

Family Planning Differentials Among Caste Groups in Bihar, India

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Abstract: The paper aims to study the family planning differentials among caste groups in Bihar, along with their socioeconomic and demographic characteristics. The data has been analysed from the National Family Health Survey (NFHS 5) conducted during 2019-2021 in India. The data analysis used bivariate and logistic regression analyses to observe the association between family planning use and socioeconomic and demographic characteristics. The analysis reveals that the knowledge of any family planning method and any modern family planning method is universal among all caste groups in Bihar. However, contraceptive use is lower among the women of Schedule Caste/Schedule Tribe and other backward classes than in Other Castes. Female sterilisation is the most used family planning method, followed by IUDs, condoms and pills among all the caste groups. Contraceptive use is much higher among women with four or more surviving children than women with two or more sons and women with two or more daughters. The use of any family planning method and any modern method significantly increases with the age of the women, marital duration, education and household wealth index in Bihar. It indicates that the differences in contraceptive use between caste groups will disappear with the improvement of socioeconomic status.

Keywords: family planning, differentials, caste groups, India

India initiated a family welfare program in 1951 to accelerate social and economic development by controlling fertility and reducing population growth (Jain, 1989; Chutia & Barman, 2020; Kumar & Joshi, 2008). The objectives of the family welfare program are to have only the expected number of children and to achieve proper spacing between two successive births (Dabral & Malik, 2004). The family planning program in India has undergone various changes in terms of policy, but many

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goals still need to be achieved (Healey, 2014; Khan & Malik, 2004). Women continue to have unplanned pregnancies and lack contraceptive use and choices among adolescent men and women (Santhya, 2003). However, past studies have found that contraception is one of the most important proximate determinants of fertility (Bongaarts et al., 1984; Wubalen et al., 2003; Dash & Nagdeve, 2020). Family planning is one of the best solutions to control population growth. It helps reduce fertility and is useful in spacing and limiting the number of children. It also improves maternal and child health and empowers women (Singh et al., 2014).

The acceptance of contraceptives still varies among different castes and religious groups. The individual, family and community-level factors are responsible for such variation channelled by the social, economic and cultural milieu of Indian society (Parek & Rao, 1984; Bhuyan, 1991; Prateek & Saurabh, 2012; Gogoi et al., 2017). The successful small family size norm depends on the couple's usual family ideas, their psychological acceptance of family limitations, knowledge of family planning methods, availability and accessibility of contraceptives, cost of family planning and an environment favourable to family planning (IIPS, 2021). Contraceptive use varies by education, religion, caste and wealth among currently married women in Bihar. Contraceptive use among currently married women aged 15-49 increased from 37 per cent in 1992-93 to 43 per cent in 1998-99; it further increased to 56 per cent in 2005-06 and decreased to 51 per cent in 2015-16 and again increased to 56 per cent in 2019-21 in India. Similarly, the use of modern contraceptives among married women aged 15-49 years increased from 22 to 29 per cent between 1992-93 and 2005-06, but it decreased to 23 per cent in 2015-16, and it again increased to 44 per cent in 2019-21 in Bihar. An increase in contraceptive use is not uniform across caste groups, and considerable family planning uses differentials exist among caste groups in Bihar. Contraceptive use has been much lower in the case of Scheduled Caste (SC) and Scheduled Tribe (ST) women than that of Other Backward Class (OBC) and Other Caste (OC) women. According to the National Family Health Survey (NFHS-5), conducted in 2019-2021, any modern method of family planning is 4.6 per cent lower among ST women and 1.3 per cent lower among SC women than among OBC (56.7%) women. Any modern method of family planning is 4.4 per cent lower among ST women and 0.2 per cent lower among OBC women than 45.2 per cent among SC women (Nagdeve, 2010).

Fertility has declined in most states and achieved below replacement level fertility, but Bihar has the highest TFR of 2.98 children per woman. Bihar ranks the twelfth largest state in India in terms of area, with a total area of 94,163 square kilometres. The population of Bihar is increasing rapidly, and it is the third most populous state in the country after Uttar Pradesh and Maharashtra having a population of 104 million. Bihar is one of the eight socioeconomically backward states in India. Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, Odisha, Rajasthan,

Uttaranchal and Uttar Pradesh, known as the Empowered Action Group (EAG) states. The population of Bihar increased from 52 million in 1981 to 104 million in 2011. Out of every 100 persons in India, nine are from Bihar. The population of Bihar doubled between 1981 and 2011, an increase of 52 million in Bihar for 30 years. The population growth in Bihar varies from decade to decade. The decadal growth of the population in Bihar has increased from 24.23 per cent in 1981 to 25.33 per cent in 2011. The literacy rate in Bihar has increased from 32.1 per cent in 1981 to 61.8 per cent in 2011. According to the 2011 census, literacy among males is 71.20 per cent, whereas female literacy is 46.40 per cent in Bihar.

The sex ratio in Bihar has increased from 933 females in 1981 to 940 females per 1000 males in 2011. The population density in Bihar increased from 402 persons per square kilometre in 1981 to 1102 persons per square kilometre in 2011. The percentage of the urban population in Bihar has declined from 12 per cent in 1981 to 11 per cent in 2011. Further, Bihar is a poor state with high fertility, high-unmet need, high maternal and child mortality, low literacy, and low life expectancy is a great challenge for the government and policymakers. Unplanned pregnancies are relatively common in Bihar, and their socioeconomic characteristics have influenced family planning use by couples. There are few studies on family planning differentials in Bihar, but there is no study on family planning differentials among caste groups in Bihar. Therefore, the present paper has studied the family planning differentials among caste groups in Bihar, along with their socioeconomic and demographic characteristics.

Taking a cue from the above statements, the present study examines family planning differentials among caste groups in Bihar in the light of the following research questions:

1. Whether the impact of caste factors, including customs, traditions and beliefs, on the use of family planning across religions in India?
2. Is the role played by the caste in the use of family planning more than that of socioeconomic factors? and
3. Within socioeconomic factors, is it the educational level of females in child-bearing age groups or the living standard of the households to which such women belong that plays a more significant role in family planning?

Materials and Methods

Data and Methods

The data have been used from the National Family Health Survey (NFHS-5), an ongoing sociodemographic health survey conducted by International Institute for Population Sciences, Mumbai and has now completed five rounds. NFHS-5 is a large-scale multi-round survey conducted in a representative sample of households

throughout India. The survey provides national and state information on fertility, infant and child mortality and the practice of family planning. Individual consent and all the ethical protocols have been obtained before the set of questions on family planning. Data has been conducted in all 38 districts of Bihar from 9 July 2019 to 2 February 2020 from a representative sample of 35,834 households and 42,483 women aged 15-49 years. The household and women's response rate was 97 and 96.6 per cent, respectively. The details of the study design, sampling frame and sample implementation have been provided in the NFHS report (IIPS, 2021). The NFHS-5 provides information on four caste groups, i.e., Scheduled Caste (SC), Scheduled Tribe (ST), Other Backward Class (OBC) and those who do not belong to SC, ST and OBC and are reported as "Other Castes". For further analysis, four caste groups have been grouped into three categories of caste groups (SC/ST, OBC and Other Castes). Of 31,755 currently married women aged 15-49, 9,159 are SC/ST, 17,804 belong to OBC, and 4,792 are Other Castes (OC).

Techniques of Analysis

The data analysis used bivariate and logistic regression analysis to observe the association between family planning and socioeconomic and demographic characteristics. The socioeconomic and demographic variables used are the age group, age at the consummation of the marriage, marital duration, place of residence, women's education and household wealth index.

Discussion, Analysis and Findings

Knowledge of Family Planning Methods Among Caste Groups in Bihar

The lack of knowledge of various family planning methods is one of the obstacles to promoting the use of contraceptive methods among couples. Table 1 reveals that the knowledge of any family planning method, including any modern one, is universal in Bihar, and it does not vary much among caste groups. Female sterilisation is the most known method, followed by Pills, IUDs, Male Sterilisation, Condoms and Injectables among all the caste groups. Overall, 99% of currently married women know about female sterilisation, and 87% know about male sterilisation. There is little difference in knowledge of female sterilisation among caste groups, but male sterilisation varies from the lowest to 84 per cent among SC/ST women, followed by 88 per cent among OBC women and the highest to 88.3 per cent among other caste women. The table also shows differentials in the knowledge of spacing methods such as Pills, IUDs and Condoms among caste groups. The best-known spacing methods are Pills (95%), Injectable (94%), Condoms (88%), and IUDs (87.7%). There is a large difference in the knowledge of spacing methods among women of caste groups. The lowest 86 per cent of women among SC/ST, 89 per cent of women among OBC, compared to the highest 92 per cent of women among other castes know

condoms. The modern spacing methods, Pills and IUD, are known by 94 and 85 per cent of SC/ST women and 95 and 89 per cent of OBC women, whereas the corresponding figures for other castes women are 95 and 91 per cent, respectively. The knowledge of these spacing methods is lower than sterilisation. More than 87 per cent of women in Bihar are aware of traditional family planning methods, including withdrawal methods, herbals, rhythm or periodic abstinence and another Indian system of medicine for contraception. This proportion varies among caste groups from the lowest 85 per cent of women among SC/ST, 87 per cent of women among OC, to the highest 89 per cent of women among OBC.

Table 1

Percentage of Currently Married Women Who Know any Family Planning Method by Specific Method Among Caste Groups in Bihar, 2019-21

Methods	Scheduled Castes/ Scheduled Tribes	Other Backward Castes	Other Castes	Total
Any method	99.5	99.8	99.3	99.6
Any modern method	99.5	99.8	99.3	99.6
Female sterilisation	99.1	99.4	98.7	99.2
Male sterilisation	84.4	87.6	88.3	86.7
Pill	93.9	95.1	95.4	94.7
IUD	85.0	88.5	90.8	87.7
Injectables	92.6	94.5	94.8	93.9
Condom	85.9	88.5	91.9	88.2
Any traditional method	84.6	88.9	87.4	87.3
Rhythm/periodic abstinence	77.5	81.6	79.4	79.8
Withdrawal	73.9	80.2	79.8	78.2
Total number of women	9159	17804	4792	31755

Current Use of Family Planning Methods Among Caste Groups in Bihar

The current use of family planning methods for currently married women among caste groups in Bihar has presented in Table 2. About 56 per cent of currently married women are using any family planning method. Current contraceptive use is the highest among women with OBC (57%), followed by 55% of women with OC and SC/ST. The current use of any modern method is relatively low (44%) in Bihar. It varies from the lowest 42 per cent of women among OC to each 45 per cent of women among SC/ST and OBC. Female sterilisation is the most used family planning method, followed by a Condom, IUD/Loop/Copper T and Pills among all the caste groups. About 35 per cent of currently married women and negligible (0.01%) men have been sterilised in Bihar, with little variation among caste groups. Among all the users of sterilisation methods among caste groups, 36 per cent of women prefer female sterilisation among SC/ST, followed by 35 per cent of women among OBC and the lowest 30 per cent of OC women. Still, it is not the case for male sterilisation.

There are differentials in the current use of spacing methods such as Condoms, Pill and IUD/Loop/Copper T among caste groups. The more used spacing methods are Condoms (4%), Pills (1.5%) and IUD/Loop/Copper T (0.6%). However, the results show marginal differentials in the current spacing methods among caste groups. The use of spacing methods remains low compared to female sterilisation among all caste groups. Eleven per cent of women are using traditional methods, which varies from the lowest 10 per cent of women among SC/ST, 11.8 per cent of women among OBC, to the highest 12.1 per cent among OC.

Table 2

Percentage of Currently Married Women Using any Family Planning Method Among Caste Groups in Bihar, 2019-21

Methods	Scheduled Castes/ Scheduled Tribes	Other Backward Castes	Other Castes	Total
Any method	55.0	56.7	54.5	55.8
Any modern method	44.6	45.0	42.4	44.4
Female sterilisation	36.3	35.4	30.3	34.8
Male sterilisation	0.0	0.2	0.1	0.1
Pill	1.2	1.4	2.3	1.5
IUD	0.5	0.6	0.7	0.6
Injectables	2.2	2.7	2.3	2.5
Condom	3.1	4.0	5.4	4.0
Any traditional method	10.3	11.8	12.1	11.4
Rhythm/periodic abstinence	8.2	8.6	8.3	8.4
Withdrawal	1.7	2.4	2.7	3.0
Total number of women	9159	17804	4792	31755

Current Use of Family Planning by Socioeconomic and Demographic Characteristics

After examination of the knowledge and use of family planning methods, it would be better to study differentials in the use of family planning methods by socioeconomic and demographic characteristics of currently married women among caste groups in Bihar. The percentage of currently married women using any family planning method and any modern method by socioeconomic and demographic characteristics of women among caste groups is depicted in Table 3. Fifty-six per cent and 44 per cent of currently married women in Bihar are using any family planning method and modern method, respectively. The current use of any method and modern family planning method is the highest at 57 and 45 per cent among the women of OBC as compared to 55 and 45 per cent of the women among SC/ST as compared to the lowest at 54.5 and 42.4 per cent of the women among OC respectively. The current use of any family planning method and any modern family planning method among currently married women in the 15-19 years age group is 20 and 10 per cent, and this attains a peak at older ages, i.e., 67 per cent and 59 per cent

in case of age 40 and above. Similar age patterns of contraceptive use have also been observed among women of SC/ST, OBC and OC. The current use of any family planning method and any modern method among currently married women by age at first intercourse of fewer than 18 years is higher at 59 and 49 per cent compared to 52 and 39 per cent for 18 years and above, respectively. It is the highest among the women of OBC, followed by women among OC and the lowest among women of SC/ST. The current use of any family planning method and modern method increases marital duration among all the caste groups. The current use of family planning and modern methods is higher in urban areas (62% and 47%) than in rural areas (55% and 44%). It is the highest among women of OBC than SC/ST and OC women. The current use of any family planning method and modern method is also high among illiterate women (58% and 49%), followed by women who have higher secondary education (56%) in case of any method of family planning and 39 per cent in case of women who have completed secondary education and least 52 per cent among the women who have completed secondary education in case of any method of family planning and the lowest 38 per cent in case of women who have higher secondary education in case of any modern method of family planning indicates that it is lowest among educated groups as compared to the illiterate women.

An almost similar picture has been found in the current use of any family planning method and modern methods for currently married women among all the caste groups. The current contraceptive use of any family planning and modern methods increases the family wealth index. The current contraceptive use of any family planning method has increased the prevalence rate from the lowest 52 per cent among women belonging to the household of the poor index, followed by 55 per cent for women belonging to the household of medium wealth index, to the highest 62 per cent for women belonging to the household of rich wealth index. However, the current contraceptive use of modern methods has increased the prevalence rate from the lowest 42 per cent among women belonging to the household of the poor index, followed by 44 per cent for women belonging to the household of medium wealth index to the highest 48 per cent for women belonging to the household of rich wealth index. It has further found that the current use of any family planning method and modern method is the highest among women of SC/ST than OBC and OC women in the household of medium and rich wealth index. It is the lowest among women of OC compared to OBC and SC/ST women in the case of women belonging to the household with poor wealth index.

Table 3

Percentage of Currently Married Women Using any Family Planning Method and any Modern Family Planning Method by Socioeconomic and Demographic Characteristics of Women Among Caste Groups in Bihar, 2019-21

Characteristics	SC/ST		OBC		Other		Total		Currently married women
	Any method	Modern method	Any method	Modern method	Any method	Modern method	Any method	Modern method	
Age Group									
15-19	18.0	9.4	21.0	10.0	16.8	8.3	19.5	9.6	2068
20-29	44.2	31.6	45.0	31.2	43.9	29.0	44.5	30.9	12258
30-39	70.3	60.3	69.9	58.3	64.0	51.2	68.9	57.6	10065
40 and above	66.1	59.0	68.3	59.7	63.8	55.8	66.8	58.7	7364
Age at first cohabitations									
<18	57.3	47.9	60.3	49.6	57.6	47.5	58.9	48.7	17796
18 and above	51.3	39.6	52.1	39.0	51.9	37.9	51.8	38.9	13959
Marital Duration									
<5	24.0	12.5	26.4	13.7	15.9	29.6	13.7	26.2	6388
5-9	46.2	31.9	49.3	34.3	31.8	47.9	33.1	48.0	5859
10-14	64.1	54.4	65.4	52.6	50.6	63.8	52.8	64.7	5167
15 and above	30.4	61.3	29.5	60.8	55.5	35.0	60.0	30.7	14341
Residence									
Urban	59.2	47.4	63.8	47.2	61.9	46.5	62.3	47.0	3210
Rural	54.5	44.3	55.5	44.6	52.5	41.2	54.6	43.9	28545
Women's education									
Illiterate	58.8	49.6	60.3	50.7	48.4	38.8	58.4	49.0	15340
Primary Complete	54.9	43.8	56.8	45.8	52.4	41.5	55.5	44.5	3804
Secondary Complete	46.1	34.4	52.2	38.4	58.3	46.1	52.1	39.2	10707
Higher Secondary	57.4	40.2	54.9	36.8	57.1	39.2	56.0	38.2	1904
Household wealth index									
Low	51.8	42.3	53.5	43.1	39.3	30.2	51.5	41.6	11151
Medium	56.0	46.1	55.5	45.0	48.5	38.6	54.5	44.3	11023
High	62.2	48.7	61.3	46.8	62.9	48.5	61.8	47.5	9581
Total	55.0	44.6	56.7	45.0	54.5	42.4	55.8	44.4	31755

The logistic regression analysis has been used to examine the effect of socioeconomic and demographic characteristics on the current use of any family planning method in Bihar, and the results have depicted in Table 4. The analysis revealed that any family planning method significantly increases among women of older age groups than among women aged 15-19 among all the caste groups. The probability of using any family planning method significantly decreases in case of age at first intercourse above 18 years, except for SC/ST women. In the case of marital duration, the possibility of the use of any family planning method significantly increases as marital duration increases; it increases more than two times for 5 to 9

years of marital duration, 4.6 times for 10 to 14 years of marital duration and 6.5 times for 15 and more years of marital duration. The likelihood of the use of any family planning method significantly increases 2.5 times in the case of OBC women for 5 to 9 years of marital duration. It increases five times in the case of OBC women for 10 to 14 years of marital duration and 6.5 times in the case of SC/ST women for and 15 and more years of marital duration. The likelihood of use of any family planning methods significantly decreases in rural areas among women of all the caste groups in Bihar. The chance of using any family planning method is the highest at 1.6 times among women educated in higher secondary and above, followed by women having secondary education (1.2 times) and primary education (1.038 times) compared to illiterate. A similar pattern for using any family planning method has been found among women of all the caste groups in Bihar except OBC women in the case of primary education. The possibility of using any family planning method increases among women belonging to the medium and rich wealth index household than among women belonging to the household of poor wealth index among all the caste groups in Bihar. A similar pattern has been found for the effect of socioeconomic and demographic characteristics on the current use of any modern method of family planning in Bihar (Table 5).

Table 4

Results of Logistic Regression (Odds Ratio) for Current Use of any Family Planning Method by Socioeconomic and Demographic Characteristics of Women in Bihar, 2019-21

Characteristics	Scheduled Castes/ Scheduled Tribes	Other Backward Castes	Other Castes	Total
Age Group				
15-19®				
20-29	1.570***	1.378***	1.930***	1.489***
30-39	1.818***	1.702***	2.223***	1.777***
40 and above	1.290	1.300**	1.843**	1.343***
Age at the consummation of the marriage				
<18®				
18 and above	1.015	0.941	0.883*	0.953*
Marital Duration				
<5®				
5-9	2.305***	2.455***	2.394***	2.305***
10-14	4.581***	4.880***	3.970***	4.581***
15 and above	6.464***	6.251***	4.897***	6.464***
Residence				
Urban®				
Rural	0.942	0.831***	0.970	0.885***
Women's education				
Illiterate®				
Primary Complete	1.091	0.991	1.329***	1.038
Secondary Complete	1.053	1.199***	1.659***	1.197***

Characteristics	Scheduled Castes/ Scheduled Tribes	Other Backward Castes	Other Castes	Total
Higher Secondary and above	1.500***	1.662***	1.801***	1.574***
Household wealth index				
Poor®				
Medium	1.218***	1.161***	1.384***	1.181***
Rich	1.514***	1.299***	2.164***	1.423***
Constant	0.221***	0.281***	0.105***	0.237***

Note: Dependent Variable: 0- Do not use any family planning method 1- Use any family planning method Level of significance 0.000=P<0.001, 0.00=P<0.05 and 0.0=P<0.1

Table 5

Results of Logistic Regression (Odds Ratio) for Current Use of Modern Family Planning Method by Socioeconomic and Demographic Characteristics of Women in Bihar, 2019-21

Characteristics	Scheduled Castes/Scheduled Tribes	Other Backward Castes	Other Castes	Total
Age Group				
15-19®				
20-29	1.570***	1.378***	1.941**	1.662***
30-39	1.818***	1.702***	2.250***	2.021***
40 and above	1.290	1.300**	2.266***	1.769***
Age at the consummation of the marriage				
<18®				
18 and above	1.015	0.941	0.820***	0.903***
Marital duration				
<5®				
5-9	2.305***	2.455***	2.563***	2.701***
10-14	4.581***	4.880***	4.711***	5.903***
15 and above	6.464***	6.251***	6.088***	7.594***
Residence				
Urban®				
Rural	0.942	0.831***	1.126	1.042
Women's education				
Illiterate®				
Primary Complete	1.091	0.991	1.233*	1.023
Secondary Complete	1.053	1.199***	1.554***	1.130***
Higher Secondary and above	1.500***	1.662***	1.554***	1.324***
Standard of Living Index				
Low®				
Medium	1.218***	1.161***	1.364***	1.181***
High	1.514***	1.299***	1.944***	1.292***
Constant	0.221***	0.281***	0.047***	0.089***

Note: Dependent Variable: 0- Do not use a modern family planning method 1- Use a modern family planning method
Level of significance 0.000=P<0.001, 0.00=P<0.05 and 0.0=P<0.1

Current Use of Family Planning Methods by Number of Surviving Children to Women

The information on current contraceptive use by the number of surviving children among caste groups has presented in Table 6. Understanding the association between the number of living children and contraceptive use among women of different caste groups is important. The table shows that contraceptive use is comparatively high among the women who have threesurviving children (70% for any method and 60% for modern method) invariably of methods and caste groups in Bihar except SC/ST women where contraceptive use is comparatively high among the women who have four surviving children. The use of any family planning method is 74 per cent among the women having two sons and is higher than the women having two daughters (63%). A similar trend has been observed for any modern method, which is 65 per cent for women having two sons and is higher than the women having two daughters (52%). A similar trend has also been found among all the caste groups in Bihar.

Table 6

Percentage of Currently Married Women by Current use of Family Planning Method by Total Surviving Children in Bihar, 2019-21

Surviving Children	Scheduled Caste/ Scheduled Tribe		Other Backward Castes		Other Castes		Total		Total
	Any Method	Modern Method	Any Method	Modern Method	Any Method	Modern Method	Any Method	Modern Method	
Total									
0	9.8	4.6	11.8	4.9	12.1	6.0	11.2	5.0	3312
1	30.3	15.8	34.0	18.0	39.4	21.8	34.0	18.2	4295
2	55.2	39.3	59.9	44.6	65.7	50.7	59.9	44.6	7008
3	67.7	59.2	71.3	61.2	68.5	59.5	69.7	60.3	7494
4	71.2	62.9	70.7	61.0	60.1	50.3	69.4	60.2	5212
5+	68.1	59.4	65.5	54.5	53.9	42.8	64.7	54.4	4507
Surviving son									
0	22.1	12.2	24.1	12.0	27.3	14.6	24.0	12.4	7005
1	51.1	36.0	55.4	39.6	57.6	43.0	54.6	39.3	10408
2	73.8	65.7	74.6	66.0	70.5	61.5	73.6	65.2	10015
3	68.8	63.4	70.5	62.0	61.7	53.8	68.8	61.4	3174
4	77.6	69.7	72.7	63.5	57.1	41.8	71.9	62.3	908
5+	70.1	57.2	53.7	40.3	30.0	15.2	54.4	40.9	318
Surviving daughter									
0	38.3	28.7	42.9	32.6	43.7	32.5	41.7	31.5	9368
1	60.3	49.4	62.1	49.6	60.7	47.1	61.3	49.1	10868
2	63.4	53.2	63.8	52.0	62.3	50.9	63.4	52.1	6505
3	63.5	53.5	64.2	52.3	56.7	43.8	62.7	51.3	3155
4	60.5	50.3	59.6	45.0	48.9	39.1	58.4	46.0	1295
5+	58.9	44.0	54.8	40.9	43.7	33.6	54.4	40.7	637
Total	55.0	44.6	56.7	45.0	54.5	42.4	55.8	44.4	31755

The Desire for More Children

The per cent distribution of currently married women by the desire for children according to the number of living children among caste groups in Bihar has presented in Table 7. The overall percentage for currently married women, who want no more children, is 32 per cent, varying from 30 per cent of women for SC/ST, 31 per cent of women among OBC, to 37 per cent among OC women. For currently married women, around 37 per cent cannot have another child due to the sterilisation of the husband or the wife; it varies from 33 per cent of OC women, followed by 37 per cent of women among SC/ST to the highest 38 per cent of women among OBC. Two per cent reported that they could not conceive ('declared infecund'), and this percentage varies from the lower 2 per cent each among SC/ST and OBC women to the higher 2.3 per cent among OC women. Twelve per cent of women reported that they would want a child soon, more than 14 per cent want another child later, and less than 1 per cent want another child but are undecided when. About the same proportion of SC/ST (13%), OBC (12%), and OC (10%) women reported that they wanted another child soon. However, 14% of women say they want another child later, varying from the lower 13 per cent of women among OC, followed by 14 per cent of women among OBC, to the highest 15 per cent among SC/ST. Less than 1 per cent of women want another child but are undecided about whether to have a child. This percentage is almost similar among all the caste groups in Bihar. It shows that the desire not to have a child increases quickly with the number of living children. The proportion is negligible for women who have no living children and reported that they do not want any children (due to sterilisation) among all caste groups in Bihar. However, the women who have two and three living children reported that they do not want any children (due to sterilisation) 32 and 66 per cent of women among OC, compared with 14 and 85 per cent of women among SC/ST and 20 and 80 per cent of women among OBC who have two and three living children respectively.

Table 7

Percentage Distribution of Currently Married Women by a Desire for Children, According to the Number of Living Children Among Caste Groups in Bihar, 2019-21

Desire for children	Number of living children															Total
	SC/ST					OBC					Other Castes					
	0	1	2	3+	Total	0	1	2	3+	Total	0	1	2	3+	Total	
Wants within two years	44.8	28.5	17.0	9.7	13.1	44.0	28.8	16.5	10.7	11.7	45.0	31.9	13.6	9.5	11.3	12.01
Wants after two years	24.4	42.4	20.7	12.6	14.8	28.3	45.6	18.3	7.8	14.0	25.1	49.0	14.6	11.4	13.1	14.13
Want another, undecided when	38.7	29.1	16.2	16.1	0.7	38.3	32.3	16.3	13.1	0.9	26.8	44.4	13.1	15.7	1.0	0.84
Undecided	12.2	17.4	34.4	36.1	2.3	11.5	28.1	27.3	33.2	2.7	11.0	29.8	26.5	32.7	2.9	2.59

Desire for children	Number of living children															Total
	SC/ST					OBC					Other Castes					
	0	1	2	3+	Total	0	1	2	3+	Total	0	1	2	3+	Total	
Want no more	1.2	8.9	23.9	66.0	30.3	1.5	7.6	30.2	60.7	31.0	1.1	11.2	35.9	51.7	36.5	31.66
Sterilised	0.1	1.2	13.5	85.2	37.0	0.1	0.9	19.5	79.6	37.8	0.0	1.8	32.4	65.8	32.9	36.77
Declared infecund	21.9	13.7	16.6	47.8	1.9	23.9	15.7	18.6	41.8	2.0	28.2	23.1	17.3	31.4	2.3	2
Total	10.9	13.9	18.6	56.6	100.0	10.8	13.9	22.5	52.8	100.0	10.3	17.0	28.4	44.4	100.0	100.0
Number of women	967	1204	1675	5313	9159	1863	2332	3977	9632	17804	468	751	1344	2229	4792	31755

Conclusions

The present paper has analysed the family planning differentials in the context of socioeconomic and demographic characteristics among caste groups in Bihar. The analysis shows that family planning differentials exist among caste groups in Bihar. The knowledge of family planning and modern methods is universal and does not vary much among caste groups in Bihar. Current contraceptive use is lower among women of OC than OBC and SC/ST women. Female sterilisation is the mostly used method, followed by IUDs, Condoms and Pills among all the caste groups. There are differentials in the current use of spacing methods among caste groups. The current use of any family planning method is higher among urban women. The current use of the family planning method is much lower among young age groups and higher among older age groups. However, age, marital duration, education and household wealth index enhanced the current family planning method, but it varies among the caste groups. Contraceptive use is higher among women with three surviving children, and this proportion is higher for women with two or more sons than women with two or more daughters, invariably of methods and caste groups in Bihar. Logistic regression analysis results on the current use of any family planning method, and modern method showed differentials among caste groups. The use of any method and any modern family planning method significantly increases with the age of the women, marital duration, education and household wealth index in Bihar. This indicates that the differences in contraceptive use between caste groups will disappear with the improvement of socioeconomic status.

Policy Implications

The illiterate women are contributing more to an increase in family planning use. Therefore, family planning methods should be accessible and affordable in rural and remote areas. Since education is important in family planning, girls' education must be encouraged. The lower use of family planning methods among SC/ST was a major problem in developing norms regarding smaller family sizes. It has been concluded from the findings that with the improvement of socioeconomic status, differentials in the use

of family planning among caste groups will decline. This would entail a more widely dispersed development program, stressing wider improvements in conditions that influence family planning. It will help narrow the differentials in family planning methods among caste groups in Bihar. Family planning policies must focus on rural and remote areas and illiterate and poor women to ensure the achievement of state-level improvements in family planning programs.

References

- Bhuyan, K. C. (1991). Social-mobility and family planning practices in rural Bangladesh: A case study. *Journal of Family Welfare*, 37(4), 46-58.
- Bongaarts, J., Frank, O., & Lesthaeghe, R. (1984). The proximate determinants of fertility in Sub-Saharan Africa. *Population and Development Review*, 10(3), 511-537. <https://doi.org/10.2307/1973518>
- Chutia, D. & Barman, P. (2020). Acceptance of contraceptive methods by antenatal mothers attending antenatal sessions in the tea garden area, Cachar district, Assam. *J Evid Based Med Healthc*, 7(37), 1989-1993.
- Dabral, S. & Malik, S. L. (2004). Demographic study of Gujjars of Delhi: IV. KAP of family planning. *Journal of Human Ecology*, 16(4), 231-237. <https://doi.org/10.1080/09709274.2004.11905744>
- Dash, A.A. & Nagdeve, D. A. (2020). Fertility transition in India: An application of Bongaarts model. *Glob J Fertil Res*, 5(1), 009-015. <https://doi.org/10.17352/gjfr.000016>
- Gogoi, K., Hazarika, P. J., Chanu, N. S., & Hazarika, J. (2017). A study on the status of family planning practices and its association with socioeconomic and demographic factors in Manipur, India. *International Journal of Statistics and Systems*, 12(3), 441-455.
- Healey, M. (2014). *Indian sisters: A history of nursing and the state, 1907–2007*. Routledge.
- International Institute for Population Sciences (IIPS) and ICF. (2021). *National Family Health Survey (NFHS-5), India, 2019-21: Bihar*. Mumbai: IIPS.
- Jain, A. K. (1989). Revising the role and responsibility of the family welfare programme in India. *Economic and Political Weekly*, 24(49), 2729–2737.
- Khan, M. E., & Bhatnagar, I. (2015). Challenges in introducing new contraceptive methods: A case study of India. *Int Q Community Health Educ*, 35(4), 387-401. <https://doi.org/10.1177/0272684X15596093>. PMID: 26470400
- Kumar, A. & Joshi, K. M. (2008). Family-planning methods among the tribal population in South Gujarat: A case study of access and usage. *Development in Practice*, 18(2), 258- 266.

Nagdeve, D. A. (2010). Fertility and family planning differentials in Madhya Pradesh. In Alok Ranjan (Ed.), *Family welfare and fertility in India* (pp. 57-75). Shyam Institute Bhopal.

Parek, H. J., & Rao, D. S. (1984). Role of husbands in family planning. *Journal of Community Medicine*, 23, 22-24.

Prateek, S. S. & Saurabh, R. S. (2012). Contraceptive practices adopted by women attending an urban health centre. *African Health Sciences*, 12(4), 416-421.

Santhya, K.G. (2003). Changing family planning scenario in India: An overview of recent evidence, *South & East Asia Regional Working Paper no. 17*. Population Council, Regional Office for South and East Asia. New Delhi, India.

Singh, S., Darroch, J. E., & Ashford, L. S. (2014). *Adding it up: The costs and benefits of investing in sexual and reproductive health 2014*. Guttmacher Institute and UNFPA.

Wubalem, Z., Sibanda, A. & Dennis, P. (2003). The proximate determinants of the decline to below replacement fertility in Addis Ababa. *Studies in Family Planning*, 34(1), 1-7.

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