



ORIGINAL RESEARCH PAPER

Community Medicine

“CORRELATES OF FERTILITY BEHAVIOR OF WOMEN IN A RURAL COMMUNITY OF AMBALA DISTRICT IN HARYANA”

KEY WORDS: Birth aversion; Fertility behaviour; Son preference; Undesired birth; Unintended pregnancy

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ABSTRACT

Context: Fertility behaviour of women may differ considerably in terms of fertility decisions regarding desired family size, son preference, attitude towards family planning. Fertility studies are essential for understanding factors associated with unwanted births having regional variations. **Objective:** To investigate fertility behavior of women and its associated factors. **Methods:** A cross-sectional study conducted among 104 married women aged 18-49 years in a rural community attached with a teaching institution. Study variables included socio- demographic characteristics, reproductive health characteristics, unplanned pregnancies. **Results:** Strong preference for sons was observed among women and 61 (58.7%) desired no daughter whereas 23 (22.1%) women expressed desired for having no son. According to 42.3% women, first birth should be between 2 to 3 years after marriage. Past preferences for sons and daughters in the past were expressed by 41.3 % and 22.1% women. Among 18 women desiring more children, 27.8% were in favour of having girl as compared to 33.4% desired next baby to be boy. The percentage of women having delivered 3 or more children with at least one live child was found to be 33.7%. Having no male child was the only significant risk factor of undesired births by women based on Logistic Regression. **Conclusions and Suggestions:** High fertility levels were observed mainly due to strong son preference resulting in high percentage of unwanted births. There is an urgent need of adopting some population specific strategies for changing fertility behavior of couples for attaining desired reproductive health outcomes in terms of birth aversions, reduction of unwanted births and encouraging daughter preference.

INTRODUCTION:

Welfare of a country directly depends upon welfare of its women as they make a major contribution for the development of the society. Fertility behavior of women has significant implications on policy and programme. Understanding fertility behaviour of women helps us to know the development status of the community. High fertility levels existing in India resulted in undesired births. Aversion of unwanted births is desired to have potential demographic outcomes. Fertility behaviour of women may differ considerably in terms of fertility decisions regarding desired family size, son preference, attitude towards family planning reproductive health care of women. ¹In NFHS-3 report fertility related information of both men and women is included for the first time and reported twenty-one percent pregnancies as unplanned. ² According to NFHS-4 survey results, the percentage of births that were wanted increased from 79 percent in 2005-06 to 91 percent. ³

Fertility studies are essential for understanding factors associated with reproductive behavior having regional variations. An earlier study reported involvement of family members on reproductive decision of women. ⁴ Individual situations and desires influence fertility decisions of men and women. Studies on fertility decisions such as when to have the first child, the number of children, the choice of contraceptive methods, adopting a contraceptive, the time of adoption and length of its use, unwanted pregnancy and abortion are important. Studies on fertility behaviour of in Northern India are few and far from conclusive. Therefore, present study was conducted with a purpose of investigating fertility behavior of women in relation with its socio-demographic characteristics and other correlates.

MATERIAL AND METHODS:

A sample of 104 married women aged 18-49 years having at least one child were selected in the present cross-sectional study conducted in catchment area with Rural Health Training Centre\ attached with the Community Medicine Department of the institution.

A sample of households and women in selected households

were selected systematically according to inclusion criterion. Selected women were interviewed in privacy to provide desired information about them as well as background characteristics of their spouses. Power analysis was done to calculate optimum sample size.

House-to-house survey was conducted for data collection. Women in the reproductive age group with at least one child ever borne were interviewed in privacy to collect the desired information at the respondent's home at flexible time points. Predesigned and pretested semi-structured interview schedule designed after reviewing literature were used for data collection. Interview schedules were modified based on experiences of pilot survey.

Study variables included socio- demographic characteristics (age, religion, level of education, occupation, age at first marriage, age at first delivery, number of live children), Reproductive characteristics ,behavior of herself and perceptions of spouses in terms of past and future fertility desires, timing to have the first child, birth interval desired, intention of last pregnancy, fertility preferences, , attitude towards family planning, gender preference.

Data analysis was conducted by using Normal test of proportions for testing the significance of differences in proportions in two different sub groups and Chi square (χ^2) test was used for testing the significance of associations. Binary logistic regression analysis was done to investigate predictors of undesired births. Odds ratios along with 95% confidence intervals were calculated for potential risk factors. Data analysis was carried out by using SPSS -20 Software.

Prior approval by Institutional Ethics Committee (IEC) was taken to conduct the study. ICMR Ethical Guidelines for Biomedical Research on Human Participants (2017) were followed. ⁶ Informed consents were taken and confidentiality of responses was ensured maintaining privacy of respondents.

RESULTS:

A total of 104 women with an overall mean age of 35.56 ± 10.33 years included in the present study represented almost all socio-economic classes. The mean age of spouses was found to be 39.40 ± 10.81 years. They also represented all socio-economic classes. Maximum number of women were having spouses in the age group 36-49 years (58.7%) followed by 26 to 35 years (35.6%). About 78% of women were aware of legal age at marriage. Institutional deliveries were observed in 74(71.2%) cases. Among 3.8% women history of induced abortions was observed whereas among 7.6% women, history of spontaneous abortions was observed. Among 23(22.1%) of all surveyed women, first delivery was prior to 18 years of age. Among 58(55.8%) women first delivery occurred within first year of marriage. Out of all women studied, 48(46%) women were having youngest child below 5 years of age. The percentage of improvident maternity, that is, women having delivered 3 or more children with at least one live child was found to be 33.7%. Demographic characteristics of women are presented in Table-1.

Table-1: Distribution of Women by Socio-demographic Characteristics

Age of Wife	No	%
18-21	2	1.9
22-25	20	19.2
26-35	37	35.6
36-49	45	43.3
Mean ± SD	35.56 ± 10.33	
Age of Husband		
18-21	1	1.0
22-25	5	4.8
26-35	37	35.6
36-49	61	58.7
Mean ± SD	39.40 ± 10.81	
Occupation		
Housewife	87	83.7
Service	5	4.8
Business	2	1.9
Labor	4	3.8
Skilled Worker	5	4.8
Others	1	1.0
Age at Marriage		
Below 18	10	9.6
18-21	67	64.4
Above 21 years	27	26.0
Awareness of legal age at marriage		
Below 18	3	2.9
18	81	77.9
19-20	9	8.7
21	6	5.8
Above 21 years	5	4.8
Place of previous delivery		
Home	30	28.8
Hospital	74	71.2
Outcome of last delivery		
Live Birth Male	70	67.3
Live Birth Female	15	14.4
Others/No Response	19	18.3
Abortions induced		
None	100	96.2
1	2	1.9
2	2	1.9
Spontaneous abortions		
None	96	92.3
1	2	1.9
2	3	2.9
3 or more	3	2.9
Currently pregnant or lactating (N=104)		
Pregnant	4	3.8
Lactating	11	10.6

Age at first delivery		
Below 18	11	10.6
18-25	79	76.0
Above 25 years	14	13.5
Age at previous delivery		
Below 18	23	22.1
18-25	36	34.6
Above 25 years	45	43.3
Spacing between marriage and first delivery		
Within 12 months	58	55.8
Between 13-24 months	28	26.9
Between 25-36 months	14	13.5
Above 36 months	4	3.8
Spacing between first and second delivery		
Not Applicable/No response	38	36.5
Within 12 months	8	7.7
Between 13-24 months	26	25.0
Between 25-36 months	21	20.2
Above 36 months	11	10.6
Age of youngest child		
Under five years	48	46.1
6-9	19	18.3
10-19	23	22.1
Above 19	14	13.5
Total	104	100.0
No of Children		
3 or more	35	33.7
2 or less	69	66.3
Any reproductive health problem		
	5	4.8
Total	104	100.0

Fertility desires of the women are presented in Table- 2. There were 50 (%48.1) women who desired marriage at legal age of 18 years and 99% women were of the opinion that marriage should be only after attaining legal age at marriage. According to 44 (42.3%) women, first birth should be between 2 to 3 years after marriage. Strong preference for sons was observed among women and 61 (58.7%) desired no daughter whereas 23 (22.1%) women expressed desired for having no son. Among 18 women desiring more children, 27.8% were in favour of having girl as compared to 33.4% desired next baby to be boy. Having no male child was the only significant risk factor of women bearing three or more children based on Logistic Regression presented in Table-3.

Table-2: Fertility Desires of Women

Reproductive Desires	No	%
Desired age at marriage		
Below 18	1	1.0
18	50	48.1
19-20	22	21.2
21	16	15.4
Above 21 years	15	14.4
Desired birth spacing		
Within 12 months	2	1.9
Between 13-24 months	43	41.4
Between 25-36 months	44	42.3
Above 36 months	15	14.5
Desired number of sons		
0	23	22.1
1	67	64.4
2	10	9.6
3 or more	4	3.9
Desired number of daughters		
0	61	58.7
1	35	33.7
2	7	6.7
3	1	1.0
Desired more child		

Yes	18	17.3
No	84	80.8
No Response	2	1.9
Such desires in past		
Yes	32	30.8
No	60	57.7
No Response	12	11.5
Gender of Desired child (N=18)		
Boy	5	27.8
Girl	6	33.4
No Response	7	38.8
Ever used /currently using any contraceptive	62	59.6
Desire to use contraceptive in future	38	36.5
Preferred method of contraception to be used in future (N=38)		
Female sterilization	6	18.8
IUCD (Cu-T)	15	39.5
Oral Pills	5	13.2
Condom	4	10.5
Safe Period/Withdrawal	14	36.8
No choice	4	10.5
Desire to use contraceptive by spouse	21	20.2
Intended method of contraception of choice by spouse (N=21)		
Female sterilization	8	38.1
Male sterilization	1	4.8
IUCD/ (Cu-T)	3	14.4
Condom	2	9.6
Safe Period, Withdrawal, Abstinence	1	4.8
No response	6	28.6

Table-3: Logistic Regression of Factors Having delivered Three or More Children by Women

Factor	B	S.E.	Sig.	Odds Ratio = Exp(B)	95% CI for OR	
					Lower	Upper
Illiterate/primary vs. educated wife	.744	.558	.182	2.104	.705	6.280
Illiterate/primary vs. educated husband	1.028	.731	.160	2.795	.667	11.708
Low vs. middle/high SES	-.153	.557	.783	.858	.288	2.554
Married up to 21 years vs. later	.852	.585	.146	2.344	.744	7.380
No male child	-1.090	.550	.047*	.336	.114	.988
Age of wife up to 25 years vs. higher	1.558	1.334	.243	4.749	.348	64.883
Age of husband up <30 years vs. higher	1.310	1.019	.199	3.705	.503	27.280
No Contraceptive Use Vs Use	-.188	.605	.756	.829	.253	2.714
Good personal relation vs. Not Good	-.641	.642	.318	.527	.150	1.853
Constant	-3.218	1.379	.020*	.040		

Figures in () indicate percentages.

P> 0.05 Non Significant, *P<0.05 Significant, **P<0.001 Highly Significant.

DISCUSSION:

Present study included 104 women in reproductive age group

having delivered at least one child. The percentage of women having delivered 3 or more children with at least one live child as a proxy indicator of unwanted births was found to be 33.7%. Reproductive desires of women were expressed in terms of marriage after attainment of legal age at marriage (99%), first birth should be between 2 to 3 years after marriage (42.3%), son preference (58.7%). Only 30.8% women reported past desire to have children, indicating high percentage of women having unwanted births and even than only about 60 % couples used contraceptive and 36.5% intended use of contraceptive in future. According to NFHS-4 survey, the percentage of births that were wanted increased from 79 percent in 2005-06 to 91 percent.³ In the present study, desired number of children by studied women and men were less than actual number of births indicating undesired births. Majority of the males (59%) and females (74%) in Delhi were found in favour of having only two children.⁷ Also, 62.8% of mothers were in favour of it in rural area of West Bengal.⁸ Only 36.5% women expressed intentions to use contraceptives in future. None of the factor except having no male child came out to be significant correlate of improvident maternity. This indicates strong preference for sons among women in the study area. Present study has some limitations in terms of small sample size because of time constraints. Moreover, male partners could not be interviewed and responses of females were relied upon for collecting fertility behavior.

CONCLUSIONS:

Present study indicates high fertility levels mainly due to strong son preference resulting in high percentage of unwanted births. There is an urgent need of adopting some population specific strategies for changing fertility behavior of couples through encouraging daughter preference for reduction of unwanted births.

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