SPOUSE DIFFERENTIAL IN FERTILITY AND CONTRACEPTIVE INTENTIONS CULTURALLY CONTRASTING STATES OF INDIA

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INTRODUCTION

Traditionally, family welfare programs have been directed towards women (Becker, 1996) since they bear the children. However fertility and contraceptive intentions are normally influenced by the bargaining strengths and preferences of those involved in decision-making, more particularly, in traditional societies where wide disparity prevails in the socio-economic condition and cultural roles of men and women. Women's attitudes towards and practice of contraception are well documented, but less information has been published on men. Becker (1996) in a review of studies of couples and reproductive health outcomes emphasizes the importance of couples based intervention programs over those that target one partner or the other. Over the years there has been growing realization of studying spouses differential in fertility preferences and subsequent fertility (Bankole, 1995). Estimation of unmet need for couples and determinants of limiting spacing of births (1998, 1999, 2001), Beckman (1984), Ezeh (1993) and Thomson (1997) conducted elsewhere other than India

Malhotra et al. (1995) pointed out three limitations to arguments linking fertility to the cultural context of gender inequality in India and examine three dimensions of patriarchy system to ascertain its implication on fertility at district level. Jejeebhoy and Kulkarni (1989) compares family size preferences, ideal sex composition, and the motivation underlying these preference between currently married women and their husbands in rural Maharashtra in India based on sample of 1692 couples. Otherwise, there are few studies in the Indian context which investigate implication of patriarchal system on spouse differential fertility preference and future intentions of child bearing based on large scale representative sample.

In most of the policy documents adopted by government after ICPD, Cairo, Unmet need is the main indicator to not only monitor the progress of program but also evaluate the performance of end level service providers (ELSP). Unmet need is regarded as a real demand for family planning. Recently, Ross and Winfrey (2001) emphasis the need for considering a woman's own statements regarding their intention to use contraception in future as an alternative or supplement information of unmet need. Roy et al (2003) have also indicated this measure as more valid indicator of the demand, even allowing for some failure to use among those stating an intention to use.

These two concepts however, are based on the woman's need which cannot be translated into reality due to various factors at household as well as at community level. From program and

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policy points of view, it is very essential to understand the dynamics of spousal intentions that will help to initiate newer strategies.

To enrich research on couples for policy formulation and intervention programs, the present paper makes an attempt to unearth wives and husbands differential in fertility and contraceptive intentions in three culturally contrasting states of Andhra Pradesh, Punjab and Orissa in India

DATA AND METHODOLOGY

The data is from the nationwide district level Reproductive and child Health (RCH) survey conducted under the auspices of Ministry of Health & Family Welfare, Government of India. From each district a sample of one thousand currently married women are drawn using a multistage stratified sampling design and a separate questionnaire for husband is also canvassed. The survey was conducted in 2002-2003 and covers 50 percent of the districts in each state and union territory in India. The tabulation plan for women are based on households and womens response rates while that of husband incorporates households, women and husbands response rates. Questions on additional children desire, sex of the desired additional child, timing of additional child and future contraceptive intentions were addressed to both wives and husbands. The response to these questions are adopted for studying wives and husbands differential in fertility and contraceptive intentions in the states of Andhra Pradesh, Punjab and Orissa in India.

ANALYSIS

Table 1 through 3 some of the basic background characteristics of the men, women and couples in three selected states. Urbanization in Punjab and Andhra Pradesh seems to be at same level compared to Orissa where more than 70 percent of the respondent came from rural background. In the state of Andhra Pradesh and Orissa sample is dominated by respondents following Hindu religion whereas in Punjab, follower of Sikh religion are more. It may also noted that households in Punjab are economically much better than those in Orissa and Andhra Pradesh. In Orissa 7 households in every 10 households falls in low standard of living where as it is around 4 in Andhra Pradesh and hardly one in Punjab.

Comparatively age at marriage is higher in Punjab (Table 2). Age gap in husband and wife is lesser in Punjab compared to Orissa and Andhra Pradesh. Only about 29 percent of the couples wives of more than 5 years younger than their husbands in Punjab where as in Orissa and Andhra Pradesh nearly half of the women fall in this category. Husband and wife educational status is also better in Punjab. According to the survey female literacy rate is about 65 percent in Punjab where as in Orissa and Andhra pradesh 45 and 43 percent wives are literate respectively. It may also be noted that in Punjab there are good number of women who have married to men having comparatively less years of schooling. Further more, 35 percent of spouses are illiterate in Andhra Pradesh followed by Orissa (29 percent) and Punjab (18 percent).

Table 4 presents the current use of the contraception reported by husband and wife. There is very high degree of agreement between the reported use of the contraception by couples under Indian condition where sterilization is virtually only method being used such level of agreement is not surprising. In Andhra Pradesh there is more than 90 percent agreement among spouses. This is the state where most of the women adopt female sterilization; a method that is known to all in the neighborhood because it is clinic bared and cannot be hidden.

Table 5 shows the percentage distribution of spouses by number of living children as reported by them. It may be noted that in case of 87 percent of spouses report same number of living children. This figure is only 78 percent in Punjab and Orissa. It is surprising to note much lower agreement in Orissa (71%) compared to other two states.

Table 6 depicts the current use of family planning methods by number of living sons and daughters and standard of living index couples who have both sons(s) and daughter(s) are using more permanent methods as compared to having only daughter(s) or son(s) in Punjab (41 percent), Orissa (37 percent) and Andhra Pradesh (84 percent). If we look at the use of spacing methods than the situation is different in all three selected states, where in Punjab higher use of spacing methods are among the couples with only daughter(s) or only son(s) than the couples having both son(s) and daughter(s). This trend is same in Orissa and Andhra Pradesh. Traditional methods of family planning are more in Punjab with couples who have both son(s) and daughter(s) (11 percent) as compare to Orissa (7 percent). Standard of living is positively associate with use of family planning among couples in three states. In Punjab, couples having low standard of living are more likely to use permanent methods as compared to medium and high standard of living couples but this trends goes in reverse when we see the use of spacing methods where the higher use of spacing methods are among with high standard of living couples. In Orissa and Andhra Pradesh permanent methods are more prevail among couples with living in medium standard but use of spacing methods are more among couples with living in high standard followed by traditional method of family planning.

Table 7 give shows the future use of family planning methods by couples with number of son(s) and daughter (s) and standard of living. In this table the intention to adopt contraception in future have been asked only to those couples who are currently not using any family planning methods. In Orissa 30 percent of couples intend to use contraception in future followed by Andhra Pradesh (24 percent) and Punjab (10 percent). The higher use of contraceptive methods in future is found among the couples having both son(s) and daughter(s) (17 percent) while in Orissa, 36 percent of couples having only daughter(s) in Andhra Pradesh, 32 percent couples having son(s) are intended to use family planning methods are found among the couples who are living in medium standard in terms of SLI (14 percent) in Punjab but in Orissa and Andhra Pradesh, couples with living in low standard are more intend to use contraceptives in future as compared to couples living medium and high standard. It is therefore evident that intention of contraceptive use among couples varies by sex composition of children that couples have.

Table 8 shows the method- wise intention to use family planning methods in future. Almost all the spouses in Andhra Pradesh have reported that they will use permanent methods in future (95 percent) followed my Punjab (52 percent) and Orissa (38 percent). In Orissa 20 percent of couples intend to use spacing methods as compared to Punjab (16 percent). Only in Andhra Pradesh, 95 percent of spouses have reported same method while in Punjab, 68 percent of couples and in Orissa 62 percent of couples are in intend to use same methods as reported by spouses.

Table 9 depicts the spouse differential in reported desire for additional children. In Andhra Pradesh and Orissa desire of additional child (ren) is more among husbands than their wives while in Punjab wives want more child (ren) than their husbands. In Andhra Pradesh, 67 percent of spouses have reported that they want more children as followed by Punjab and Orissa (58 percent and 57 percent) respectively. In Punjab, 87 percent of couples have reported same desire ness as compare to 83 percent of couples both in Orissa and Andhra Pradesh.

Table 10 reflects the desired sex of additional child (ren) among spouses. In Orissa 37 percent of spouses reported that they desire to have boy as compared to Punjab (19 percent) and Andhra Pradesh (16 percent). The desireness of additional child to be a girl having 8 percent among couples residing in Andhra Pradesh followed by Orissa (3 percent) and Punjab (1 percent). In decision in the sex of desired child (ren) have been reported higher among half of the spouses in Punjab which goes down in Andhra Pradesh (48 percent) and Orissa (25 percent). Seventy one percent of spouses have reported same desireness in Andhra Pradesh followed by Punjab (69 percent) and Orissa (65 percent).

Table 11 shows the intended waiting time of next desired child as reported by couples. In Punjab 73 percent of couple desired the next child to be born within two years followed by Andhra Pradesh (71 percent) and Orissa (61 percent). In Orissa, 3 percent of couples desired their next child to be born after 2 years followed by Andhra Pradesh (1 percent) and Orissa (1 percent). In all the three states, almost same number of couples have not decided about the timing of next desired child. Seventy-eight percent of spouses in Punjab have reported same timing of next desired child followed by Andhra Pradesh (75 percent) and Orissa (69 percent).

Table 12 shows the differentials in desireness of additional child (ren) among spouses by sex of living children and standard of living. Every 9 among 10 couples in Punjab, who have only daughter(s) are more likely to desired for additional child followed, by Andhra Pradesh (86 percent) and Orissa (84 percent). Couples with only son(s) are less likely to desired for an additional child as compared to couples with only daughter(s) in all the three states but this intention is more in Andhra Pradesh (78 Percent) as compared to Orissa (61 percent) and Punjab (51 percent). Those couples having both son(s) and daughter(s) have are more desire to have another child in Orissa (25 percent) followed by Andhra Pradesh (23 percent) and Punjab (8 percent). Husband desireness is more in Andhra Pradesh and Orissa than their spouses among couples who are having both son(s) and daughter(s). Eighty-two percent of couples with both living son(s) and daughter(s) do not want additional child in Punjab followed by Andhra Pradesh (62 percent) and Orissa (61 percent). Couples with medium standard of living want more child (ren) in future in Andhra Pradesh (80 percent) followed by Punjab and Orissa (58 percent). Desire for additional children is less among couples residing in Andhra Pradesh (64 percent) and 57 percent in Orissa, who are better off in terms of high standard of living index. In Andhra Pradesh 12 percent of husbands want more children than spouses among this category of couples. Among the couples who do not want more child in future vary by states and standard of living.

MULTIVARIATE ANALYSIS

Significant background characteristics of spouses influencing current contraceptive practices, intention to use family planning methods in future and desired for additional children are subject to investigation adopting multivariate logistic regression for each and the results are presented in Table 13 through Table 15. In all the three states of Punjab, Orissa and Andhra Pradesh, couples having children either of only sex a children of both sex the odds of contraceptive use are higher compare to those who have children at all and this is statistically significant for probability level P < 0.01. Invariably of these three states, odds of adopting contraception are higher among couples who are together for at least five years in terms of marital duration compared to those with short marital duration of less than five years and this statistically significant. Education of wife enhances contraception in the two states of Orissa and Andhra Pradesh significantly but this not true for Punjab. Similar interpretation holds good for the effect of husband's education on contraception practices. The age gap between the spouses where wives are younger, the likely of contraception are found to be higher in the two states of Orissa and Andhra Pradesh. Rural –urban differential in contraceptive use is not prominent in Punjab, urban resident couples are more likely to adopt contraception in Orissa but other way round in Andhra Pradesh and these findings are statistically pronounce.

Significant influence of better standard of living on contraceptive use among couples could be seen only in the state of Andhra Pradesh, religion differential emerges only in the state of Orissa and caste differential are significant in these two states.

When it comes to contraceptive intention, the results of logistic regression shown in Table 14, once again reconfirmed that invariably of the three states, those couples with children irrespective of sex composition are more likely to intend to adopt contraception in future compared to those with no living child. In Orissa and Andhra Pradesh education of husband have shown some bearing on future contraceptive intention. Surprisingly the influence of wife's education have no bearing. Such conclusion is found in respect of the age difference between the spouses. Another interesting finding is that in all the three states marital duration have inverse relation with the odds of future contraceptive intention. There seems marginal or no differential in contraceptive intention by religion, caste and standard of living.

In the similar way background characteristics which favour or disfavour desired for additional child (ren) are examine adopting logistic regression to the dichotomous response intend to have additional child (ren) 'yes' being coded as 1 and 'no' is coded as 0. The results in terms of odds ratio and significance level are shown in Table 15. It is evident that odds of desiring additional child (ren) depends on the living children and their sex composition. Compare to couples with no living children, those have children irrespective of their sex composition are less likely to desired additional child (ren) and odds ratios relative to those who have no children drastically decreases with living children, more so when couples of children of both sex. Marital duration of couples is the other factor which have negative association with desiring for additional child (ren) and this inverse relationship is statistically significant. Marginal or no prominent differential in desiring for additional child is found for residence background, age gap

between spouses, education of wife, education of husband, religion, caste/tribe and standard of living of couples.

SUMMARY AND CONCLUSION

The salient findings are:

➢ The spousal age gap in Punjab is lesser as compared to Orissa and Andhra Pradesh.

➢ There is very high degree of agreement between the reported use of the contraception by couples under Indian condition where sterilizations is virtually only method being used.

➢ As far as current use of family planning methods by number of living sons and daughters and standard of living index is concerned couples who have both son(s) and daughter(s) are using more permanent methods in Andhra Pradesh followed by Punjab and Orissa.

➢ Use of spacing methods is higher in Punjab than other two states with the couples having only son(s) or daughter(s). This finding reveals that such couples have not completed their family size.

➢ Intention to use family planning methods among couples who are not currently using any contraception are more in Orissa followed by Andhra Pradesh and Punjab.

➢ The higher intention to use of permanent contraceptives methods in future is found among couples having both son(s) and daughter(s) and high standard of living index in Punjab, Andhra Pradesh and Orissa.

➢ Desire for additional child(ren) among the couples is more in Andhra Pradesh and Orissa as compared to Punjab. The desire for additional child(ren) is more among husbands than their wives in Andhra Pradesh and Orissa while in Punjab wives want more child(ren) than their husbands but in all the three states difference is small.

Table 1: **Percent distribution of couples by socio-economic characteristics in Punjab, Orissa and Andhra Pradesh, RCH2, 2002**

	Punjab			Orissa			Andhra Pradesh		
	Men	Women	Couple	Men	Women	Couple	Men	Women	Couple
Place of Residence									
Rural	65.5	66.3	68.8	74.6	72.0	74.2	63.7	63.8	64.5
Urban	34.5	33.7	31.2	25.4	28.0	25.8	36.3	36.2	35.5
Religion									
Hindu	37.7	37.5	38.9	96.0	95.8	96.2	86.7	86.1	87.1
Muslim	1.2	1.0	1.1	2.2	2.4	1.7	8.4	8.9	8.1
Other	61.2*	61.4*	59.9*	1.8	1.8	2.0	4.9	5.1	4.8
Caste/tribe									
SC/ST	32.4	32.8	34.2	45.4	43.4	46.6	26.9	25.7	26.8
Other	67.6	67.2	65.8	54.6	56.6	53.4	73.1	74.3	73.2
SLI									
Low	8.5	9.8	8.5	65.0	62.8	65.9	38.1	37.1	38.1
Medium	40.7	40.6	41.4	23.2	24.2	21.5	36.7	37.2	37.0
High	50.8	49.6	50.4	11.8	13.0	12.6	25.2	25.7	24.9
Number	**3909**	**7124**	**3572**	**19805**	**12473**	**9391**	**4940**	**9418**	**4656**

* Other includes Sikh religion

Table 2: **Percentage distribution of couples by age in Punjab, Orissa and Andhra Pradesh , RCH2, 2002**

Wife	Husband				
	< 25 years	25 –34 years	35 –44 years	45+ years	Total
Punjab (n = 3572)					
15 – 24 years	6.6	11.8	0.6	-	19.0
25 – 34 years	0.5	23.0	18.8	1.0	43.2
35 –44 years	0.1	0.7	17.9	19.1	37.8
Total	7.1	35.4	37.3	20.1	100.0
Orissa (n = 9391)					
15 – 24 years	5.1	17.3	2.1	0.2	24.8
25 – 34 years	0.2	17.3	24.6	2.3	44.4
35 –44 years	0.2	0.4	13.5	16.7	30.8
Total	5.5	35.0	40.3	19.2	100.0
Andra Pradesh (n = 4656)					
15 – 24 years	6.2	18.4	1.8	0.2	26.7
25 – 34 years	0.2	16.5	22.3	2.6	41.7
35 –44 years	0.1	0.3	13.2	18.0	31.6
Total	6.6	35.2	37.3	20.8	100.0

Table 2A: **Percent distribution of age combination of couples in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002**

Age combination of couples	Punjab	Orissa	Andhra Pradesh	Total
Wives are older or same age with husband s	8.5	3.9	4.5	5.0
Wives are 5 years younger than their husbands	62.6	46.0	43.9	48.8
Wives are more than 5 years younger than their husbands	28.9	50.1	51.6	46.2
Number of couples	3572	9391	4656	17619

Table 3: **Percentage distributions of couples by education (year of schooling) in Punjab, Orissa and Andhra Pradesh, RCH2, 2002**

Wife	Husband			
	Illiterate	0 – 9 years of schooling	10+ years of schooling	Total
Punjab (n = 3572)				
Illiterate	18.0	12.8	4.3	35.1
0-9 years of schooling	3.9	16.9	11.8	32.6
10+ years of schooling	0.8	6.0	25.5	32.3
Total	22.6	35.7	41.6	100.0
Orissa (n = 9391)				
Illiterate	28.9	24.2	1.7	54.8
0-9 years of schooling	3.3	20.9	9.6	33.8
10+ years of schooling	0.1	1.4	9.9	11.4
Total	32.4	46.5	21.1	100.0
Andhra Pradesh (n = 4656)				
Illiterate	34.5	16.3	5.8	56.6
0-9 years of schooling	4.0	10.8	10.3	25.1
10+ years of schooling	0.5	2.1	15.7	18.4
Total	38.9	29.2	31.9	100.0

Table 4: **Current use of the contraception reported by spouses in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002**

Wife reported CPR	Husband reported CPR					
	Permanent methods	Spacing methods	Traditional methods	Other methods	Non-users	Total
PUNJAB (n = 3572 level agreement = 89%)						
Permanent methods	30.5	0.4	-	-	0.3	31.3
Spacing methods	0.1	26.5	0.3	-	1.0	27.9
Traditional methods	0.1	1.3	8.8	0.1	0.8	11.0
Other methods	-	-	-	0.3	-	0.3
Non-users	0.4	2.0	0.8	0.3	26.0	29.4
Total	31.2	30.2	9.9	0.6	28.1	100.0
ORISSA (n = 9391 level of agreement = 86%)						
Permanent methods	30.6	0.8	0.1	-	0.4	31.9
Spacing methods	0.2	9.2	0.2	0.1	0.7	10.5
Traditional methods	0.1	0.5	6.6	0.1	1.5	8.8
Other methods	0.3	0.1	0.1	1.4	0.3	2.2
Non-users	0.5	1.4	1.4	0.5	42.7	46.5
Total	31.7	12.1	8.4	2.2	45.6	100.0
ANDHRA PRADESH (n = 4656 level of agreement 91%)						
Permanent methods	64.4	0.8	-	-	0.8	65.9
Spacing methods	0.1	0.6	-	-	0.2	0.9
Traditional methods	-	-	-	-	-	-
Other methods	0.1	-	-	-	-	0.1
Non-users	1.6	0.3	-	-	30.9	33.0
Total	66.1	1.7	0.1	0.1	32.0	100.0

Table 5: **Percentage distribution of spouses by number of living children in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002.**

Reported by wife	Reported by husband					
	PUNJAB (n = 3572) (Level of agreement 0.814)					
	0	**1**	**2**	**3-4**	**5+**	**Total**
0	8.9	0.2	0.2	0.1	0.0	9.4
1	0.7	12.0	0.2	0.1	0.0	13.1
2	0.2	1.8	25.4	0.5	0.1	27.9
3-4	0.1	0.3	4.2	33.9	0.1	38.7
5+	0.1	-	0.3	4.3	6.2	10.9
Total	9.9	14.3	30.3	38.9	6.5	100.0
	ORISSA (n = 9391) (Level of agreement = 0.709)					
0	9.4	0.5	0.4	0.4	0.2	10.8
1	0.9	13.6	0.4	0.4	0.2	15.6
2	0.4	2.5	19.4	0.6	0.4	23.4
3-4	0.3	0.7	5.6	27.2	0.8	34.6
5+	0.1	0.2	0.7	6.5	8.2	15.6
Total	11.0	17.5	26.5	35.1	9.8	100.0
	ANDHRA PRADESH (n = 4656) (Level of agreement = 0.813)					
0	8.2	0.2	0.2	0.2	-	8.8
1	0.6	11.9	0.6	0.3	0.1	13.5
2	0.2	1.6	29.8	1.4	0.3	33.2
3-4	0.1	0.4	3.9	31.6	0.7	36.7
5+	-	0.1	0.4	2.2	5.1	7.7
Total	9.0	14.2	34.9	35.7	6.2	100.0

Table 6: **Percent distribution of couples by current use of family planning methods by number of living children and SLI in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002**

	Permanent	Spacing	Traditional	Other	Non-users
PUNJAB (n = 3572)					
Living Children					
Only Daughter	2.2	31.1	7.7	-	59.0
Only Son	29.5	31.3	9.4	0.3	29.5
Both	41.0	27.6	10.6	0.3	20.5
No living children	-	0.9	0.9	-	98.3
SLI					
Low	44.0	10.6	5.8	0.7	38.9
Medium	36.6	19.1	8.9	0.3	35.0
High	23.3	35.1	9.3	0.2	32.1
Total	30.5	26.5	8.8	0.3	33.8
ORISSA (n = 9391)					
Living Children					
Only Daughter	8.9	11.6	7.5	0.6	71.3
Only Son	29.9	12.0	8.1	0.8	49.3
Both	44.5	9.3	7.1	2.2	36.9
No living children	0.6	1.0	0.7	-	97.7
SLI					
Low	30.1	4.3	4.7	1.9	59.0
Medium	32.7	14.3	8.4	0.5	44.1
High	29.6	26.5	13.6	0.5	29.9
Total	30.6	9.2	6.6	1.4	52.2
ANDHRA PRADESH (n = 4656)					
Living Children					
Only Daughter	46.2	1.8	-	0.2	51.9
Only Son	56.6	1.7	-	-	41.8
Both	84.3	0.2	-	-	15.4
No living children	0.7	0.7	0.2	-	98.3
SLI					
Low	60.6	0.1	-	-	39.3
Medium	67.4	0.3	-	-	32.3
High	65.6	2.0	0.1	0.2	32.2
Total	64.4	0.6	-	-	34.9

Table 7:   Percentage of future use of family planning methods by couples in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002

	Punjab		Orissa		Andra Pradesh	
	Percent	Number	Percent	Number	Percent	Number
Living Children						
Only daughters	13.8	94	35.6	660	30.0	217
Only sons	11.5	96	34.1	643	32.2	211
Both	17.3	226	33.0	1117	28.6	255
No living children	4.0	201	19.7	745	9.5	315
Total	11.7	617	30.4	3165	24.4	998
SLI						
Low	12.9	70	31.0	2655	26.3	547
Medium	14.4	285	30.6	5446	23.2	426
High	9.0	323	19.6	153	22.4	272

Table 8:   Percentage of future use of family planning methods reported by husband and wife in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002

Wife	Husband				
	Permanent	Spacing	Traditional	Other	Total
PUNJAB (n =76, level of agreement = *)					
Permanent	51.8	9.6	2.4	-	68.4
Spacing	10.8	15.7	1.2	2.4	27.6
Traditional	2.4	-	-	-	-
Other	3.6	-	-	-	3.9
Total	69.7	25.0	3.9	1.3	100.0
ORISSA (n = 1021, level of agreement = 0.35)					
Permanent	38.0	10.9	0.7	2.9	52.5
Spacing	13.0	20.3	0.5	3.5	37.3
Traditional	0.4	0.4	0.8	0.1	1.7
Other	3.1	2.1	0.1	3.2	8.5
Total	54.6	33.6	2.1	9.8	100.0
ANDHRA PRADESH (n = 303, level of agreement = 0.20)					
Permanent	94.6	1.7	-	1.3	97.7
Spacing	1.3	-	-	-	1.3
Traditional	-	-	-	-	-
Other	1.0	-	-	-	1.0
Total	97.0	1.7	-	1.3	100.0

* Kappa statistic cannot be completed. It required a symmetric 2 – way table in which the values of the first variable match the values of the second variable

Table 9:   **Percentage distribution of couples by desire of additional child in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002**

Wife	Husband				
	Want more	Want no more	Not decided	Upto god	Total
PUNJAB (n = 575) (Level of agreement 0.723)					
Want more	57.6	4.6	1.7	0.5	63.8
Want no more	2.8	28.7	1.4	0.3	33.2
Not decided	1.6	0.2	0.2	-	1.9
Upto god	0.9	-	0.2	-	1.0
Total	62.8	32.9	3.5	0.9	100.0
ORISSA (n = 3266) (Level of agreement = 0.647)					
Want more	57.4	4.6	1.2	0.7	63.8
Want no more	5.3	25.0	0.7	0.2	31.2
Not decided	1.9	0.6	0.4	0.1	3.0
Upto god	1.0	0.8	0.0	0.2	2.0
Total	65.6	31.0	2.3	1.1	100.0
ANDHRA PRADESH (n = 1179) (Level of agreement = 0.575)					
Want more	66.8	2.5	1.0	2.1	72.4
Want no more	5.4	15.5	0.7	0.3	22.0
Not decided	1.6	0.3	0.2	-	2.0
Upto god	2.7	0.4	0.1	0.3	3.6
Total	76.6	18.7	2.0	2.8	100.0

Table 10:   Percentage distribution of couples by desire of additional child by sex in Punjab, Orissa & Andhra Pradesh, RCH 2, 2002.

Wife	Husband			
	Boy	Girl	Does not matter/ upto god	Total
PUNJAB (n = 356) (Level of agreement 0.352)				
Boy	18.5	0.3	18.8	37.6
Girl	-	0.8	2.0	2.8
Doesn't matter/ Up to god	8.7	1.1	49.7	59.6
Total	27.2	2.2	70.5	100.0
ORISSA (n = 2042) (Level of agreement = 0.371)				
Boy	37.3	0.9	11.5	49.7
Girl	1.2	3.1	3.3	7.6
Doesn't matter/ Up to god	15.8	2.4	24.5	42.7
Total	54.3	6.5	39.3	100.0
ANDHRA PRADESH (n = 884) (Level of agreement = 0.469)				
Boy	15.6	0.5	8.6	24.7
Girl	0.9	7.6	5.9	14.4
Doesn't matter/ Up to god	8.9	4.8	48.2	61.0
Total	24.5	12.8	62.7	100.0

Table 11:   Percentage distribution of couples by waiting time of next desired child in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002

Wife	Husband			
	Within 2 years	After 2 years	Not decided	Total
PUNJAB (n = 323) (Level of agreement 0.235)				
Within 2 years	73.4	1.5	11.8	86.7
After 2 years	1.9	0.6	0.9	3.4
Not decided	5.0	0.9	4.0	9.9
Total	80.2	3.1	16.7	100.0
ORISSA (n = 1962) (Level of agreement = 0.249)				
Within 2 years	60.8	6.4	12.4	79.6
After 2 years	3.4	3.4	2.0	8.8
Not decided	5.0	2.1	4.5	11.7
Total	69.2	11.9	18.9	100.0
ANDHRA PRADESH (n = 793) (Level of agreement = 0.183)				
Within 2 years	70.5	2.8	9.8	83.1
After 2 years	1.5	0.8	1.4	3.7
Not decided	8.8	0.8	3.7	13.2
Total	80.8	4.3	14.9	100.0

Table 12: Percent distribution desire for additional children by living children and SLI in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002.

	Both wants more child	Wife wants husband not	Husband wants wife not	Both do not want
PUNJAB				
Living children				
Only Daughter	90.5	-	4.1	5.4
Only Son	50.7	10.1	4.3	34.8
Both	8.2	7.5	2.7	81.6
No living	98.4	1.0	0.5	-
SLI				
Low	62.5	7.1	-	30.4
Medium	57.9	5.3	3.9	32.9
High	65.3	2.8	2.8	29.1
ORISSA				
Living children				
Only Daughter	83.7	3.4	4.7	8.2
Only Son	61.2	6.4	6.4	26.1
Both	24.6	6.9	7.5	61.0
No living	95.5	1.3	2.6	0.6
SLI				
Low	63.3	4.8	5.9	26.0
Medium	57.7	5.7	5.1	31.5
High	57.4	5.1	6.6	30.9
ANDHRA PRADESH				
Living children				
Only Daughter	85.6	2.5	5.5	6.5
Only Son	77.8	2.6	7.2	12.4
Both	23.0	4.1	11.2	61.7
No living	98.1	0.4	1.5	-
SLI				
Low	75.1	3.4	4.7	16.8
Medium	79.5	1.9	4.1	14.5
High	63.7	2.6	11.5	22.2

Table 13: Logistic regration depicting the effect of selected background variables on spouses who are currently using family planning method in Punjab, Orissa and Andhra Pradesh, RCH2, 2002

Category	Punjab		Orissa		Andhra Pradesh	
	β	Exp (β)	β	Exp (β)	β	Exp (β)
Residence						
Rural(R)		1.00		1.00		1.00
Urban	0.13	1.134	0.33	1.39***	-0.40	0.67***
Age difference among couple						
Wives are older/same age with husbands®		1.00		1.00		1.00
Wives are 5 years younger than husbands	- 0.18	0.84	0.23	1.25	0.36	1.44*
Wives are < 5 years younger than husbands	- 0.09	0.92	0.37	1.45**	0.32	1.37
Marital duration						
0 –4 years(R)		1.00		1.00		1.00
5 –9 years	0.43	1.53**	0.41	1.50***	1.79	5.98***
10+ years	0.98	2.67***	1.55	4.69***	2.77	15.91***
Education of wife						
Illiterate(R)		1.00		1.00		1.00
0-9 years	0.14	1.15	0.32	1.38***	0.34	5.98***
10+ years	0.08	1.08	0.63	1.89***	0.46	15.91***
Education of husband						
Illiterate (R)		1.00		1.00		1.00
0-9 years	- 0.10	0.90	0.13	1.14*	0.01	1.39**
10+ years	0.13	1.13	0.17	1.19	0.07	1.59**
Religion						
Hindu(R)		1.00		1.00		1.00
Other	- 0.06	0.94	-0.26	0.77*	-0.52	1.08
Caste/Tribe						
SC/ST(R)		1.00		1.00		1.00
Other/DK	- 0.41	0.96	0.30	1.35***	0.28	1.33**
Living children						
No living children(R)		1.00		1.00		1.00
Only daughter	3.17	23.89***	2.00	7.41***	3.09	21.89***
Only sons	4.34	76.50***	2.93	18.66***	3.63	37.69***
Both daughters and sons	4.67	106.84***	3.24	25.41***	4.59	98.93***
Standard of living index						
Low(R)		1.00		1.00		1.00
Medium	0.24	1.27	0.42	1.53	0.46	1.59***
High	0.54	1.71	1.08	2.94	0.39	1.48**
	R^2=27%		R^2 = 28%		R^2 = 35%	
	N=3563		N = 9381		N = 4654	

R: Reference category

*: 0.01 < P < 0.05 level of significant

* *: 0.001 < P < 0.01 level of significant

* * *: P < 0.001 level of significant

Table 14: Logistic regression depicting the effect of selected background variable on spouses who are intend to use family planning methods in future in Punjab, Orissa and Andhra Pradesh, RCH 2, 2002

Category	Punjab β	Punjab Exp (β)	Orissa β	Orissa Exp (β)	Andhra Pradesh β	Andhra Pradesh Exp (β)
Residence						
Rural(R)		1.00		1.00		1.00
Urban	- 0.25	0.78	- 0.44	0.64***	- 0.06	0.94
Age difference among couple						
Wives are older/same age with husbands®		1.00		1.00		1.00
Wives are 5 years younger than husbands	0.60	1.82	0.17	1.18	0.39	1.49
Wives are < 5 years younger than husbands	0.39	1.48	0.19	1.21	0.17	1.19
Marital duration						
0 –4 years(R)		1.00		1.00		1.00
5 –9 years	0.35	1.42	- 0.31	0.73**	0.07	1.07
10+ years	- 0.89	0.41*	- 0.88	0.42***	- 1.05	0.35***
Education of wife						
Illiterate(R)		1.00		1.00		1.00
0-9 years	- 0.27	0.76	0.09	1.10	0.06	1.06
10+ years	0.37	1.45	0.01	1.01	0.10	1.10
Education of husband						
Illiterate (R)		1.00		1.00		1.00
0-9 years	- 0.19	0.83	0.18	1.20*	0.24	1.27
10+ years	- 0.61	0.54	0.12	1.13	- 0.45	0.64*
Religion						
Hindu(R)		1.00		1.00		1.00
Other	- 0.39	0.68	- 0.24	0.79	0.06	1.06
Caste/Tribe						
SC/ST(R)		1.00		1.00		1.00
Other/DK	- 0.06	0.95	- 0.18	0.84*	- 0.09	0.92
Living children						
No living children(R)		1.00		1.00		1.00
Only daughter	1.11	3.05*		2.42***	1.54	4.65***
Only sons	1.29	3.65**		2.08***	1.58	4.85***
Both daughters and sons	1.81	6.12***		2.73***	1.67	5.31***
Standard of living index						
Low(R)		1.00		1.00		1.00
Medium	0.32	1.38	-0.06	0.94	- 0.09	0.92
High	0.04	1.04	-0.67	0.51**	- 0.07	0.94
	R^2=4%		R^2 = 4%		R^2 = 8%	
	N=1119		N = 4634		N = 1583	

R: Reference category

*: 0.01 < P < 0.05 level of significant

* *: 0.001 < P < 0.01 level of significant

* * *: P < 0.001 level of significant

Table 15:　　Logistic regression depicting the effect of selected background variable on spouses who have desired additional children in future, Punjab, Orissa and Andhra Pradesh, RCH 2, 2002

Category	Punjab		Orissa		Andhra Pradesh	
	β	Exp (β)	β	Exp (β)	β	Exp (β)
Residence						
Rural(R)		1.00		1.00		1.00
Urban	0.07	1.07	- 0.54	0.58***	- 0.12	0.88
Age difference among couple						
Wives are older/same age with husbands®		1.00		1.00		1.00
Wives are 5 years younger than husbands	- 0.30	0.75	- 0.33	0.72	0.22	1.26
Wives are < 5 years younger than husbands	- 0.34	0.71	- 0.66	0.52**	- 0.20	0.82
Marital duration						
0 –4 years(R)		1.00		1.00		1.00
5 –9 years	- 0.04	0.96	- 0.36	0.70**	- 0.26	0.77
10+ years	- 1.04	0.35***	- 1.15	0.32***	- 1.53	0.22***
Education of wife						
Illiterate(R)		1.00		1.00		1.00
0-9 years	- 0.31	0.74	- 0.29	0.75**	- 0.25	0.78
10+ years	- 0.26	0.77	- 0.95	0.39**	- 0.27	0.76
Education of husband						
Illiterate (R)		1.00		1.00		1.00
0-9 years	- 0.30	0.74	- 0.19	0.83	0.28	1.33
10+ years	- 0.58	0.56	- 0.06	0.94	0.08	1.08
Religion						
Hindu(R)		1.00		1.00		1.00
Other	0.38	1.47	- 0.13	0.88	0.38	1.46
Caste/Tribe						
SC/ST(R)		1.00		1.00		1.00
Other/DK	0.26	1.29	- 0.27	0.76	- 0.41	0.66*
Living children						
No living children(R)		1.00		1.00		1.00
Only daughter	- 1.45	0.23***	- 0.83	0.44***	- 0.02	0.98
Only sons	- 2.74	0.07***	- 1.74	0.17***	- 0.21	0.81
Both daughters and sons	- 4.89	0.01***	- 3.01	0.05***	- 2.42	0.09***
Standard of living index						
Low(R)		1.00		1.00		1.00
Medium	- 0.62	0.54	- 0.25	0.78	0.13	1.13
High	- 0.32	0.73	- 0.42	0.66	- 0.37	0.69
	R^2=45%		R^2 = 31%		R^2 = 8%	
	N=674		N = 3576		N = 1246	

R: Reference category

*: 0.01 < P < 0.05 level of significant

* *: 0.001 < P < 0.01 level of significant

* * *: P < 0.001 level of significant

APPENDIX

COMPUTATION OF STANDARD OF LIVING INDEX (SLI):

In Phase-I of First Round of the RHS, type of house alone was taken as the proxy for the economic status of the households. But in Phase-II, questions related to household amenities and possession of some selected household items were asked. In Phase – I of Second Round RHS, the same was followed in Phase- II of First Round RHS. In order to develop SLI, the following scores related to response categories for each question were given.

Table 1.2: Standard of Living Index (SLI)			
Sr. No	**Variable**	**Categories**	**Scores**
1	Source of Drinking Water	1.Tap (own) 2.Tap shared 3.Hand pump + Well 4.Others	3 2 1 0
2	Type of House	1.*Semi pucca* 2. *Pucca* 3.*Kachcha*	4 2 0
3	Source of Lighting	1.Electricity 2.Kerosene 3.Other	2 1 0
4	Fuel for Cooking	1.LPG 2.Kerosene 3.Others	2 1 0
5	Toilet Facility	1.Own Flush Toilet 2.Own Pit Toilet 3.Shared Toilet 4.No Toilet	4 2 2 0
6	Ownership of items	1.Fan 2.Radio/Transistor 3. Sewing machine 4.Television 5.Telephone 6.Bicycle 7.Motor cycle/Scooter 8.Car 9.Tractor	2 2 2 3 3 2 3 4 4

The total of the scores may vary from the lowest of 0 to a maximum of 28. On the basis of total
score, households are divided into three categories as:

(a)   Low   if total score is less than or equal to 9.
(b)   Medium   if total score is greater than 9 but less than or equal to 19.
(c)   High   if total score is greater than 19.

REFERENCES

Bankole A, Desired fertility and frtility behavior among he Yoruba of Nigeria: a study of couple preference and subsequent fertility, Population Studies, 1995, 49 (2): 317 – 328.

Becker, S. Couples and Reproductive Health. Studies in Family Planning. 1996. 27 (6): 291 – 306.

Becker S and Robinson JC, Reproductive health care: Services oriented to couples, International Journal of Gynecology and Obstetrics, 1998, 46 (12): 15 87 – 1598.

Becker, S. Measuring unmet need: Wives, Husband and/or couples. International Family Planning Perspectives. 1999. 25(4) : 172 – 180.

Becker, S. and Costenbader E. Husbands' and wives' reports of contraceptive use. Studies in Family Planning 2001 32(2): 111 – 129.

Beckman LJ, Husbands' and wives' relative influence on fertility decisions and outcomes, Population and Environment, 1984, 7 : 182 – 197.

Ezeh, AC, The influence of spouses over each other's contraceptive attitudes in Ghana, studies in Family Planning, 1993 24(3): 163 – 174.

Thomson E, Couple childbearing desires, intentions and births, Demography, 1997, 34 (3) : 343 – 54.

Ross JA and Winfrey WL, Contraceptive use, intention to use and unmet need during the extended postpartum period, International Family Planning Perspectives, 2001, 27(1) : 20 – 27.

Roy T.K., F. Ram, Parveen Nangia, Umasaha & Nizamuddin Khan; " Can women's childbearing and contraceptive intentions predict contraceptive demand? Finding from longitudinal study in central India", International Family Planning perspectives, Vol 29, No. 1, March 2003.

S.J. Jejeebhoy and S. Kulkarni, " Reproductive Motivation: A comparison of Wives and Husband in Maharashtra, India," Studies, in Family Planning, 20: 264 – 272, 1989.

Malhotra, Anju , Reeva Vanneman, and Sunita Kishor. 1995 " Fertility, dimensions of patriarchy, and development in India." Population and Development Review 21, 2: 281 – 305.