

Which Contraceptive Methods Are Used for Stopping Childbearing in India? Levels, Patterns and Determinants

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Abstract

Background: This study aims to examine patterns and socio-economic correlates of using contraceptives for limiting childbirths in India.

Methods: The study is based on data from the fourth round of the National Family Health Survey considering 339,537 currently married, non-pregnant and fecund women. Bivariate and three separate binary logistic regression model were carried out to accomplish the research objectives.

Results: Most of the women stated to postpone their childrearing after age 25 years and after achieved children 2 or more in India. Still, 13.5% women were not using any contraceptive to satisfy their demand for postpone childbearing and 8% women were using traditional contraceptive to postpone their childbearing and using traditional contraceptive to postpone childrearing was higher among women aged 15-19 years, illiterate, poor, Muslims and belong from central and northeast region. Women's age, parity, year of schooling, wealth status, religion, caste, mass media and region found to be strong determinants of met need for limiting childbearing and using traditional contraceptives in India.

Conclusion: The met need for demand of spacing methods was far lagging to desire goals of SDG-3.7. The government should needs to focus on women with high unmet need for limiting and use traditional methods for limiting.

Plain English Summary

Using contraceptives for family planning is one the central concerns in reproductive health. In India, family planning practice is extremely skewed towards limiting child births rather than birth spacing in India. So, the success of family planning highly depends on using prevalence of modern contraceptives for limiting childbirth in India. The unmet need and using traditional contraceptive methods for limiting is significantly high. Unmet need and using traditional contraceptive for limiting childbearing both was significantly high among adolescent, Muslims, and belongs from Central and North-East region. Contrarily, the level of met need for limiting childbearing lies below the national average among women aged below 35 years, parity having less than two, no living children, affiliated to Muslims, illiterate and poor. It was found that women with higher education were more aware of family planning and modern contraceptive use in their daily life. In addition, women resided in rural area are less likely to use reversible contraceptives for limiting childbearing due to less information about contraceptive methods and low follow up is main significant barriers of extensive use of reversible methods in rural area. Since traditional contraceptive methods have a high risk of failure, there is need to encourage the use of modern contraceptive methods for stopping childbearing.

Introduction

Family planning and using contraception methods are central concerns in reproductive health [1]. Family planning means using contraception to limit or space out pregnancies [2]. Since 1951, India has

implemented several programmes to increase family planning acceptance and choice-based contraception method use [3, 4]. The government of India has introduced the community needs assessment approach (CNAA) to move forward target free, client choice contraceptive use and diversified use of contraceptives [5]. Over 15 years-long journeys of the CNAA and reproductive and child health (RCH) programme, the trends of using modern reversible contraceptives remain stagnant between 1999 and 2015 [6]. In India, family planning practice is extremely skewed towards limiting child births rather than birth spacing in India [7]. The acceptance of female sterilization continues to be enormously high compared to others alternative contraceptive methods in India [6]. The total demand and met need of different contraceptives methods for limit or space the child births are remarkably varied across Indian states and union territories [8]. Furthermore, India has achieved noteworthy progress in reducing fertility rate over the recent period but some states in central and north India are still lagged behind from desire goal [9]. The recent data of National Family Health Survey (NFHS) 2015-16 shows the total fertility rate (TFR) was 2.2 nationally and varies among the states [9]. Previous studies suggested that the quality of family planning services has proved to be effective but far away from satisfactory level and concentrated in female sterilization over the time [10, 6]. Furthermore, the use of permanent contraceptive methods for family planning (male and female sterilization) has varies significantly across the socio-economic groups and states in India [11]. The dominance of using permanent methods for family planning (male and female sterilization) in India has been arising questioning about limited choice of family planning methods [12] and increasing trends of sterilization regrets [11].

Limited choice of methods, inadequate information delivered to users, weak technical standards, lack of follow up, and low campaign about the use of reversible methods considered as the major weakness of the family planning programme [12].

Recent NFHS-4 data (2015-16) shows-55.3% women had decided to limit or stop their childbirth (limiting demand) out of total demand for family planning (66.4%) in India [9]. Furthermore, the demand for the limit was five times higher than spacing family planning demand in India in 2015-16 [9]. So, above this information confirmed that the success and failure of family planning programme highly depends on what type of contraceptives are using by women for their limiting childbirths in India. If unmet need for limiting (not using contraceptives for limiting childbirths) and using traditional methods for limit child birth is tend to be high then it became alarming for high populated country India.

A number of studies examined the trends, patterns and determinants of unmet need for total family planning as well as spacing or limiting childbirths, determinant of contraceptive use, reason for non-use of contraception etc. in India and elsewhere [6, 13-16]. But, no studies have examined the patterns of contraceptive methods using to satisfy the limiting childbirths demand in India based on NFHS-4 (2015-16) data. Therefore, this study tried to find out the prevalence of contraceptive use (met need) for limiting childbirths and types of contraceptive methods using to stop the next childbirths in India. The socio-economic correlates of met need for limiting childbirths and using traditional contraceptive methods for limiting childbearing also analysed in this paper.

Data & Methods

Data:

The study used data from the latest round of the National Family Health Survey (NFHS), an Indian version of the Demographic and Health Survey (DHS) carried out during 2015-16. The main objectives of the survey are to provide a reliable estimation on fertility, maternal and child mortality, family planning, reproductive and child health, nutritional status of children, utilization of maternal and child health care services and women's autonomy. The survey adopted a multistage sampling design, and details of sampling design are provided NFHS-4 report [9].

The NFHS collected data using different interview schedules- household schedule and eligible women, men and biomarker schedule. The present analysis is based on the information related to a weight age sample of 339,537 currently married, non-pregnant and fecund women who have demand for family planning (demand for spacing or limiting childbearing). The details of the sampling weights are given in the NFHS-4 report [9].

Outcome variables

Family planning demand refers to either demand for space or limits childbearing. Total family planning demand denotes the sum of demand for spacing and limiting [9]. The selected outcomes variables are met need for limiting demand or using any contraceptive methods for limit childbearing, met need for limiting childbearing by using any reversible contraceptive method and met need for limiting childbearing by using any traditional contraceptive method. The study used revised definitions of unmet and met need for family planning as well as spacing and limiting childbirths [17].

Key definitions:

Demand for limiting childbearing: It refers the proportion of currently married women who want no more children or discontinue childbearing.

Unmet need for limiting childbearing: It includes pregnant or amenorrhoeic women whose pregnancy was unwanted, women who were non-pregnant or non-amenorrhoeic, fecund and who were not using any contraceptives method and want no more children. And when above mentioned women are using any contraceptive methods to limit childbearing then it called met need for limiting childbearing.

In this paper, the contraceptives methods are primarily classified into two broad classes- any permanent contraceptive methods and any reversible contraceptive methods. Further, any reversible methods classified into two sub-categories- any modern reversible contraceptive methods and any traditional reversible methods. Any permanent methods include male and female sterilizations. Any reversible contraceptive methods include pill, IUD, injectable, male condom, female condom, standard days method (SDM), diaphragm, foam/jelly, locational amenorrhoea method (LAM), and other modern methods, rhythm, withdrawal and other traditional methods. Modern reversible contraceptive methods include all

reversible contraceptives excluding rhythm, withdrawal and other traditional methods. Traditional contraceptive method includes rhythm, withdrawal, and other traditional methods.

Defining Predictor Variables

This paper used a range of socioeconomic and demographic variables in the analysis that has been documented to be significantly associated with unmet and met need for family planning in India and elsewhere in many previous studies. These variables are- respondent's age (15-19,20-24,25-29,30-34, 35-39, 40-44 and 45-49 years), parity (0, 1, 2, 3, 4+), children sex composition (no child, only daughter and at least one son), women's years of schooling (illiterate, 1-5, 6-10,11+), wealth status (poorest, poorer, middle, richer and richest), religion (Hindu, Muslim, Christians and other) and caste (General, Other backward classes [OBC], Scheduled Caste [SC], Scheduled Tribe [ST] and others), mass media exposure (no, yes), place of residence (urban, rural) and geographical region (North, Central, East, North-East, West and South). The division of geographical regions was taken from NFHS-4 report [9].

Statistical Analysis:

Bivariate and binary logistic regression analyses were applied to accomplish the study objectives. Bivariate analysis was carried out to examine the levels and patterns of the total demand for limiting childbearing, demand satisfied for limiting childbearing and types of contraceptives using for limiting childbearing by background characteristics.

The three separate binary logistic regression analysis was performed to find out the socioeconomic correlates of met demand for limiting childbearing, using reversible contraceptive for limiting childbearing and using traditional contraceptives for limiting childbearing. The results of binary logistic regression analysis were presented in the form of adjusted odds ratios (AOR) with 95% confidence interval (CI). The whole analyses were carried out using statistical STATA (version 14.1 SE).

In the present study, we used three different outcome variables related to limiting childbearing and all the variables are dichotomous in nature. These outcome variables are coded as following: demand satisfied for limiting childbearing (unmet need "0", met need "1"), demand satisfied for limiting childbearing by using any reversible contraceptives (any permanent contraceptives "0", any reversible contraceptives "1") and demand satisfied for limiting childbearing by using any traditional contraceptives (modern reversible method"0", traditional method"1").

Results

Levels and Patterns of Total demand and demand satisfied for limiting childbearing:

Table 1 presents the levels and patterns of total demand for limiting childbearing (total limiting demand) and using any contraceptive methods to satisfy the demand for limiting childbearing (met need for limiting childbearing) in India during 2015-16. Majority of women (86.5%) were using any contraceptive methods for limit their childbearing (met need for limiting) those who had demand for limit childbearing.

The demand and met need for limiting childbearing both increased with women's age and parity. The demand for limiting childbearing was very low in women age 15-19 years (4.8%) and only about half of them (53.1) were using any contraceptive methods to stop their childbearing. Surprisingly, the willingness of postpone childbearing (demand for limiting childbearing) and using contraceptive for limiting births (met need for limiting) both has increased remarkably from the women age group 25-29 years. The demand for limiting childbearing was significantly high among women who had at least one son (64%) compared to the women who had only daughter (54%). The demand for limit childbearing was reverse with women's level of education. The demand for limiting childbearing was noticeably higher among illiterate women (59.6%) compared to women with 11 or more year of schooling (44.4%). There is no significant differences in terms of demand for limiting childbearing based on wealth status; but using any contraceptive methods for limiting childbirths (met need) was comparatively lower among poorest (79.3%) than richest (88.8%). Among the religious groups, the demand for limit childbearing has observed lowest in Muslims (47.1%) and highest in others (63.4%). The use of any contraceptives for limit the childbearing (met need for limiting childbearing) was low among Muslims (80.2%) compared to others (91%). There was no significant difference in demand for limiting childbearing or met need for limiting childbearing on the basis of caste affiliation. Concerning to the geographical region, the limiting demand was highest in the Southern region (59.2%) and lowest in the north-eastern region (43.2%). Furthermore, the gap in using any contraceptives to satisfy the limiting demand (met need for limiting childbearing) has observed between North-East (80.1%) and South region (93.1%).

Types of using contraceptives for limiting childbearing:

Table 2 shows types of contraceptives using to satisfy the limiting childbirths demand with background characteristics. Result shows that- majority of women using permanent contraceptive methods (75.4%) to limit or stop their childbearing. Still, 8.7% women were using any traditional contraceptives to limit their childbearing in India. The use of permanent contraceptive methods (male and female sterilizations) for limit or stop childbearing was increased with women's age and parity and decreased with increasing women's year of schooling and wealth status. Using any reversible contraceptives for limit childbearing was noticeably high among the women- age group 15-19 years (65.7%), single parity (60.9%), no living child (41.5%), year of schooling 11 years or more (40.8), Muslims (44.6%), richest (32.3%), General (34.1%) and North-East region (71.5%) compared to their counterparts. The use traditional contraceptive methods to limit childbearing was comparatively higher among the women- age group 15-19 years (16.6%), single parity (20.9%), no living child (16.5%), Muslims (14%), North-East region (26.1) and Central region (17.3%) than their counterparts.

Socio-economic correlates of using any contraceptives, reversible contraceptives and traditional contraceptives to stop childbearing:

The logistic regression model after adjusting the effect of predictors revealed that women's age, parity, sex composition of children, year of schooling, wealth status, religion, caste, mass media, place of resident and region continued to be significant determinants of met need for limiting childbearing and

using reversible contraceptives or traditional contraceptives for limiting childbearing in 2015-16 (Table 3). The likelihood of met need for limiting childbearing (using any contraceptives for limit the childbearing) was increasing with women's age, parity, year of schooling and wealth status. The odds of using contraceptives for limiting childbearing was 72% more likely in women's age group 25-29 years compared to reference category age group 15-19 years. The likelihood of using contraceptives for limiting was four fold higher in women whose parity was two (AOR: 4.33; 95% CI: 2.59-7.10) compared to zero parity. Surprisingly, the likelihood of demand satisfied for limiting childbearing was 2.1 times higher in women who had only daughter and 1.7 times higher who had at least one son as compared to women who had no child. Richest women 71% more likely satisfied demand for limiting childbearing compared to poorest group. The odds of met need for limiting childbearing was 13% higher among women who completed 11 or more years of schooling (AOR: 1.13; 95% CI: 1.12-1.18) as compared to reference category i.e. illiterate women. The likelihood of any using contraceptives for limiting childbearing (met need) was 40% and 29% less likely in Muslims and Christians respectively compared to Hindu. Unpredictably, women who belonged to STs were more likely to satisfied limiting demand (AOR: 1.06; 95% CI: 1.04-1.07) as compared to General. Furthermore, the positive association between mass media and met need for limiting childbearing was observed. The women who accessed mass media related family planning was 30% more likely using contraceptives for limiting childbearing compared to women who not accessed mass media. However, women from rural areas (AOR: 1.10; 95% CI: 1.08-1.15) were more likely satisfied demand than urban. The meet need for limiting childbearing was significantly higher in South region (AOR: 1.82; 95% CI: 1.71-1.87) compare to reference group i.e. North. Shockingly, the odds of met need for limiting childbearing was 30%, 19% and 31% less likely in Central, East and North-East region respectively compared to reference category i.e. North region.

Table 3 also shows the odds of using any reversible contraceptives against using permanent methods for limiting. The odds of using any reversible methods for limiting childbirth were decreasing with increasing women's age and parity. The women who had at least one son was more likely using reversible method (AOR: 2.60; 95% CI: 1.30-5.00) as compared to the women who had no children. The using reversible contraceptive method for limiting childbearing was significantly increasing with increasing women's year of schooling and wealth status. The woman with 11 or more years of schooling shows higher odds of using reversible contraceptive methods for limiting childbearing (AOR: 3.30; 95% CI: 3.15-3.43) compared to illiterate. Similarly, the richest woman was 47% more likely using reversible contraceptives for limiting childbearing than poorest. The likelihood of using reversible contraceptives for limiting childbearing was 3.41, 1.34 and 1.22 times more likely in Muslims, Christians and others respectively compared to reference category i.e. Hindu. Similarly, caste also had a significant influence on the use of reversible contraceptives for limiting childbearing. Women belonged to ST (AOR= 0.91; 95% CI:0.88-0.94), OBC (AOR= 0.80; 95% CI: 0.79-0.83) and SC (AOR: 0.59; 95% CI: 0.55-0.60) less likely using reversible contraceptives for limit or stop childbearing as compared to General or no-caste. The women lived in rural was 29% less likely using reversible contraceptives for stop childbearing compared to urban. The Central, East and North-East region shows 1.58, 1.13 and 5.61 times more likely using reversible contraceptives

for limiting as compared to North. But, West and South regions were 74% and 98% less likely using reversible contraceptives respectively to stop childbearing as compared to North.

The odds of using traditional contraceptives against modern reversible contraceptives for stop childbearing was statistically and significantly associated with women's age, years of schooling, wealth status, religion, caste, mass media exposure, place of resident and region. The odds of using traditional contraceptives to stop childbearing among advanced reproductive aged women (age 40-49 years) was found extremely higher (AOR: 3.52- 5.31) compared to women age group 15-19 years. Result shows that the women's year of schooling and wealth status has positive impact on reducing use of traditional contraceptive methods for limiting childbearing. The using traditional contraceptive was declining with increasing year of schooling and wealth status. The women who completed 11 or more years of schooling was 37% less likely using traditional contraceptives as compared to illiterate. Similarly, the richest women was 39% less likely using traditional contraceptives than reference category i.e. poorest. The Muslims and other religion was 36% and 20% less likely using traditional contraceptives compared to Hindus. Likewise, women belong to OBCs and SCs were 12% (AOR: 1.12; 95% CI: 1.06-1.16) and 11% (AOR: 1.11; 95% CI: 1.01-1.12) more likely to adopt traditional methods respectively compared to General. Rural women were 13% more inclined towards using traditional contraceptives than their counterparts. It was found that geographical location significantly impacted on the adaptation of traditional methods. Women residing in the Central (AOR: 2.10; 95% CI: 1.91-2.13), Northeast (AOR: 1.31; 95% CI: 1.16-1.37) and East regions (AOR: 1.21; 95% CI: 1.14-1.28) were more likely to using traditional contraceptive methods as compared to reference category i.e. North.

Discussion

The study found that demand for limiting childbearing was significantly higher compared to demand for spacing childbearing. Furthermore, Most of women were satisfied demand for limiting childbearing and using permanent contraceptives noticeably higher than reversible contraceptives in India in 2015-16. Findings also revealed that demand for limiting childbearing was comparatively high among women who are at an age of 35 years or above, multiparous, illiterate, had at least one son, and from the Southern region. The level of met need for limiting childbearing lies below the national average among women those who belonged to below 35 years, parity having less than two, no living children, affiliated to Muslims, illiterate, poor, and from the North-Eastern region. The early reproductive, highly educated, lower parity, Muslims, and North-eastern region's women were significantly preferred reversible contraceptives to stop their childbearing. The use of traditional methods for limit the births were significantly higher among the women in early reproductive age, lower parity, belong from OBCs or STs, lived in rural and resided in the Central or North-east regions.

Women's age is found to be a strong predictor of willingness for limiting childbearing and using contraceptives for stop childbearing. Results suggest that women aged 25 years or above had higher odds of met need for limiting childbearing and use of any traditional method. This finding is similar to the results from many previous studies [14, 18, 19]. On the other hand, the using reversible contraceptives for

discontinued childbearing replaced to using permanent contraceptives with increasing women's age. Similarly, using contraceptives for limiting childbearing increased with increase women's parity [13] because with more living childbearing, the couples become much more aware of the contraceptive use appropriately [20, 21]. In addition, multiparous women usually satisfied limiting childbearing demand with permanent contraceptive methods whereas they archived desire number of children [22, 23]. Women having at least one son child were more likely used reversible contraceptive methods for limiting the child births. This result is ambiguous and some studies suggested that although son child is the most desirable, parents want a daughter child for their old age who will take care of them [24-26]. The study confirmed that met need for limiting childbearing and reversible contraceptive method using for limiting childbearing increase with increasing years of schooling, whereas the use of the traditional methods decreases. With the improvement in the educational level, it is expected that women may be more aware of family planning and modern contraceptive use [27-29]. Similar patterns also observed with increasing wealth status; because wealth condition reflects the affordability and purchasing power of contraceptive methods of family planning [30, 31]. As evident from the present study, Muslim women usually preferred to space child births than postpone childbirths, similar finding observed in many previous studies [32-34]. Further, using reversible contraceptive methods for limiting childbearing also found to be high among Muslims because of the rigid religious belief [33, 34]. Mass media regarding family planning plays positive role to reduce unmet need for limiting childbearing and acceptance of alternative contraceptives for limiting births; some previous studies also found significant association between mass media and prevalence of contraceptives use [6, 15, 16].

The women in rural area are less likely use reversible contraceptives for limiting childbearing. Lower accessibility of any reversible method and less information about contraceptive methods and low follow up is main significant barriers of extensive use of reversible methods in rural area [35, 36]. Another key finding of the present study is the low fertility Southern region in India had the higher met need for limiting childbearing by using permanent contraceptive methods compared to others region in the country. On the other hand, Central, East and Northeast regions reported having higher use of any reversible and any traditional contraceptives to postpone childbearing. Most of the previous studies have found that in the Southern region, sterilization is much standard than any other region in India [11, 6]. Limiting childbearing demand satisfied by traditional contraceptive methods was remarkably high among the women in advanced reproductive age (35-49 years), socio-economically backward groups (OBC or ST), Central, East and North-East region. Similar results also suggested in the previous study [14].

Conclusion

This study confirmed that India has limited choice of contraceptives for stopping childbearing in India. This study has several implications for program interventions. First, a lower met need for limiting childbearing among the Muslims, illiterates, and the women living in the central or north-east region as compared to their counterparts shows unequal fulfilment of contraceptive supplies to the needy women. Second, the use of permanent methods of contraceptive use particularly female sterilisation was significantly higher than others contraceptives for stopping childbearing. Perhaps, this figure attracts

attention from quality of care perspective. Third, the use of traditional contraceptive methods using for limiting childbearing was noticeable higher among the women in advanced reproductive age (35-49 years) and socio-economically disadvantaged groups such as OBC and SC and the women belong from Central, East and North-east region and rural areas. Since traditional contraceptive methods have a high risk of failure, there is need to encourage the use of modern contraceptive methods for stopping childbearing. Addressing the issue of not satisfaction of the need for family planning considering the findings of this study in the program revision will help achieve the Sustainable Development Goal (SDG)-3.7.

Abbreviations

CNAA: Community needs assessment approach

RCH: Reproductive and child health

TFR: Total fertility rate

NFHS: National Family Health Survey

DHS: Demographic and Health Survey

SDM: Standard days method

IUD: Intrauterine device

SC: Scheduled Caste

ST: Scheduled caste

OBC: Other backward classes

LAM: Locational amenorrhoea method

AOR: Adjusted odds ratios

CI: Confidence interval

SDG: Sustainable Development Goal

Declarations

Authors' contributions:

AR and MR conceptualized the study aims and designed the study and assisted with interpretation of the analysis/results and manuscript writing. AR and MR conducted the analysis and led the preparation of

the manuscript. NK and PC assisted with different parts of the manuscript editing/writing. PC prepared final draft of the manuscript. All authors read and approved the final manuscript.

Availability of Data and Materials:

The data for this research is available to the public on DHS measures website. Any individual can register and easily obtained data in electronic version from the following website

<https://dhsprogram.com/data/new-userregistration.cfm>

Ethical approval:

This study is based on secondary data which is available in public domain. Therefore, ethical approval is not required for conducting this study.

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Tables

Table 1: Levels and patterns of total demand for limiting childbearing and using contraceptives to limiting childbearing (met need) by background characteristics of currently married women age 15-49 years in India, 2015-16

Background Characteristics	Total family Planning Demand (%)	Demand for limiting childbearing (%)	Using contraceptives for limiting childbearing or Met need (%)
Age			
15-19	37.0	4.8	53.1
20-24	51.2	21.8	70.0
25-29	66.6	48.9	79.0
30-34	74.7	67.5	86.1
35-39	75.5	73.3	90.1
40-44	71.8	71.1	92.2
45-49	63.9	63.7	94.9
Parity			
0	19.7	2.1	42.0
1	54.7	20.4	76.9
2	77.8	71.5	88.5
3	77.6	74.4	89.4
4+	70.8	68.7	85.0
Children sex composition			
No	19.3	2.2	45.6
Daughter	70.1	54.1	87.9
At least 1 Son	72.6	64.3	86.9
Year Of Schooling			
Illiterate	65.0	59.6	87.3
01-May	69.5	61.2	89.0
06-Oct	67.6	54.8	87.3
11+	64.4	44.4	83.3
Wealth Status			
Poorest	58.8	48.5	79.3
Poorer	65.0	53.9	86.6
Middle	67.3	57.0	89.2

Richer	69.1	58.0	88.9
Richest	70.8	58.2	88.8
Religion			
Hindu	66.8	56.4	87.7
Muslim	61.7	47.1	80.2
Christians	64.1	52.6	88.7
Others	76.3	63.4	91.0
Caste			
General	70.6	58.6	87.2
Other Backward Caste	64.9	54.6	86.5
Scheduled Caste	67.0	56.3	88.1
Scheduled Tribe	62.4	51.1	86.7
Mass Media exposure			
No	62.8	53.1	84.3
Yes	68.5	56.6	88.5
Resident			
Urban	69.3	57.9	87.8
Rural	64.9	54.0	86.5
Region			
North	73.3	61.2	88.9
Central	64.0	52.6	82.2
East	62.9	49.1	83.0
Northeast	64.6	43.2	80.1
West	70.7	60.6	88.4
South	65.9	59.2	93.1
India	66.4	55.3	86.5

Note: Percentage of met need for limiting is the women who using any contraceptive methods for limiting childbearing divided by total number women who had demand for limiting childbearing multiplied by hundred.

Table 2: Types of using of contraceptive methods for limiting childbearing or postpone childbirths by women age 15-49 years with background characteristics in India, 2015-16

Background Characteristics	Any Permanent contraceptive methods (%)	Any reversible contraceptive methods (%)	Reversible contraceptive methods	
			Modern (%)	Traditional (%)
Age				
15-19	34.3	65.7	49.1	16.6
20-24	60.2	39.8	29.8	10.0
25-29	67.0	33.0	23.8	9.2
30-34	70.4	29.6	20.4	9.2
35-39	75.2	24.9	15.2	9.7
40-44	81.5	18.5	10.1	8.4
45-49	89.4	10.6	4.6	6.0
Parity				
0	53.9	46.2	28.5	17.7
1	39.1	60.9	40.0	20.9
2	76.1	23.9	16.8	7.1
3	81.4	18.6	12.0	6.6
4+	76.7	23.3	12.4	10.9
Children sex composition				
No	58.6	41.5	25.0	16.5
Daughter	74.0	26.0	17.3	8.7
At least 1 son	75.9	24.1	15.4	8.7
Year of Schooling				
Illiterate	82.7	17.4	9.2	8.2
1-5	78.9	21.1	13.3	7.8
6-10	73.1	26.9	18.2	8.8
11+	59.3	40.8	29.9	10.9
Wealth Status				
Poorest	76.3	23.7	12.4	11.3

Poorer	76.3	23.7	14.3	9.4
Middle	79.6	20.3	12.6	7.7
Richer	77.6	22.4	15.0	7.4
Richest	67.7	32.3	23.6	8.7
Religion				
Hindu	78.0	22.0	13.8	8.2
Muslim	55.4	44.6	30.6	14.0
Christians	86.8	13.2	8.6	4.6
Others	67.5	32.5	24.8	7.7
Caste				
Gen	65.9	34.1	23.6	10.5
Other Backward Caste	79.5	20.5	12.6	7.9
Scheduled Caste	78.3	21.7	13.4	8.3
Scheduled Tribe	83.7	16.3	10.1	6.2
Mass media exposure				
No	77.4	22.5	12.8	9.7
Yes	74.4	25.7	17.5	8.2
Resident				
Urban	70.8	29.2	20.5	8.7
Rural	78.0	22.1	13.4	8.7
Region				
North	65.9	34.2	25.2	9.0
Central	63.5	36.6	19.3	17.3
East	64.4	35.6	22.8	12.8
North East	28.5	71.5	45.4	26.1
West	84.1	15.9	12.6	3.3
South	97.2	2.8	2.1	0.7
India	75.4	24.6	15.9	8.7

Table 3: Binary logistic regression model showing adjusted odds ratios (AOR) for the met need for limiting childbearing, using any reversible methods and any traditional contraceptive or traditional contraceptives to postpone childbirths in India, 2015-16

Background Characteristics	Met need for limiting childbearing		Using any reversible contraceptives for limiting childbearing		Using any traditional contraceptives for limiting childbearing	
	(Met need against Unmet need for limiting childbearing)		(Using any reversible contraceptives against any permanent contraceptives)		(Using any traditional contraceptives against any modern reversible contraceptives)	
	AOR	95% CI	AOR	95% CI	AOR	95% CI
Age						
15-19®	1.00		1.00		1.00	
20-24	1.11	0.92-1.24	0.42***	0.34-0.59	1.30	0.98-1.70
25-29	1.72***	1.44-1.95	0.36***	0.24-0.42	1.61***	1.21-2.08
30-34	3.01***	2.56-3.47	0.31***	0.19-0.33	1.93***	1.46-2.50
35-39	4.52***	3.84-5.21	0.21***	0.15-0.26	2.70***	2.08-3.57
40-44	5.81***	4.99-6.80	0.14***	0.10-0.17	3.52***	2.64-4.56
45-49	8.63***	7.32-10.04	0.09***	0.06-0.10	5.31***	4.03-7.01
Parity						
0 ®	1.00		1.00		1.00	
1	1.90*	1.17-3.2	1.00	0.49-2.07	0.92	0.31-2.51
2	4.33***	2.59-7.1	0.21***	0.08-0.33	0.64	0.21-1.74
3	4.36***	2.6-7.15	0.11***	0.05-0.22	0.61	0.2-1.65
4+	2.74***	1.65-4.54	0.10***	0.07-0.30	0.63	0.2-1.68
Sex Composition of child						
No ®	1.00		1.00		1.00	
Daughter	2.10**	1.29-3.39	1.76	0.89-3.40	0.83	0.28-2.10
Atleast 1 Son	1.72*	1.02-2.68	2.60**	1.30-5.00	0.81	0.29-2.16
Year of Schooling						

Illiterate ®	1.00		1.00		1.00	
1-5	1.10***	1.09-1.11	1.12***	1.1-1.18	0.90***	0.81-0.91
6-10	1.12***	1.11-1.15	1.72***	1.68-1.79	0.82***	0.79-0.88
11+	1.13***	1.12-1.18	3.35***	3.15-3.43	0.63***	0.61-0.69
Wealth status						
Poorest ®	1.00		1.00		1.00	
Poorer	1.51***	1.45-1.56	1.11***	1.06-1.14	0.89**	0.80-0.91
Middle	1.73***	1.63-1.77	1.13***	1.07-1.16	0.90**	0.84-0.96
Richer	1.62***	1.55-1.70	1.24***	1.18-1.29	0.80***	0.76-0.88
Richest	1.71***	1.59-1.77	1.47***	1.38-1.52	0.61***	0.6-0.70
Religion						
Hindu ®	1.00		1.00		1.00	
Muslim	0.60***	0.58-0.62	3.41***	3.32-3.57	0.64***	0.62-0.68
Christians	0.71***	0.64-0.76	1.34***	1.17-1.45	0.90	0.77-1.08
Others	1.23***	1.15-1.33	1.22***	1.18-1.31	0.80***	0.69-0.82
Caste						
General ®	1.00		1.00		1.00	
Other Backward Caste	0.90	0.84-0.89	0.80***	0.79-0.83	1.12***	1.06-1.16
Scheduled Caste	1.00	0.99-1.07	0.91***	0.88-0.94	1.11**	1.01-1.12
Scheduled Tribe	1.06**	1.04-1.07	0.59***	0.55-0.60	1.00	0.93-1.10
FP message from mass media						
No ®	1.00		1.00		1.00	
Yes	1.30***	1.24-	0.91***	0.88-0.92	0.82***	0.79-0.86

	1.31					
Place of Resident						
Urban ®	1.00		1.00		1.00	
Rural	1.05***	1.03-1.07	0.71***	0.69-0.73	1.13***	1.07-1.17
Region						
North ®	1.00		1.00		1.00	
Central	0.70***	0.68-0.73	1.58***	1.51-1.61	2.10***	1.91-2.13
East	0.81***	0.77-0.84	1.13***	1.09-1.17	1.21***	1.14-1.28
Northeast	0.69***	0.61-0.71	5.61***	5.24-6.03	1.31***	1.16-1.37
West	1.00	0.96-1.05	0.26***	0.25-0.28	0.80***	0.71-0.83
South	1.82***	1.71-1.87	0.02***	0.01-0.04	0.91***	0.77-0.97

Note: AOR= Adjusted Odds Ratios, CI= Confidence Interval, ®=Reference Category, ***p<0.01, **<0.05, * <0.1