I conceive now, then I will certainly do MR without informing my husband."</p>	No	Yes	None
20	<p>Before: Husband had a daughter from first marriage. The (second) wife had problems conceiving, but eventually had a son. After: Due to the family's poverty and older age, she does not want to have anymore children, but said her husband disagrees. (Husband not available for interview.)</p>	No	Yes	None