Family Planning Adoption and Unmet Needs: Spousal Agreement in Rural Varanasi

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Abstract

Background: There have been very few studies in India where both partners' involvement in family planning is seen. The present study was undertaken to assess the spousal agreement level regarding family planning adoption and unmet needs. **Materials and Methods:** Married couples where wife was in reproductive age group (15–44 years) were included. A pretested, semi-structured interview schedule was used for the study. Sterilized couples were excluded. Interview of both husband and wife was done on the same day but in isolation. **Results:** There was excellent to poor agreement was reported among husbands and wives in fertility desire ($\kappa = 0.769$), current use of contraception ($\kappa = 0.581$), unmet need for family planning ($\kappa = 0.416$), ideal family size (Spearman correlation = 0.329), and approval for the use of contraception ($\kappa = 0.300$). In 6.1% of cases, husband-only unmet need was reported. **Conclusion:** There is need to encourage spousal communication so that they can make informed decisions on contraceptive choice. Husband-only unmet need for family planning was found, so man may be a potential entry point of national demographic health surveys to improve the contraceptive usage among couples and reduce the unmet need of them.

Keywords: Agreement, family planning, kappa, spousal, unmet need

INTRODUCTION

Men and women are equal partners in public and private life, so it is essential to improve communication between men and women on issues of sexual and reproductive health and the understanding of their joint responsibilities.^[1]

Level of knowledge about the use of contraceptives particularly of no-scalpel vasectomy is poor among men. Men take a little interest in knowing about various contraceptive methods. This reflects that involvement of men in family planning program is limited. The share of male sterilization among eligible couples is lowest. It has declined further from 1.0% (2005–2006) to 0.3% (NFHS-4, 2015–2016).

There have been very few studies in India where involvement of both male and female in family planning is seen. Hence, there is a need to collect information by interviewing husbands and wives both but separately in studies assessing fertility preferences, contraceptive practices, and unmet need for family planning. The aim of the study was to assess the spousal agreement level regarding family planning adoption and unmet needs.

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MATERIALS AND METHODS

A community-based cross-sectional study was conducted from April 12, 2016, to April 11, 2017. To calculate the sample size of the study subjects (married couples), formula: (Z^2PQ/L^2) was used.

Where, P = 67.5% (percentage agreement for ideal family size^[4]); L = Relative permissible error (10% of P); Z = 1.96 (critical value at 95% confidence level of certainty); Considering the design effect of 1.5 and 10% nonresponse rate, total sample size was 309.

There are eight Community Development Blocks in Varanasi, out of which Chiraigaon block was purposively selected as Rural Health Training Centre (RHTC) of the Institute of Medical Sciences, Banaras Hindu University is located in the block. There are 94 Gram Panchayats in the Chiraigaon block,

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and the total population is 322,652, four Gram Panchayats were selected randomly. Married couples wherein the wife would be of 15–44 years, were included in the study.

A separate sampling frame of each Gram Panchayat was prepared with the help of household list. The study subjects were selected from households by probability proportional to size sampling technique followed by random sampling from the selected Gram Panchayat.

If more than one married couples were available in a household, lottery method was used to select one couple from each household.

Exclusion criteria

(1) Wife was menopausal, (2) husband or wife was sterilized, and (3) husband was out of station, and it was not possible to contact within next three visits (next household was selected for the interview of the study subject).

To reduce the hesitation of the study subjects (Husbands), the assistance of the male medical social worker was taken, posted at RHTC.

Operational definitions for unmet need for spacing and limiting were as per demographic health surveys. [5] A semi-structured and pretested interview schedule were used. Informed and written consent was taken from the study subject. A total of 309 husbands and 309 wives were interviewed. The interview of the husband and wife was done at their home, on the same day but in isolation to avoid any contamination for agreement. As most of the men go for their work in the daytime, therefore, early morning and evening time were utilized for the interview.

The data were entered into Microsoft Office Excel. Statistical Package for the Social Sciences software (SPSS) Trial version 21, International Business Machines Corporation (IBM, New York, USA) was used for statistical analysis. Statistics used in the analysis was mean, range, proportion, standard deviation, confidence interval, kappa statistic, and Spearman correlation. [6,7] This study was approved by the Ethical Committee of Institute.

RESULTS

Table 1 shows the mean age of the husbands and wives in the study was 29.4 ± 4.5 years and 25.6 ± 4.0 years, respectively. The mean age at marriage was 22.1 years (range: 12-38 years) for husbands and 18.3 years (range: 11-25 years) for wives.

Most (97.7%) of the couples were Hindus. Majority (72.5%) of married couples belonged to other backward caste followed by scheduled caste/scheduled tribe (15.5%) and others (12.0%). Percentage of wives who were illiterate was approximately twice (19.1%) the percentage of illiterate husbands. Approximately one-third of the husbands were unskilled worker. Most (90.9%) of the wives interviewed were homemaker.

According to Udai Pareekh's socioeconomic scale, 55.3% of couples were in lower middle class followed by middle

Table 1: Demographic characteristics with mean, standard deviation, and range of study subjects

Variables (years)	Husbands (n = 309)	Wives $(n=309)$	
	Mean±SD	Range	Mean±SD	Range
Age of respondents	29.4±4.5	20-43	25.6±4.0	16-40
Age at marriage	22.1±3.4	12-38	18.3 ± 2.6	11-25
Age at cohabitation	23.0 ± 3.0	16-38	19.2 ± 2.0	13-25
Duration of marriage	7.3 ± 4.6	0-24	7.3 ± 4.6	0-24
Number of living children	1.9±1.1	0-5	1.9±1.1	0-5

SD: Standard deviation

class (30.7%), lower class (9.7%), upper middle class (4.2%), and none in upper class.

Approximately one-third (31.7%) of the husbands were married before the age of 21 years and 36.9% of wives were married before the age of 18 years (as per the Child Marriage Restraint Act of 1978).

Table 2 shows complete agreement between husbands and wives regarding number of living children. Cross-tabulation for ideal family size shows that the overall agreement of 67% (95% confidence interval [CI]: 61.8–72.2) was reported between husbands and wives regarding ideal family size, and the Spearman correlation value was 0.320 (P < 0.001). It indicates a fair degree of spousal agreement.

In Table 3, 298 married couples were taken as a sample for contraceptive practices, as in 11 cases, wives were pregnant at the time of interview.

The spousal agreement of 77.5% (95% CI: 72.8–82.2) was observed for ever use of contraception, and kappa statistic was 0.528 (P < 0.001), which corresponds to intermediate agreement. In 24 (8.1%) couples, the wife reported ever use of contraception while husband reported otherwise and in 43 (14.4%) couples, husbands reported ever use of contraception while wives reported otherwise.

Table regarding the current use of contraception showed spousal agreement of 79.2% (95% CI: 74.6–83.8) and kappa statistics was 0.581 (P < 0.001), indicated intermediate agreement. In 22 (7.4%) cases, current use of contraception was reported by the wife while the husband reported using none.

In 40 (13.4%) cases, husbands reported the current use of contraception such as withdrawal method (11.1%) followed by condoms (2.3%) while the wife reported using none.

Cross-tabulation for fertility desire showed overall spousal agreement of 88.7% (95% CI: 85.2–92.2). The unadjusted kappa statistic was 0.769 (P < 0.001), which corresponds to excellent agreement. In 8.1% of cases, the husband wanted more children than the wife did, while in 3.2% of cases, the wife wanted more children than the husband did.

The proportional agreement regarding approval for the use of contraception was 67.9% (95% CI: 62.8–73). The unadjusted kappa statistic was 0.300, which indicated poor agreement.

Table 2: Spousal agreement regarding number of living children and ideal family*

Number of living children Spearman correlation, P Husbands Wives 0 2 3 1 4 5 Total 0 21 (6.8) 0 0 0 0 0 21 (6.8) 1.000, < 0.001 95 (30.7) 1 0 0 0 0 95 (30.7) 0 2 0 115 (37.2) 0 0 0 115 (37.2) 0 3 0 0 47 (15.2) 0 0 47 (15.2) 4 0 0 0 0 23 (7.4) 0 23 (7.4) 5 0 0 0 0 0 8(2.6)8(2.6)Total 21 (6.8) 95 (30.7) 115 (37.2) 47 (15.2) 23 (7.4) 8(2.6)309 (100)

Ideal family size

Husbands	1	2	3	4	Total	Spearman correlation, P
1	4 (1.3)	5 (1.6)	0	0	9 (2.9)	0.320, <0.001
2	16 (5.2)	184 (59.5)	18 (5.8)	1 (0.3)	219 (70.9)	
3	0	59 (19.1)	16 (5.2)	0	75 (24.3)	
4	0	1 (0.3)	2 (0.6)	3 (1.0)	6 (1.9)	
Total	20 (6.5)	249 (80.6)	36 (11.6)	4 (1.3)	309 (100)	

^{*}In parenthesis: Percentage

Table 3: Spousal agreement regarding contraceptive practices, fertility desire, approval for the use of contraception, and unmet need for family planning*

Ever use of contraception Wives κ statistic Husbands Yes (%) No (%) Total Yes 149 (50.0) 43 (14.4) 192 (64.4) 0.528 No 24 (8.1) 82 (27.5) 106 (35.6)	contraception, and unmet need for family planning*						
Yes 149 (50.0) 43 (14.4) 192 (64.4) 0.528 No 24 (8.1) 82 (27.5) 106 (35.6) 106 (35.6) 106 (35.6) 106 (35.6) 106 (35.6) 106 (35.6) 106 (35.6) 106 (35.6) 107 (35.1) 125 (41.9) 298 (100.0) 107 (35.1) 108 (35.6)							
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Total 173 (58.1) 125 (41.9) 298 (100.0) Current use of contraception Yes No Total κ statistic Yes 134 (45.0) 40 (13.4) 174 (58.4) 0.581 No 22 (7.4) 102 (34.2) 124 (41.6) 124 (41.6) Total 156 (52.4) 142 (47.6) 298 (100.0) 142 (47.6) Fertility desire Want more Want no more Total κ statistic Want more 114 (36.9) 25 (8.1) 139 (45.0) 0.769 Want no more 10 (3.2) 160 (51.8) 170 (55.0) 170 (55.0) Total 124 (40.1) 185 (59.9) 309 (100.0) 185 (59.9) 309 (100.0) Approval for the use of contraception Approve Disapprove Total κ statistic Approve 150 (48.5) 49 (15.9) 199 (64.4) 0.300 Disapprove 50 (16.2) 60 (19.4) 110 (35.6)	Yes	149 (50.0)	43 (14.4)	192 (64.4)	0.528		
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	Want no more	10 (3.2)	160 (51.8)	170 (55.0)			
of contraception statistic Approve 150 (48.5) 49 (15.9) 199 (64.4) 0.300 Disapprove 50 (16.2) 60 (19.4) 110 (35.6) 110 (35.6)	Total	124 (40.1)	185 (59.9)	309 (100.0)			
Disapprove 50 (16.2) 60 (19.4) 110 (35.6)	• •	Approve	Disapprove	Total			
	Approve	150 (48.5)	49 (15.9)	199 (64.4)	0.300		
Total 200 (64.7) 109 (35.3) 309 (100.0)	Disapprove	50 (16.2)	60 (19.4)	110 (35.6)			
(*, **** (*****)	Total	200 (64.7)	109 (35.3)	309 (100.0)			

Unmet need for

family planning

In 16.2% of cases, wives approved of contraception whereas husbands did not, while in 15.9% of cases, husbands approved of contraception whereas wives did not.

Yes

62 (20.1)

60 (19.4)

122 (39.5)

Total

230 (74.5)

79 (25.5)

309 (100.0)

statistic

0.416

No

168 (54.4)

19 (6.1)

187 (60.5)

Spousal agreement of 73.8% (95% CI: 68.9-78.7) was observed regarding unmet need for family planning. The unmet need in both partners was reported by 19.4% and none by 54.4%. The unadjusted kappa statistic was 0.416 (P < 0.001), which corresponds to an intermediate agreement. In 6.1% of cases, husband-only unmet need was reported.

DISCUSSION

Complete agreement was observed for number of living children between husband and wife, contrary to this, a study conducted in village Dayalpur, Haryana, found under-reporting of girl child in 3% of cases by husbands.^[4]

Overall agreement of 67% was between husbands and wives regarding ideal family size, consistent with the findings of a study assessing concordance regarding fertility intentions and contraception in Dukem, Ethiopia, which found concordance of 71.6% for ideal family size.^[8]

In research from Ethiopia, current use of contraception as reported by couples showed 95.7% overall agreement. [9] The lower spousal agreement (79.2%) in our study regarding this may be attributable to the exclusion of sterilized couples. The agreement for fertility desire among married couples was 88.7%, coherent with the finding of study conducted in Dayalpur village, which reported 88.5% of overall concordance regarding fertility desire. [4]

Aresearch which used Demographic and Health Survey data from West African countries found that less than half of the couples with unmet need had concordant unmet need (41.2–48.8%). Nearly 15.1%–22.9% had husband-only unmet need.^[9]

CONCLUSION

The findings of intermediate to poor agreement among married couples regarding contraceptive practices,

No

Yes

^{*}In parenthesis: Percentage

unmet need, ideal family size, and their approval for contraception suggest that there is need to encourage spousal communication so that they can make informed decisions on contraceptive choice.

Present study highlighted the husband-only unmet need for family planning. Therefore, man may be a potential entry point of national demographic health surveys to improve the contraceptive usage among couples and to reduce the unmet need of them.

To assess the unmet need of husband, it is important that the same questions should be asked to both so that the concept for husband's unmet need has the same meaning as that of wife.

A qualitative exploration is further needed by conducting focussed group discussion sessions, In-depth interviews, etc., in the study area targeting husbands and wives both to assess the family planning adoption, spousal communication, and unmet need among them.

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Conflicts of interest

There are no conflicts of interest.

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