FERTILITY DECISIONS AMON COUPLES: A STUDY OF THREE SELECTED DISTRICTS FROM BIHAR AND UTTAR PRADESH

Sayeed Unisa, T. K. Roy and Chander Shekar

INTRODUCTION

In demographic surveys women are usually taken as respondents and all rates and measures have been developed focusing women (Mauldin, 1965; Morris et al, 1981; Becker, 1996; Harphan and Scott, 1987). There has been good reason for the demographers for interviewing women as most of the information in demographic surveys concentrate on reproductive histories, frequently extensive and detailed, and on knowledge and use of birth control.

In several surveys, fertility goals, wantedness of last births, desire for additional child, and unmet demand for contraception were all based on women's reporting. Translation of these goals into actual behaviour of fertility and contraceptive use was not found in many countries. It is increasingly evident that the complex dynamics of the reproductive process cannot be properly understood as long as researchers continue to base their studies on data collected exclusively from women (Bankole, 1995). In patriarchal societies women cannot translate their preference into actual behaviour, because their husbands may be opposed to these ideas. In most theoretical frameworks it is said that husband and wife's fertility goals differ due to the difference in demand for children by them. This is argued as the demand of number of children depends on the function of number of sons desired and this is different between the husband and the wife (Bulatao and Lee, 1983; Cleland and Wilson, 1987). However, most of the national level surveys continue to rely exclusively on female respondents. The rationale for excluding husbands appears to be that their reported desires explain only small marginal variance in

couple fertility beyond that explained by wives' desires and the cost of data collection will be almost double and logistically it is difficult to interview males (Bumpass and Westoff, 1970). To overcome these problems and also to address the fertility attitude and behaviour of husbands, researchers have relied on the proxy reports provided by wives. Marital partners may simply assume that their desires for children are the same and evidence supports this that individuals assume that they are more similar in attitudes and values to spouses than is actually the case (Byrne and Blaylock, 1963). Debate about the reliability of these proxy reports for husbands and the complexity of the analysis of these responses is still unending (Williams and Thomson, 1985; Becker, 1996; Biddllecom et al., 1997; Unalanl, 1998).

Although researchers have recognized the husband's importance in family building process, it is only in a few studies that husbands as well as wives have been interviewed. This has been considered in the places where the dominance of husbands in decision making is well established (Hill et al 1959; United Nations, 1961; Yaukey et al 1965, Poffenberger, 1969; Thomason, 1990; Bankole, 1995; Becker, 1996; Casterline et al, 1997). The need for couple study to understand fertility decline was recognized in India in the sixties and two notable studies namely the Mysore Population study (United Nations, 1961) and Central Family Planning Institute study (Poffenberger, 1969) have been done in India. Unfortunately these were done in few villages (Mysore study) and in only one village in another study. After these research works, Indian as well as in South Asian countries researchers have not made any attempt to explore couple behaviour but have started examining the status of women, empowerment, and autonomy of women and its relationship with fertility (Dyson and Moore 1983; Jeejbhoy, 1991; Alam and Leete, 1993; Balk, 1994; Dharmalingam and Morgan, 1996; Sathar and Kazi, 1997, Parasuraman et al, 1999). To some extent these concepts explain fertility behaviour but in the case of India, women with education, autonomy and motivation to use contraceptive fail to translate their preferences into actual behaviour, because their husband may want an additional child (Roy et al, 2003, Freedman and Coombs, 1974). Under the existing condition, it would be desirable to examine how family size desire as well as motivation to use contraception varies between husbands and wives. Research involving men will

have implication for developing effective policies and programmes and will also enhance the reliability of estimates obtained from data collected only from females. The present study is an attempt in this direction. It is undertaken in a region where level of fertility is still substantially high and women tend to have less autonomy.

DATA AND METHODOLOGY

The present paper is based on the project data of "An epidemiological investigation into the gallbladder diseases in North India" which was carried out in three districts of North India - two districts in Bihar, namely Patna and Vaishali and one district in Uttar Pradesh i.e., Varanasi. The fieldwork for the study was carried out during March - August 2002. Initial research based on hospital level data from Tata Memorial Hospital (the study was undertaken in collaboration with two doctors working in the hospital), Mumbai, revealed the area is prone to gallbladder related diseases. In each of the three districts 20 villages were scientifically selected for the study. All households in a village and all men and women of age 30 and above in a household were interviewed with specifically designed questionnaires. The age restriction was made taking into account the fact that prevalence of gallbladder disease at younger ages is quite low.

The male and female questionnaires, apart from few socio-economic characteristics like age, education, occupation, caste etc., included a series of questions on various risk factors. The risk factors were mainly on type of occupation (whether working in any hazardous industry); life style like drinking and smoking, whether suffered from certain diseases which could possibly be linked with gallbladder diseases, various symptoms of gallbladder diseases etc. One of the risk factors of gallbladder disease among females is high fertility (Storm et al, 1995, Zatonski et al, 1997). Therefore, questions on fertility and family planning practices were also included for married males and females. We also added few questions on the fertility desire of both males and females. The household questionnaire provided information on risk factors such as water and sanitation facility, availability of various amenities in a household (mainly to understand their standard of living), consumption of different food items, utilization and storing of fertilizers and pesticides etc. At the village level water and soil samples were collected and tested. All eligible men and women having symptoms were

specifically screened by ultrasound (by doctors) for any gallbladder disease. In 2:1 ratio, eligible persons not having symptoms were also screened by ultrasound. Men and women in a household were interviewed simultaneously by male and female interviewers respectively. Free ultrasound test by a doctor created tremendous enthusiasm in the community. It helped the team to have good rapport with respondents and the response rate even among male was also considerable (female response rate 96% and male response rate 71.4%).

Selection of villages in a district was done by probability proportional to size sampling after stratifying them according to village size and arranging villages in each stratum in ascending order of female literacy. Very small villages of size less than five households were deleted from the frame (it consisted of less than one percent of the total population). Villages of size less than 50 households were linked with a nearby village before the selection. The design is not self-weighting, however appropriate weights have been used for districts as well as for combined estimates. A total of 13334 households in the 60 villages were covered, where 10352 males and 12509 females of age 30 and above were interviewed. Total number of couples (where wife are of age between 30-49) interviewed was 4719. In the present paper we analyse the responses to following two questions asked to both husband and wife. One is on the desired family size and the other is on desire for an additional child. The question is asked slightly differently for persons with and without children. For the former the question asked is "if you could go back to the time you did not have children and could choose exactly the number of children to have in your whole life, how many would that be?" For the latter group it is "if you could plan to have children in future then how many would you like to have?" A further question to ascertain the sex of desired children is also asked.

The other type of question reflecting desired family size is on desire for additional children. A simple question on whether wants to have another child is asked. Usual bivariate and multivariate analyses have been employed to examine the extent of agreement between husband and wife on desired family size and also on desire for additional children. The analysis is also carried out to examine how unmet need for family planning differs if we take into account desire for additional children for both husband and wife instead of only wife. Agreement between husband and wife on

contraceptive use is also studied. Unmet need is defined as those (with wife not pregnant) who do not want additional children and yet not practicing family planning.

In studying the concordance of desired number of children between wives' and husbands', we have compared the responses and classified them into three categories, namely, the desire is 'higher among husbands', 'same for both' and 'higher among wives'. Similarly, for additional children desired, the responses are categorized as 'both desiring', 'husband only desires', wife only desires', and 'both not desiring'.

ANALYSIS AND FINDINGS

Husband-wife agreement about desired family size

Agreement on desired family size has been studied considering their children ever born. In 25 percent cases it is found that the reported number of children ever born by husband and wife does not match. In 13 percent of these cases, children ever born reported by husbands were greater than that of their wives. It may be mentioned that details of either marriage history or birth history have not been collected in the survey. In fact, as a part of the requirement of the project, emphasis was given to record all the children irrespective of number of marriages. It is possible that in small proportion of cases, they reported children ever born from all marriages.

For further analysis, the cases where children ever born differed or a non-numeric response to desired family size was given have been excluded (with this criteria we had 3559 couples for analysis). Table 1 shows the agreement between spouses on desired family size and their mean desired children by children ever born. In 46 percent cases there is an agreement between the spouses. The desired family size as reported by husband is higher than the wife in 28 percent cases. In the remaining about 27 percent cases wife reported higher desired family size than the husband. Over all, the mean desired family size is quite similar (2.8 children) between the spouses, but the distribution is statistically significant showing that it is higher among the husbands compared to the wives. It could be noticed that wives tend to report higher desired family than husband at

lower parity (parity 2 or less). At parity three and above the mean desired family size tends to be higher for husbands compared to wives. However, the mean desired family size is statistically significant only at parity five or more. The highest agreement is found among couples with two children ever born. The family welfare programme in the country has been advocating two child family norm since long. It is expected that this norm will gradually sink in the minds of people. A look at the distribution of men and women by desired family size (not shown) reveal that both the distributions have a modal value at two children. Earlier studies in South Asia by Mason and Taj (1987) found that women wanted more children than men. In recent studies based on demographic and health surveys it is observed that differences between husbands' and wives desires are small and women wanted relatively less number of children (Bankole and Singh, 1998).

It is true that a respondent is often likely to rationalize desired family size to match the actual family size (Demeny, 1988; Bankole and Westoff, 1998). This is because if a person reports, for example, family size as three and says the desired family size is two, it tantamount to indicting that one of the children is unwanted. It would be of interest to examine and compare the extent of rationalization, if any, between husband and wife, as it has direct implication for understanding the fertility preference. By rationalization we refer to the tendency of a person to report desired family size either equal or higher than the actual family size, so that one does not imply that some of the children are unwanted. The proportion of husbands and wives who report desired family size less than the actual family size can be compared to comprehend the existence of rationalization, if any. Table 2 shows that a higher proportion of wives of parity three and above report the desired family size less than their children ever born, compared to their husbands. Thus, the effect of rationalization, if any, is less among wives than the husbands.

The preference for sons among husbands and wives has been examined next. For this, we have further restricted the analysis to all the couples with same desired family size, as the desired number of sons will depend on the number of desired children. Overall, the desired number of sons is found to be the same among the spouses in 91

percent cases (Table 3). However, the preference for sons is found to be slightly higher among men than women as in 6 percent cases the number of sons desired by husbands is higher than the wife and only in three percent cases wives reported higher number of sons than the husbands. At the lower desired family size the agreement among couples about desired number of sons is, as expected, higher and it decreases at the higher desired number of children. As the desired family size increases, the available options to report desired number of sons increase.

The above analysis reveals that by and large there exists fairly good agreement between spouses about desired family size and particularly about desired number of sons. Men are found to have slightly higher preference for both the desired family size and desired number of sons. This points to the fact that involvement of men will be helpful in strengthening the family welfare programme.

Husband-wife agreement on desire for additional children

Another fruitful way to look at the future fertility behaviour is to analyse the desire for additional children. This is based on a simple question on whether one wants to have another child or not. For this analysis too we have considered children ever born to a couple. At individual level analysis, information about children surviving is important but in this paper our emphasis is to examine the extent of agreement or disagreement of couples about their fertility goals and not the actual behaviour. In other studies on couples also parity was used for analysis (Williams, 1994).

As expected, the desire for additional children declines consistently with parity for both the spouses (Table 4). At parity one, 74 percent of spouses agree on their desire (to have or not to have an additional child) with 41 percent of cases where both desire to have additional children. At parity four, 92 percent of the spouses agree on their desire (to have or not to have an additional child). Only in seven percent cases for all parities both desires to have additional children. The Kappa index, which shows the extent of agreement on the desire, is significant at all parities but the magnitude of the index is very small (Mason and Smith, 2000).

At every parity, more number of husbands than wives desire to have additional children. Overall, in 11 per cent cases there is disagreement between spouses. In six percent cases it is the husbands who desire more children but not the wives. In the remaining five percent cases it is wives not the husbands. Therefore, though the level of agreement between spouses is substantially high, men are more inclined to have higher fertility than the women.

The extent of son preference is examined by extending the analysis for additional children by sex composition of children ever born (Table 5). Although the desire for additional children is higher among men than women, the son preference, i.e. desire for additional children when there is no son in the family appears to be stronger among women compared to men. For women with number of children less than or equal to three, the desire of additional children is stronger among wife than husband if they do not have any son. Maximum discrepancy between the spouses in their desire for additional children occurs in this case. For example, among couples with three or less children with no son, in 12 percent cases wives desire to have another child but not the husband, whereas in nine percent cases husbands want another children but not the wives. For higher parity couples, the discrepancy is not very clear, as the total number of cases with no son is only 22. Further investigation is required to better understand the issue.

An attempt is made to study the congruence between indicators that are generally used for measuring fertility preference, namely desired family size and desire for additional children. For this purpose, analysis is carried out separately for men and women subdividing them into two groups with less than three and four and above children ever born. We calculate for the two groups (separately for men and women) the desire for additional children when the desired family size is greater than or equal to and less than the number of children ever born (Table 6). If the desired family size is less than children ever born, for a person, he/she is likely to not desire additional children. Table 6 reveals that the congruence between the indicators of preference is higher for women than men. There are 5-6 percent women whose desired family size is less than their children ever born say they desire more children. This is slightly higher in case of men (7-10 percent).

Further analysis with desired family size and desire for additional children revealed that a significantly higher percentage of couples do not want an additional child with the same desired family size, than the other two categories where husbands or wives have a higher desired family size in comparison to their respective partners (table not shown).

To better understand how the agreement between spouses on fertility desire varies by socio-economic and demographic variables, multivariate analysis has been used. We gave two separate logistic regression runs to understand the phenomena. In the first analysis the dependent variable considered is dichotomous indicating whether a couple has agreement (that is, either both desire to have or both not desiring to have additional children) or not (that is, either husband desires and not wife or wife desires and not husband) on their desires for additional children. The second analysis is restricted to latter group, that is, where couple has disagreement on their desire for additional children. The dependent variable in this case also is dichotomous, taking a value of '1' if husband desires but not wife and '0' if husband does not desire but wife desires. The first analysis shows the extent of variation in agreement by socio-economic and demographic variables. It helps in understanding the extent of agreement, but does not indicate how husbands desire compares with the wives in terms of having additional children. The second analysis reveals whether husbands are more desirous to have additional children compared to wives; and how this phenomenon varies by the different socio-economic and demographic characteristics. The results are depicted in Table 7. It shows that the agreement between husband and wife increases with number of children they have. Higher the number of children, greater is the degree of agreement. Agreement in desire for additional children is lower among couples whose spousal preference for desired family size differ, compared to couples with both spouses having same desired family size. It is statistically significant only among couples whose husbands desired family size is less than that of the wife. Expectedly, when husbands desired family size is higher than the wives, a greater proportion of husbands desire to have additional children than the wives (second regression).

The agreement in desire for additional children is higher among couples where wives are illiterate or having less than 10 years of schooling, compared to couples with

wives having at least 10 years of schooling. The differences are, however, statistically significant only for illiterate women or women with 5-10 years of schooling. Husbands' education does not exert any influence on the agreement in having additional children. However, their occupations do make a difference. Among couples where husbands are either not working or working as a labourer, the couples tend to have less agreement in whether to have additional children, compared to couples where husband is in service.

Interestingly, agreement in desire for additional children declines among couples where age gap between husband and wife is less, compared to couple where wife is at least six years younger than her husband. Also, husbands are more desirous to have additional children in the former compared to the latter. Among the three caste groups, husbands are less desirous to have additional children when compared to couples that belong to general caste.

Contraceptive use and unmet need

Reporting on current contraceptive use by husband and wife differs slightly. In six percent cases husband reports use whereas wife does not, and in four percent couples it is the other way round, that is wife reporting use and husband does not (Table 8). In 90 percent couples the reporting matches. The contraceptive use status reported by husbands and wives where there is mismatch in reporting is analysed further in Table 8. This can help in understanding the quality of reporting contraceptive use by husbands and wives, and whose reporting is likely to be more reliable in estimating the level of contraceptive use. It needs to be mentioned that in 51 percent cases where husbands reported use but not the wives, the wives are found to be either in menopause or have undergone hysterectomy. It is interesting to note that in 19 percent cases husbands reported female sterilization when the wives had actually undergone hysterectomy (according to wives reporting). In 32 percent cases where the method mentioned is other than official methods (withdrawal, abstinence etc.), the wives are found to have reached

menopause (a question was asked to women about their current menstrual status where they reported about hysterectomy and menopause).

There appears to be confusion about hysterectomy and sterilization among husbands. This could also explain in part the mismatch in couples where 54 percent women reported female sterilization but not the husbands. It is evident that the reporting by wife is likely to be more reliable than husbands. It is also true that since the method used are predominantly female related, it is improbable that a wife will not be aware of use of a method and not report it when the husband does. On the contrary, it may be possible the other way round. A husband may not be aware that, say, his wife is fitted with IUD. A deliberate misreporting is, however, possible by both, and it is difficult to know whose misreporting (deliberate) is higher.

For further analysis of contraceptive prevalence rate, we consider wives reporting on contraceptive use. The level of contraceptive use in the three districts, that is, Patna, Vaishali and Varanasi are 47.1, 52.6 and 46.6 respectively (rural areas). It may be mentioned that according to the district level rapid household survey conducted in 198-99, the level of contraceptive use among women aged 30-49 in the three districts (rural and urban areas) were 56.3, 39.7 and 45.7 respectively (IIPS, 2000b).

As already mentioned, unmet need for contraception is defined here as those who do not want an additional children and are not using contraception. Unmet need has been estimated based on reporting of additional children by wives as well as both for husband and wife (Westoff and Ochoa, 1991). Unmet need based on reporting of wife is, as expected, higher than that of husband and the wife together. In the case of couples with one child, unmet need for contraception according to wife is more than two times higher than that when the need for both husband and wife are taken into account (Table 9).

DISCUSSION

The study is conducted in northern region of India where the level of fertility is still high and women's status is relatively low. No claim is made that the study represents

the states of Bihar and Uttar Pradesh, since only two districts in the former and one district in the latter are covered. However, it gives an idea about the spouses' agreement on fertility behaviour in a rural setting in the northern region. Another point that is worth the mention is that the study refers to couples with wife's age 30-49, and it does not reflect the views of the younger couples. The agreement between husband and wife is generally high till they achieve their desired family size. Since the fertility is high in the region, it is in a sense better to focus on the relatively older couples.

The study reveals that there is a fair amount of understanding between husbands and wives on their fertility preferences. They tend to agree on their desired family size. Overall, the desired family size is high, commensurate with the high fertility in the region, and it is more or less similar among both the partners. Even in terms of additional children desired, the concordance is quite high. For example, if they have only one child, majority among both desired to have additional children. But if they already have two or more a majority of both do not desire to have another.

Though the level of disagreement in terms of how many children to have is low, it shows that husbands are slightly more inclined to have a higher fertility, compared to their wives. Both the spouses show strong preference for sons. The findings of the study suggest that, if anything, the extent of son preference is higher among women than men. The extent of rationalization in desired family size is relatively less among women. To that extent, the reply on desired family size is likely to be closer to fertility preference for women than men.

It is generally believed that men compared to women will have a preference for larger family size. It is the women who bear the brunt of child bearing and rearing, and it is, therefore, natural to think that a woman would not like to go through the ordeal repeatedly. However, in the Indian context, particularly in the northern states, a woman gains her importance in the family by having more children. The status of women is relatively low in the study region. According to National Family Health Survey-2, percentage of women involved in decision making on own health care in these two states

are lower than the all India average (IIPS, 2000a). The survey also shows that the autonomy in decision-making improves with women's age. The difference in preferred family size between men and women, in the region, may, therefore, reduce.

Women reporting on contraceptive use are found to be better than the men. In sizeable proportion of cases the husbands confused hysterectomy as sterilization or wrongly reported the use of traditional method when the wives were, in fact, in menopause. The unmet need for family planning reduces considerably, if fertility preference for both husband and wife are taken into consideration instead only wives reporting.

It would be better to estimate the potential demand for family planning (the unmet need) by considering information from both husband and wife. The unmet need for family planning based on women's reporting alone might get over estimated and create false understanding of the couple's need.

Table 1: Percent Distribution of Couples by Agreement between Husband (H) and Wife (W) on Desired Family Size by Children Ever Born and Mean Number of Desired Children.

CEB	Agreement for desired no. of children (%)			Mean no. of desired children(H)	Mean no. of desired children(W)	Sample size@
	H>W	H=W	H<W			
0	22.9	50.0	27.1	2.31	2.40	48
1	27.7	45.8	26.5	2.21	2.23	83
2	11.3	71.8	16.8	2.18	2.24	238
3	24.7	55.0	20.3	2.69	2.64	596
4	31.7	41.0	27.3	2.82	2.77	741
5+	29.3	40.7	30.0	3.06	3.00*	1510
Total	**27.5**	**46.0**	**26.5**	**2.84**	**2.79***	**3216**

@ Couples who had reported same number of children ever born and given numeric response for desired family size.

* Difference of desired family size between husband and wife are significant at 5 % level of significance.

Table 2: Percent Distribution of Respondents by whether Desired Family Size (DFS) Exceeds Children Ever Born (CEB) by Number of Children Ever Born

CEB	Percentage reported less, equal, and more DFS than CEB					
	Husband			Wife		
	DFS<CEB	DFS=CEB	DFS>CEB	DFS<CEB	DFS=CEB	DFS>CEB
1	-	13.1	86.9	-	8.1	91.9
2	2.9	76.5	20.6	0.8	75.9	23.3
3	33.9	61.3	4.8	38.0	58.7	3.3
4	78.3	20.3	1.4	83.2	15.9	0.8
5+	91.4	5.4	3.2	97.6	1.7	0.7

Table 3: Percent Distribution of Couples by agreement between Husband and Wife about Desired Number of Sons by Desired Family Size and Mean Number of Desired Sons.

DFS	Agreement for desired number of son (%)			Mean no. of desired sons (H)	Mean no. of desired sons (W)	Sample Size@
	H>W	H=W	W>H			
2	6.6	91.3	2.0	1.07	1.02*	497
3	3.2	94.3	2.5	2.00	1.99	776
4	23.5	61.7	14.8	2.37	2.28	81
5+	(11.1)	(55.6)	(33.3)	(3.11)	(3.44)	9
Total	**5.7**	**91.1**	**3.2**	**1.69**	**1.66***	**1363**

@ Couples who had reported same number of children ever born, same number of desired children, and given numeric response for desired number of sons.
( ) Less than 25 cases
* Difference of desired number of sons between husband and wife are significant at 5 % level of significance.

Table 4: Percent Distribution of Couples by agreement between Husband and Wife on Desire for Additional Children by Children Ever Born

CEB	Agreement regarding desire for additional children (%)					Kappa Index*	Sample size@
	Both not desiring	Both desiring	Husband only desiring	Wife only Desiring	Total		
1	32.4	41.4	14.9	11.3	100.00	0.316	87
2	70.1	11.7	10.1	8.1	100.00	0.449	248
3	85.2	5.7	5.1	4.0	100.00	0.508	629
4	86.4	5.6	4.5	3.5	100.00	0.540	797
5+	87.9	2.7	5.4	4.0	100.00	0.314	1736
Total	**82.9**	**6.6**	**5.8**	**4.7**	**100.00**	**0.497**	**3559**

@ Couples who had reported same number of children ever born and given response to the question of desire for additional children. Sterilized couples were considered as not desiring additional child.
* Kappa index is used to examine the agreement between husband and wife about the desire for additional children by CEB and it is significant for all values of CEB.

Table 5: Percent Distribution of Couples by agreement between Husband and Wife on Desire for Additional Children by Children Ever Born and Number of Sons

CEB	Number of sons	Agreement regarding desire for additional child (%)				Kappa index	Total@
		Both not desiring	Both desiring	Husband only desiring	Wife only Desiring		
<=3	No son	19.1	59.5	9.2	12.2	0.489	131
	1-2	79.9	7.5	7.2	5.4	0.407	762
	3	91.6	-	2.8	5.6	-0.039+	107
4+	No son	27.3	59.1	9.1	4.5	0.697	22
	1-2	86.0	4.3	6.0	3.7	0.420	1068
	3+	89.7	1.9	4.5	3.9	0.266	1428
Total	No son	20.2	59.5	9.2	11.1	0.521	153
	1-2	83.5	5.6	6.5	4.4	0.448	1830
	3+	89.8	1.8	4.4	4.0	0.250	1535

@ Couples who had reported same number of children ever born and given response to the question of desire for additional children. Sterilized couples were considered as not desiring additional child.

* Kappa index is used to examine the agreement between husband and wife about the desire for additional children by CEB and it is significant for all values of CEB except one.

+ Kappa index is negative and insignificant as the desire for addition child by couple is zero.

Table 6: Percent Desiring Additional Children by Desired Family Size (DFS) and Children Ever Born (CEB)

Husbands	Percent desiring additional children by desired family size			
	CEB	DFS>=CEB	DFS<CEB	Sample Size
	>=3	23.15	10.7	987
	4+	14.52	7.19	2342
Wife	>=3	24.67	5.08	1002
	4+	13.24	6.24	2408

Table 7: Variations in Husband- Wife Agreement and Whether Husbands Desire is more about Additional Children: Results of A Logistic Regression Analysis

Variable name	Agreement [a]		Husbands desire more than wives [b]	
	Exp (B)	Sample size	Exp (B)	Sample size
Agreement of Desired Family Size				
Husband>Wife	0.917	886	3.039*	86
Husband<Wife	0.714*	851	0.853	96
Husband=Wife ®		1479		138
Children ever born				
Less than 3	0.473*	965	0.962	135
4 and above®		2251		185
Husband's Education				
Illiterate	0.813	916	1.502	121
Literate<primary	1.251	443	1.127	37
5-10 years of schooling	0.921	758	1.158	72
Above 10^{th} ®		1099		90
Wife's education				
Illiterate	1.872*	2411	2.205	255
Literate<primary	2.066	79	2.212	6
5-10 years of schooling	2.930*	452	2.687	22
Above 10^{th} ®		274		37
Husband Occupation				
Non working	0.494*	125	0.411	17
Own Agriculture	0.837	1193	0.653	92
Labour	0.568*	943	0.829	131
Business	0.675	568	0.752	54
Service®		387		26
Age difference				
Same age	0.541*	411	1.885	50
1-5 years difference	0.613*	1880	2.699*	209
6+ ®		925		61
Standard of living				
Low	0.565*	1407	0.872	175
Medium	0.661*	1180	1.448	106
High ®		629		39
Caste Husband				
SC/ST	0.587*	780	0.347*	113
OBC's	0.792	1795	0.546	162
Others®		641		45

*p<0.05, **p<0.1.

a: Dependent variable categories - agree=1(that is, either both desire to have or both not desiring to have additional children) and disagree=0 (that is, either husband desires and not wife or wife desires and not husband to have additional children).

b: Dependent variable categories- husband want=1(that is, husband desires to have additional children and not wife) and wife want=0(that is wife desires to have additional children not husband).

Table 8: Percent Distribution of Contraceptive Use Status Reported by Husbands and Wives Among Couples with Mismatch in Reporting

Contraceptive use status	Percent distribution by method currently using	
	Method reported by Husband(Wife reported not using contraceptive)	Method reported by Wife(Husband reported not using contraceptive)
Female Sterilization	19.0	53.8
Male Sterilization	3.5	1.9
IUD/Pills	25.3	26.9
Condom/Nirodh	20.4	1.9
Other Methods	31.8	15.5
Number of Couples	156	107

Table 9: Unmet Need for Contraception

CEB	Unmet need according to wives reporting	Unmet need according to agreement of reporting of husband and wife
1	14.86	6.76
2	20.37	14.15
3	18.17	14.31
4	22.64	18.38
5+	34.85	29.65
Total	27.31	22.24

Unmet need is defined in this study as those who do not want additional children and not using contraceptive (contraceptive use according to reporting of wife).

References:

Alam, I., and R. Leete. 1993. "Pauses in Fertility Trends in Sri Lanka and the Philippines?" pp. 83-95 in *The Revolution in Asian Fertility: Dimensions, Causes, and Implications,* edited by R.Leete and I.Alam. Oxford: Clarendon.

Bankole, Akinrinola, 1995. " Desired Fertility and Fertility Behaviour among the Yoruba of Nigeria: A Study of Couple Preferences and Subsequent Fertility." *Population Studies* 49: 317-328.

Bankole, A. and S. Singh, 1998. "Couples' Fertility and Contraceptive Decision-making in Developing Countries: Hearing the Man's Voice." *International Family Planning Perspective*, 24(1): 15-24.

Bankole, A., and C.F. Westoff, 1998. "The Consistency and Validity of Reproductive Attitudes: Evidence from Morocco." *Journal of Biosocial Science* 30(4): 439-455.

Becker, Stan, 1996. "Couples and Reproductive Health: A Review of Couple Studies." *Studies in Family Planning*, 27(6): 291-306.

Biddlecom, Ann E., and Bolaji M. Fapohunda, 1998. "Covert Contraceptive Use: Prevalence, Motivations, and Consequences." *Studies in Family Planning* 29(4): 359-372.

Bumpass, L.L. and C.F. Westoff, 1970. *The Later Years of Childbearing.* Princeton, N J: Princeton University Press

Bulatao, Ronald and D. Lee (eds), 1983. *Determinants of Fertility in Developing Countries: A Summary of Knowledge.* New York: Academic Press.

Byrne, D. and B. Blaylock. 1963. "Similarity and Assumed Similarity of Attitudes Between Husbands and Wives." *Journal of Abnormal and Social Psychology* 67: 636-640.

Casterline, J.B., A.E. Perez, and A.E. Biddlecom, 1997. "Factors Underlying Unmet Need for Family Planning in the Philippines." *Studies in Family Planning 2*8: 173-91.

Cleland, J. and Christopher Wilson, 1987. "Demand Theories of the Fertility Transition: An Iconoclastic View." *Population Studies* 41: 5-30.

Demeny, P., 1988. "Social Science and Population Policy." *Population and Development Review*, 14 (3): 451-479, 535&537.

Dharmalingam, A. and S.P. Morgan. 1996. "Women's Work, Autonomy, and Birth Control: Evidence from Two South Indian Villages." *Population Studies* 50: 187-201.

Dyson, T. and M. Moore.1983. "On Kinship Structure, Female Autonomy, and Demographic Behaviour in India." *Population and Development Review*. 9: 35-60.

Harphan, Trudy and Chris Scott, 1987. "Sample Implementation." In John Cleland and Chris Scott (eds.). *World Fertility Survey: An Assessment*. London: Oxford University Press: 47-378.

Hill, Reuben, J. M. Stycos, and Kurt W. Back, 1959. *The Family and Population Control.* Chapel Hill, NC: University of North Carolina Press.

International Institute for Population Sciences and ORC Macro, 2000a *National Family Health Survey, 1998-99*. Mumbai: International Institute for Population Sciences.

International Institute for Population Sciences, 2000b. *Reproductive and Child Health Project- Rapid Household Survey (Phase I & II), 1998-1999*. Mumbai: International Institute for Population Sciences.

Jejeebhoy, S.J.1991. "Women's Status and Fertility: Success Cross-Sectional Evidence from Tamil Nadu, India, 1970-80*." Studies in Family Planning.* 22: 217-30.

Mason, Karen O., and Anju Taj, 1987. "Women's and Men's Reproductive Goals." *Population and Development Review* 13(4): 611-638.

Mason, Karen O. and Smith Herbert L., 2000: "Husbands' versus wives' Fertility Goals and Use of Contraception: The Influence of Gender Context in Five Asian countries." *Demography*. 37(3): 299-311.

Mauldin W. Parker, 1976. "Fertility Trends: 1950-75." *Studies in Family Planning*. 7(9): 242-248.

Morris, Leo, Gary Lewis, Dorian L. Powell, John Anderson, and Ann Way. 1981. "Contraceptive Prevalence Surveys: A New Source of Family Planning Data." *Population Reports Series*. M No.5.

Parasuraman, S., T.K. Roy, R.D. Devi, B. Paswan, P. Arokiasamy, and S. Unisa, 1999. *Role of Women/s Education in Shaping Fertility in India: Evidences from National Family Health Survey*. Mumbai: Himalaya Publishing House.

Poffenberger, Thomas, 1969. *Husband-Wife Communication and Motivational Aspects of Population Control in an Indian Village.* Central Family Planning Institute Monograph Series, No.10. New Delhi: Central Family Planning Institute.

Retherford, R.D. and Minja Kim Choe, 1993. *Statistical Models for Causal Analysis,* New York: John Wiley.

Roy, T.K., F. Ram, P. Nangia, U. Saha and N. Khan, 2003. "Can Women's Childbearing and Contraceptive Intentions Predict Contraceptive Demand? Findings from a Longitudinal Study in Central India." *International Family Planning Perspective.*29 (1).

Sathar, Z.A. and S. Kazi, 1997. *Women's Autonomy, Livelihood and Fertility, Islamabad*: Pakistan Institute of Development Economics.

Strom B.L., Soloway R.D., Rioz-Dalenz J.L. et al. 1995 "Risk factors for gallbladder cancer. An international collaborative case-control study". *Cancer.*76: 1747-56.

Unalanl, T, 1998. "Problems of Collecting Information from Men in Demographic Surveys: Experience from the 1988. Turkish Population and Health Survey." In *Men, Family Formation, and Reproduction.* Liege, Belgium: IUSSP.

United Nations, Department of Economic and Social Affairs. 1961. The Mysore Population Study. *Population Studies.* 34:141-157.

Westoff C.F., and L.H. Ochoa, 1991. *Unmet Need and the Demand for Family Planning*, DHS Comparative Studies, No.5. Columbia, Institute for Resource Development / Marco International, M.D., U.S.A.

Williams, Richard, and Elizabeth Thomson*,* 1985. " Can Spouses be Trusted: A Look at Husband/Wife Proxy Reports." *Demography.* 22(1): 115-123.

Williams, Lindy B., 1994. "Determinants of Couple Agreement in U.S Fertility Decisions." *Family Planning Perspectives.* 26(4): 169-173.

Yaukey, David, Beryl J. Roberts, and William Griffith. 1965. "Husband's and wives' responses to a fertility survey." *Population Studies.* 19:29-43.

Zatonski W.A., Lowenfels A.B., Boyle P., et al. 1997. "Epidemiological aspects of gallbladder cancer: A case-control study of the SEARCH program of the International Agency for Research on Cancer". *Journal for National Cancer Institute*. 89: 1132-1138.