

Original Research Article

Socio-demographic determinants and modern family planning usage pattern-an analysis of National Family Health Survey-IV data

Ajit Kumar Dey*

Department of Community Medicine, Silchar Medical College and Hospital, Silchar, Cachar, Assam, India

Received: 24 November 2018

Revised: 07 January 2019

Accepted: 08 January 2019

***Correspondence:**

Dr. Ajit Kumar Dey,

E-mail: drajit.smc@gmail.com

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ABSTRACT

Background: India, which accounts for world's 17.5 percent population, is the second most populous country in the world next only to China (19.4%). The major objective of the NFHS surveys has been to strengthen India's demographic and health database, to anticipate and meet the country's needs for data on emerging health and family welfare issues. The objectives of the study were to study the different background characteristics of women adopting different family planning methods and to analyze the associated socio-demographic factors..

Methods: Secondary data analysis of NFHS 4 datasets obtained from DHS program portal. Appropriate statistical testing of associated socio-demographic variables done and interpreted accordingly.

Results: Out of total 63696 couples, 99.2% women and 98.6% men knew modern method of contraception, 48.6% were currently using modern method of contraception and 7.4% traditional method. The majority (34%) women adopted female sterilization as current method of contraception. There is interstate variation in the contraceptive prevalence rate highest (80.60%) in Chandigarh compared to least (26.64%) in Goa. There is significant association observed between place of residence, religion, wealth index, women education, education of husband towards current contraceptive use.

Conclusions: About 45% of population increase is contributed by births above two children per family. The adoption of appropriate method of contraception by couples made available through quality family planning services and empowering women by proper behavior change communication will help improve the present contraceptive prevalence rate especially among the vulnerable groups.

Keywords: NFHS, Contraceptive methods, India

INTRODUCTION

India, which accounts for world's 17.5 percent population, is the second most populous country in the world next only to China (19.4%). The decadal growth declined from 23.87 percent for 1981-1991 to 21.54 percent for the period 1991-2001 and further to 17.64 percent during 2001-2011, thus added lesser population in 2001-2011 compared to the previous decade.¹ The Family Welfare Programme in India has experienced significant growth and adaptation over the past half

century since its inception in 1951. In 1996, the government took the radical decision of abolishing method-specific contraceptive targets that had been used to guide, monitor and evaluate the programme for decades, replacing it with target-free approach, later renamed as the community needs assessment approach in 1997 and decentralized participatory planning was initiated. The Reproductive and Child Health Programme, which was launched in 1997, espouses the principles of client satisfaction and high quality comprehensive and integrated health services.² The National Population

Policy, adopted in February 2000, further legitimised the paradigm shift to client-based services that aims to achieve the goal of bringing the total fertility rate to replacement level by 2010.³

The family planning intervenes in the reproductive cycle to help individuals control the number, interval, and timing of pregnancies and births, thereby reducing morbidity and improving health of mother as well as child. Besides the health objectives, family planning has been linked with human rights and with population planning objectives.⁴ The NRHM has emerged as a major financing and health sector reform strategy to strengthen States Health systems. The NRHM has been successful in putting in place large number of voluntary community health workers in the programme, which has contributed in a major way to improved utilisation of health facilities and increased health awareness.¹

The major objective of the NFHS surveys has been to strengthen India's demographic and health database, to anticipate and meet the country's needs for data on emerging health and family welfare issues.⁶ The present article attempts to study the different background characteristics of women adopting different family planning methods and to analyze various socio-demographic factors associated with pattern of current contraceptive use in India by using the NFHS-4 datasets.

METHODS

All the components of the National Family Health Survey (NFHS-4) were implemented in 29 states and 6 union territories. In addition, NFHS-4 has provided estimates of most indicators at the district level for 640 districts as per 2011 Census.

Universe: Women 15-49 and Men 15-54 years.

Period of field work: January 2015 to December 2016.

Sampling design

A uniform sample design was adopted in all the districts and PSUs selected for rural (villages) and urban (Census Enumeration Blocks (CEBs)) areas.⁶

Sample size

The sample size calculation was done by formula:

$$n = \text{Deft}^2 \times \frac{(1/P - 1)}{\alpha^2} \left/ (R_i \times R_h \times d) \right.$$

Where n is the sample size in households;

Deft is the design effect (a default value of 1.5 is used for Deft if not specified);

P is the estimated proportion;

α is the desired relative standard error;

R_i is the individual response rate;

R_h is the household gross response rate; and

d is the number of eligible individuals per household.

The total sample size for DHS survey with a number of survey domains (design domain) is the sum of the sample sizes over all domains. In almost all cases, sample size was decided to guarantee precision at domain level with appropriate allocation of the sample. The total samples with completed interviews were 601,509 households, 699,686 women, 112,122 men, 2,869,043 household members, 63,696 couples.

Sampling method

Two stage cluster sampling procedure. At the first stage, a stratified sample of EAs was selected with *probability proportional to size* (PPS). In the selected EAs, a listing procedure was performed such that all dwellings/households were listed. The NFHS-4 sample consisted of approximately 28,000 clusters throughout the country.

At the second stage, a fixed (or variable) number of households were selected by equal probability *systematic sampling* in the selected EAs. In each selected household, a household questionnaire was completed to identify women age 15-49, men age 15-54. Every eligible woman and man was interviewed with an individual questionnaire.⁷

Data collection

Data collection was divided into two phases. All the Indian States and UTs was organised into 32 States/Groups of State/UTs. Data collection was done by using Computer Assisted Personal Interviewing (CAPI) on mini laptops by a field team consisting of one field supervisor, three female interviewers, and one male interviewer.⁶

For the present study, due approval from DHS Program was obtained. The standard Recode manual for DHS 6 and guide to DHS statistics were consulted and variables chosen according to the study objectives.⁷ The analysis was done by using SPSS version 22 and the results were expressed in percent, proportions, mean. Classifying CRT method and Cox regression analysis employed to show association of socio-demographic variables in the current usage of contraceptives among the different population groups in India.

RESULTS

Out of the total 63,696 women respondents in the age group 15-49 years and men 16-54 years, the majority were Hindus (75.4%) were from rural areas (70.3%) in the age group 25-29 years (20.4%) with education up to incomplete secondary in 35.7% of women and 43.3% husbands, majority (21.3%) belonging to middle wealth index and 54.2% were having 2-3 numbers of living

children. The relationship of respondents to household head were as wife in 69.6%, 25.6% as daughter-in-law and remaining 4.8% others e.g. sister-in-law, daughter, head, mother etc. The distribution according to number of family members were as 2 to 3 in 13.7%, 4 to 5 members in 43.5%, 6 to 9 in 35.4% and 10 or more members in 7.4% of households.

The mean current age (with standard deviation) of women was 32.89 years \pm 8.078 while for men it was 37.52 years \pm 8.565. The distribution of women according to age group and wealth index in urban and rural area are given in Figure 1 and 2.

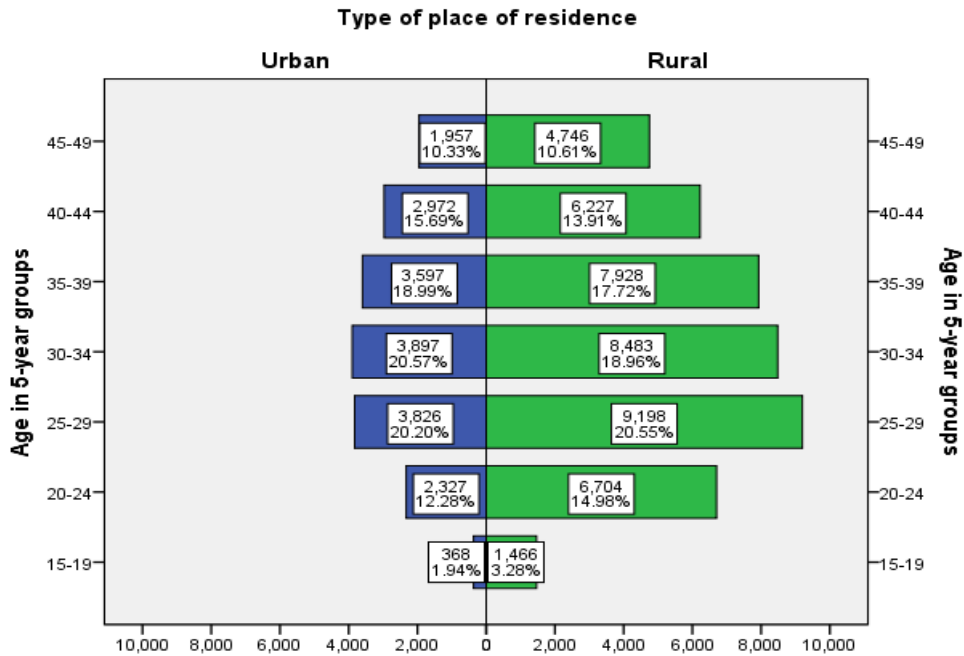


Figure 1: Distribution of respondents in age groups according to type of residence.

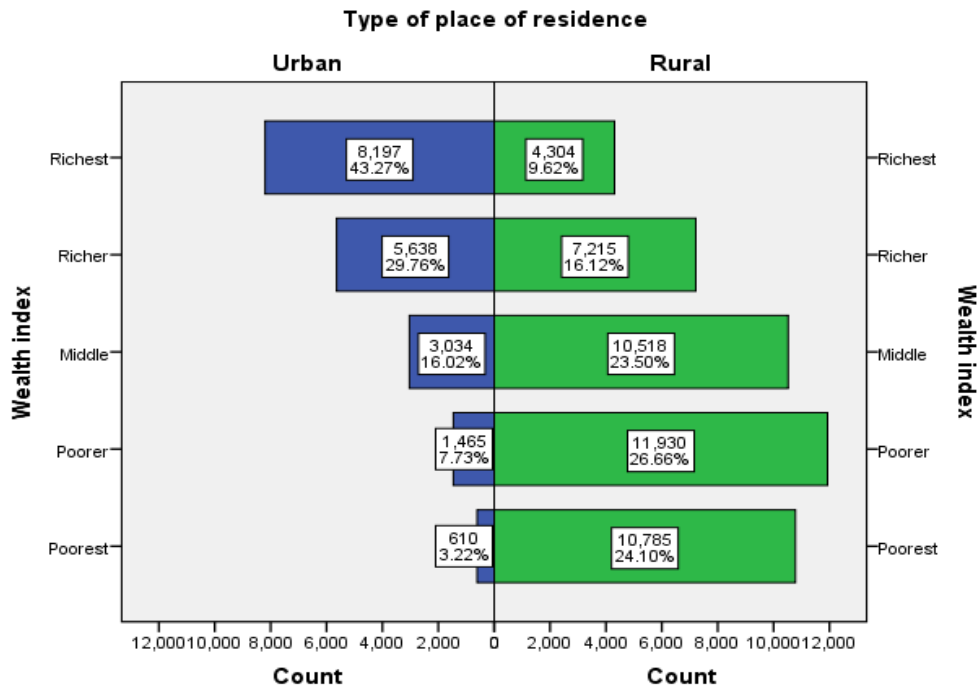


Figure 2: Distribution of respondents according to wealth index in rural-urban area.

Of the total 63696 respondents 91.2% who delivered a baby, 41.5% had their last birth in last 5 years before the interview while 23.4% between 5 to 10 years, 29.1% between 10-20 years and 6.0% more than 20 years. 58.0% women had their first birth within 2 years of marriage, 34.5% between 2-5 years, 6.3% between 5-10 year, 1.2% 10-20 years and 0.1% 20 years and above. Among the respondents, 8.8% had no births, 16.9% were of birth order 1, 31.2% were of birth order 2, 20.5% were of birth order 3 and 22.5% were birth order 4 and more. The sex ratio among in the last birth order was found to be 719 females per 1000 males. Out of total 63696 women 3888 (6.1%) were pregnant at the time of survey. Of whom 5.5% wanted current pregnancy, 0.4% wanted later, 0.3% not at all. 16.4% women ever had a terminated pregnancy. During the survey among 8.18% of women there was history of sons died and 6.98% girls died.

99.2% of women and 98.6% men knew modern method of contraception, while 1.3% men and 0.7% women knows no method and 0.1% of couples know only traditional methods. 4.2% women used contraception before birth of any child, while 16.8% after birth of 1st

child, 20.1% after 2nd child, 12.6% after 3rd and 10.5% after birth of 4 and more number of child, 35.8% never used any contraceptives. 37.9% of women who had sterilization performed were of birth order of 2, 30.6% of birth order 3, 29.1% of birth order ≥ 4 and 2.4% of birth order one or have no births. Among 38% of women sterilization was performed in less than 25 years of age, 38% between 25-29 years, while 18% between 30-34 years and only 6% above 35 years of age.

Current method of contraception adopted by respondents in India

48.6% of couples were currently using modern method of contraception and 7.4% traditional method while 44% were not using any method. Of the non-users 8.6% used before the last birth, 3.5% used since last birth and 31.8% never used. Out of the 44 percent who are not using any method, 9.8% intend to use in next 12 months, 7.9% later in the future, 2.9% unsure about use while 21.7% does not intend to use any method. The majority(34%) women adopted female sterilization as current method of contraception while male sterilization was 0.4%. Figure 3 demonstrates the current prevalence of different methods used by women.

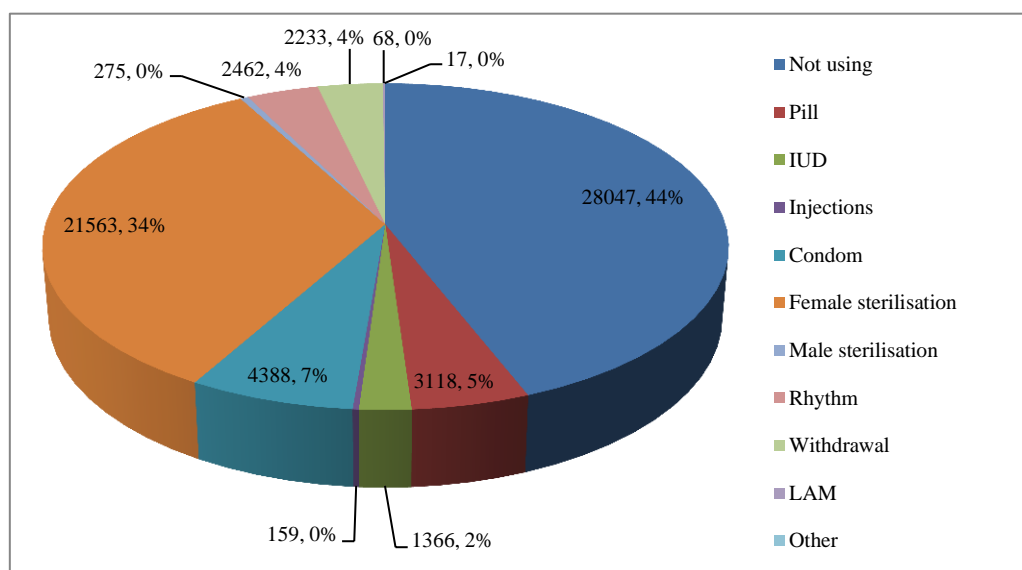


Figure 3: Current method of contraception by women in India.

The prevalence of contraceptive use in different age groups were 19.3% in 15-19 years, 33.4% in 20-24, 56.4% in 25-29, 70.3% in 30-34, 73.1% in 35-39 and 64.3% in age groups of 40 years and above. The type of contraceptive used was found to vary according to age groups as given in Figure 4. 36.4% and 26.4% respondents were currently using condom in the age groups 15-19 and 20-24 years respectively. Similar higher prevalence in use of pill (22.4%), withdrawal (21.3%), periodic abstinence (13.4%) observed in 15-19 year and 16.8%, 12.2% and 12.7% in 20-24 years age

group respectively. There is decreasing trend observed in use of Pill, Condom, Periodic abstinence and withdrawal method with increasing age. With increasing age female sterilization was the common method adopted by women 24.5%, 43.9%, 56.5%, 65.3%, 72.2% and 84.5% respectively in 5 year age groups above 20 years. Female sterilization lowest in 15-19 year age group 3.1%. comparatively higher IUD use observed in age groups 20-24 and 25-29 years, 6.5% and 5.2% respectively than to 15-19 and above 30 years age groups. Male sterilization less preferred method of contraception among the couples 1.0% and 1.4% above 40 years age groups.

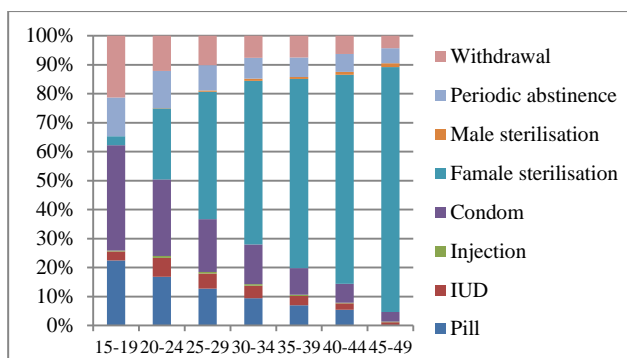


Figure 4: Age group wise current use of contraceptives.

Relationship of contraceptive methods with socio-demographic variables

Table 1 describes the distribution of variables and prevalence of contraceptive as grouped under spacing

terminal and traditional methods. All the variables were found to be statistically highly significant i.e. $p < 0.000$ by using Pearson's Chi Square test.

Contraceptive prevalence in states of India

There is variation in the contraceptive prevalence rate among the states in India highest in Chandigarh (80.60%) compared to least in Goa (26.64%) while it was overall 55.97% in India. In north east India Tripura (70.43%), Assam (61.46%) and least in Meghalaya (27.10%). Among the nine EAG states the highest prevalence in Rajasthan (66.21%) and in the bottom two were Jharkhand (42.90%) Bihar (34.02%). 86.59% of respondents were using modern method of contraception and remaining by using other traditional methods. Out of thirty six states in 26 states more than 80% of women were using modern method of contraception; the lowest rate observed in Lakshadweep (50%) and Manipur (48.60%). The figure shows distribution of current contraceptive prevalence in states of India (Figure 5).

Table 1: Socio-demographic characteristics of respondents proportion of contraceptive usage in different groups.

Variables	Proportion of women	All methods	Spacing method	Terminal method	Traditional method
Religion					
Hindu	75.4	59.8	12.7	38.6	8.5
Muslim	13.0	53.8	21.9	18.9	13.0
Christian	6.7	37.1	13.4	18.1	5.6
Other	4.8	65.5	25	31.3	9.4
Residence					
Rural	70.3	57.3	12.8	35.5	9.0
Urban	29.7	59.2	18.5	31.5	9.2
Mother education					
No education	33.2	58.5	8.1	42.4	7.9
Incomplete primary	6.9	62.4	13.1	41.5	7.8
Complete primary	7.8	61.4	12.5	41	7.7
Incomplete Secondary	35.7	57.4	16.9	31	9.6
Complete Secondary	7.4	53.5	21.1	21.4	11.1
Higher	8.9	53.1	26.5	16.2	10.4
Father education					
No education	17.8	57.2	8.8	40.7	3.5
Incomplete primary	8.5	59.9	10.7	41.6	4.1
Complete primary	7.8	59.1	12.1	39.7	3.6
Incomplete Secondary	43.3	57.8	14.6	34.2	4.7
Complete Secondary	9.6	58.1	19.7	27.6	5.8
Higher	13	55.8	22.4	22.6	6
Wealth index					
Poorest	17.9	48.9	8.2	32.1	8.5
Poorer	21.0	56.0	12.5	34.4	9.1
Middle	21.3	59.3	13.6	37.0	8.8
Richer	20.2	60.7	15.0	37.2	8.6
Richest	19.6	63.0	23.0	30.3	9.6
No of living children					
0	9.3	9.4	5.8	0.7	1.6
1	18	41.3	23	5.8	7
2 to 3	54.2	69.9	15	46.4	4.5
≥4	18.5	62.3	9.5	43.3	4

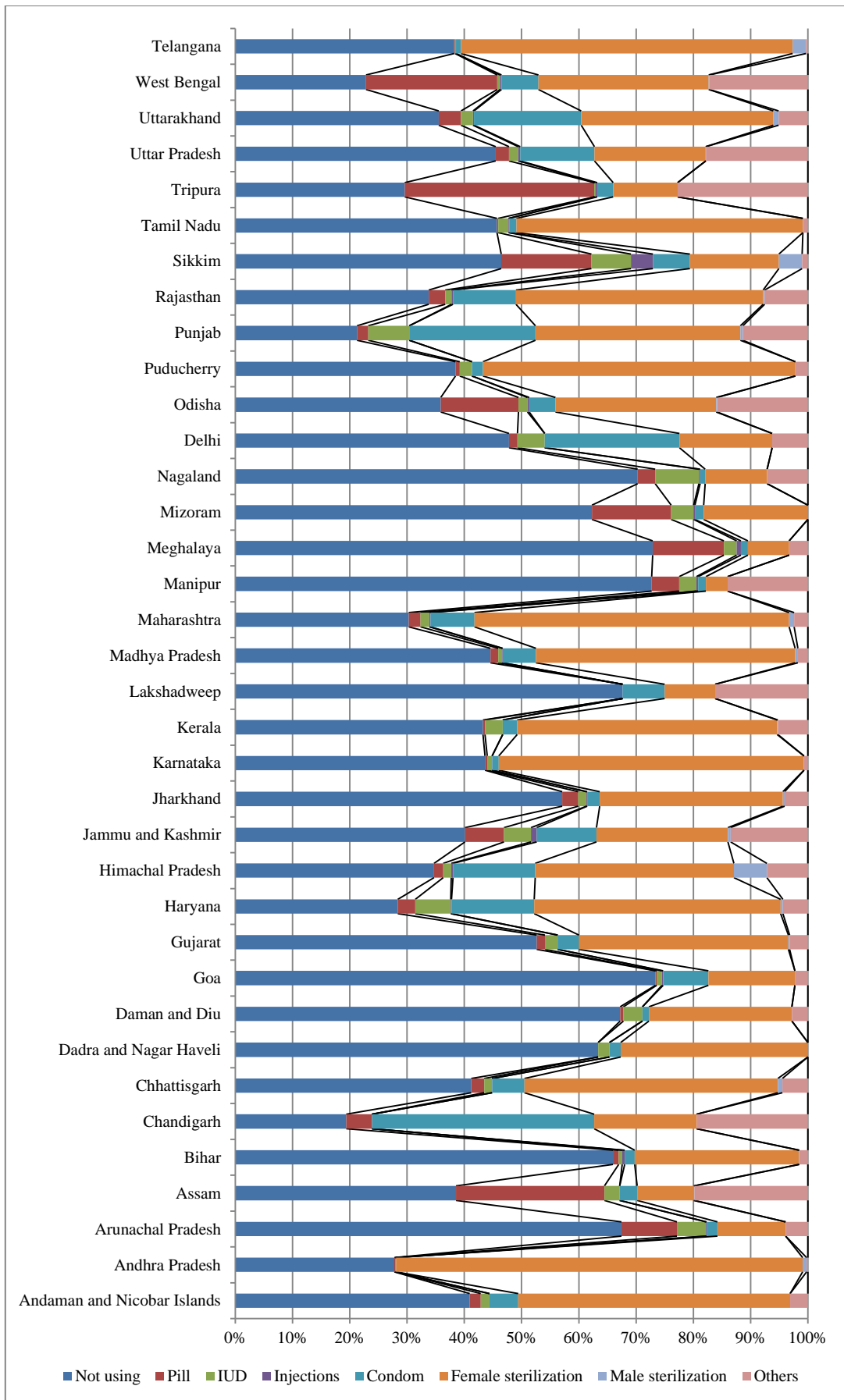


Figure 5: Current contraceptive methods used in states of India.

Use of classification tree for pattern in contraceptive use

Three individual classification trees were prepared on use of modern method of contraception namely female sterilization, pill, condom and to assess the role of socio-demographic variables on pattern of use by using SPSS v22 by using CRT sub-routine taking current method of contraceptive use as dependent variable and number of living children, wealth index, religion, educational attainment of women and husband independent variables and influencing variable women in different age group. These are described as below:

Dependant variable: Method currently used- female sterilization

Number of nodes: 29, terminal: 15 Nos.

At 1st level, all currently married women who have adopted sterilization were grouped according to number of living children ≥ 2 and one or no children. The female sterilization prevalence was found as 45.1% and 4.0% respectively in the two groups. At subsequent levels, sterilization prevalence in different socio-demographic groups were grouped as represented in the (Figure 6). The classification process correctly could classify 73.7% of women who are not using sterilization and 63.1% of users of sterilization (Table 2).

Table 2: Independent variable importance.

Independent variable	Importance	Normalized importance (%)
Number of living children	0.053	100.0
Religion	0.021	39.0
Educational attainment	0.006	11.8
Wealth index	0.004	7.5
Educational attainment	0.003	6.6
Type of place of residence	0.001	1.8

Growing method: CRT; Dependent variable: Method currently used-female sterilization.

Dependent variable: Method currently used- oral contraceptive pill (OCP)

Number of nodes: 17, terminal: 9 Nos.

At the 1st level women was classified in to Muslim and other religion 22.3% (Node-1), Hindu and other religion 77.7% (Node-2) with pill users as 8.3% and 4.0%. Node-1 further classified according to wealth index in to Richer, Richest (8.7%) and middle, poorer, poorest (13.6%) with pill users were 10.2% and 5.3%

respectively. Richer, Richest was not split further while the other group (Node-4) split in to Muslim and other (8.5%) (Node-7) and Christian and other religion(5.1%) with 11.9% and 7.4% contraceptive prevalence respectively. Node-7 again grouped according to education level of husband in to incomplete secondary, incomplete primary, complete primary, complete secondary (4.0%) and no education and higher (4.5%). Pill users were 15.5% and 8.8% in the two groups respectively. Node-11 further classified as middle (1.9%) and poorer, poorest (2.1%) with pill users as 10.4% and 20.1% respectively.

Similarly, woman belonging to Hindu and other religion Node-2 was classified in to incomplete secondary, higher, incomplete primary, or complete secondary (45.6%) (Node-5) and complete primary, no education (32.1%) (Node-6) according to educational attainment of woman with contraceptive prevalence as 4.9% and 2.6% respectively. Node-5 further sub-grouped in to richer, richest (25%) (Node-9) and poorer, poorest (20.6%) (Node-10) and contraceptive prevalence in these two groups were 3.6% and 6.5% respectively. The group richer, richest not classified further. Node 10 classified again based on number of living children in to no children, ≥ 2 (16.1%) (Node-13) and one (4.5%) (Node-14) with contraceptive prevalence as 5.1% and 11.7% respectively.

Table 3: Independent variable importance.

Independent variable	Importance	Normalized importance (%)
Religion	0.001	100.0
Wealth index	0.001	81.2
Educational attainment	0.000	70.4
Number of living children	0.000	35.4
Type of place of residence	0.000	33.3
Educational attainment	0.000	19.4

Growing method: CRT; Dependent variable: Method currently used.

The classification process correctly classified 100.0% of women who are not using pill as current method of contraception. The overall proportion of correct classification was 95.1%. The most important characteristic of woman contributing to use of pill is religion (100%) while the least was educational attainment of husband (19.4%) (Table 3).

Dependent variable: Method currently used –Condom.

Number of nodes: 23, terminal: 12 Nos.

At 1st level the classification was done according to wealth index as richest (Node-1) and middle, richer, poorer, poorest (Node-2). Of the total 19.6% and 80.4%

respondents belonging to the groups 15.6% and 5.2% of them were using condom as current method of contraception respectively.

At 2nd level, richest wealth index split in to complete secondary, higher (Node-3) and incomplete secondary, complete primary, incomplete primary, no education (Node-4) as per their educational attainment each group constituting 9.0% and 10.6% of population and condom usage as 20.1% and 11.8% respectively. Similarly, the other group belonging to middle, richer, poorer, poorest (Node-2) wealth index was split in to Muslim, other religion (Node-5) and Hindu, other religion (Node-6) that constituted 11.4% and 68.9% of total respondents with condom usage 9.6% and 4.4% respectively. At 3rd level, women with education higher and completed secondary (Node-3) classified in to Muslim, other religion (Node-8) and Christian, no religion, other (Node-7) comprising 8.5% and 0.5% population with condom usage were 20.9% and 6.1% respectively. At 4th level, Node-8 further split according to number of living children as no children and one, ≥2 children comprising 1.2% and 7.3% of total respondents with condom usage as 10.0% and 22.8% respectively. At 5th level, this is again grouped as one (Node 22) and ≥2 (Node 21) living children with population 2.9% and 4.4% with condom usage 26.3% and 20.5% respectively. Similarly in the other group, at 2nd level, women belonging to richest wealth index with incomplete secondary, complete primary, incomplete primary, no education (Node-4) was split in to Hindu, Christian, other religion (8.1%) (Node-9) and Muslim, other (2.5%) (Node-10) with condom usage 10.4% and 16.4% respectively. Node-9 is further grouped according to educational status of husband as incomplete secondary (5.9%) and incomplete primary, complete primary, no education (2.2%) with condom usage 12.0% and 6.0% respectively.

Node-2, middle, richer, poorer, poorest group is split in to Muslim, Sikh and Hindu, Christian, Other constituting 11.4% and 68.9% of population with condom use as current method of contraception as 9.6% and 4.4.% respectively. The women belonging to Muslim, Sikh again sub-grouped as richer and middle, poorer, poorest having 3.5%, 7.9% and condom usage 13.8% and 7.7%

respectively. The other group Hindu, Christian, Other was classified according to education level of women and subsequently of husbands. Women with higher, complete secondary (10.8%) and incomplete secondary, complete primary, incomplete primary, no education (58.1%) with condom usage as 8.7% and 3.6% respectively. Incomplete secondary, complete primary, incomplete primary, no education further classified in to education of husband with population incomplete secondary, higher, complete secondary, complete primary (27.7%) and incomplete primary, no education (30.5%) with condom usage 5.0% and 2.4% respectively.

Table 4: Independent variable importance.

Independent variable	Importance	Normalized importance (%)
Educational attainment	0.004	100.0
Wealth index	0.003	82.8
Educational attainment	0.003	63.6
Religion	0.002	41.1
Number of living children	0.001	12.8
Type of place of residence	0.000	2.9

Growing method: CRT; Dependent variable: Method currently used-condom.

The classification process correctly classified 100.0% of women who are not using condom as current method of contraception. The overall proportion of correct classification was 92.8%. The most important characteristic of woman contributing to use of condom is educational attainment of mother (100%) while the least type of residence (2.9%) (Table 4).

Association of socio-demographic variables towards current use of contraceptives

Cox regression analysis of the variables found there is significant association between place of residence, religion, wealth index, women education, education of husband towards use of current contraceptive use (Table 5).

Table 5: Association of socio-demographic variables to current modern contraceptive use.

Variable	B	Sig.	Exp(B)	95.0% CI for Exp(B)	
				Lower	Upper
Rural	0.032	0.025	1.033	1.004	1.062
1=Hindu(Reference)		0.000			
2=Muslim	-0.105	0.000	0.900	0.868	0.934
3=Christian	-0.714	0.000	0.489	0.463	0.517
4=Sikh	0.252	0.000	1.287	1.202	1.377
5=Buddhist/Neo-Buddhist	-0.031	0.476	0.969	0.890	1.056
6=Jain	-0.364	0.010	0.695	0.526	0.918
7=Jewish	1.096	0.121	2.992	0.748	11.969
9=No religion	0.098	0.736	1.102	0.626	1.942
96=Other	-0.676	0.000	0.509	0.440	0.588
0=No education (Reference)		0.000			

Continued.

Variable	B	Sig.	Exp(B)	95.0% CI for Exp(B)	
				Lower	Upper
1=Incomplete primary	0.338	0.000	1.403	1.340	1.468
2=Complete primary	0.403	0.000	1.497	1.432	1.565
3=Incomplete secondary	0.620	0.000	1.859	1.800	1.920
4=Complete secondary	0.720	0.000	2.055	1.945	2.172
5=Higher	0.669	0.000	1.952	1.843	2.067
1=Poorest (Reference)		0.000			
2=Poorer	0.017	0.399	1.017	0.978	1.057
3=Middle	-0.018	0.382	0.982	0.944	1.022
4=Richer	-0.174	0.000	0.841	0.805	0.877
5=Richest	-0.368	0.000	0.692	0.659	0.727
0=No education (Reference)		0.000			
1=Incomplete primary	0.059	0.012	1.061	1.013	1.112
2=Complete primary	0.169	0.000	1.185	1.129	1.243
3=Incomplete secondary	0.156	0.000	1.168	1.128	1.211
4=Complete secondary	0.142	0.000	1.153	1.096	1.213
5=Higher	0.004	0.885	1.004	0.952	1.058

Note: Number of respondents using currently modern contraceptive methods n=30869 (48.5%)

DISCUSSION

The current contraceptive prevalence 56 percent in NFHS 4 has remained unchanged from NFHS 3. However, from a multi indicator cluster survey conducted in 28 districts from 14 states of the country between January 1996 to February 1997 in rural areas it was 45.2 percent and according to NFHS 2 it was 48.2 percent.⁸ The contraceptive prevalence rate appears to have stagnated after 2004.⁹

There is slight increase in awareness about modern method of contraception from 98.0 percent of women in NFHS 3 to 99.2 percent in NFHS 4 whereas among men 98.6 percent it remained unchanged in both the rounds. IUD, Condom, Pill use has increased respectively from 1.7 percent, 5.2 percent, 3.1 percent to 2 percent, 7 percent, 5 percent. However female sterilization declined from 37.3 percent to 34 percent and male sterilization from 1 percent to 0.4 percent.¹⁰ almost similar contraceptive prevalence rate observed in both NFHS 4 and NFHS 3 in different age groups except in the age groups 15-19 years there is increase from 13.0 percent to 19.3 percent and in age group 30-34 years 70.3 percent from 66.2 percent.

In the present analysis among the women belonging to Christian, Jain, no religion, Muslim, Buddhist were 52 percent, 31 percent, 50 percent, 10 percent, 4 percent less likely to adopt family planning currently whereas Sikhs 1.28 times and Jewish about 3 times more likely to use contraceptives compared to reference group (Hindus) (Table 5). Similarly, from a study of NFHS 3 data in Uttar Pradesh Sikhs were 1.34 times and much lower for women with Muslim religion 46 percent compared to the present finding. And reported similar relationship for other socio-demographic variables.¹¹

An analysis of contraceptive use in India through data mining approach has revealed a direct relationship between the prevalence of contraception and standard of living of the household and schooling of women and their husbands which is comparable to the present findings.¹²

Classification of women with currently using sterilization as method of contraception.

Among the women belonging to the group Muslim, Christian, no religion and as wealth index richer, richest and having living children ≥ 2 numbers has adopted sterilization as current method of contraception in 31.1% women which is significantly higher as compared to women belonging to middle, poorer and poorest wealth index with 26.0%.

While, women belonging to Hindu and other religion, having living children ≥ 2 numbers, women and her husband's educational attainments were higher or completed secondary is less likely to adopt sterilization 34.5% as compared to 40.4% where husbands are with no education, incomplete primary, complete primary or incomplete secondary education. Similarly among the women with incomplete secondary, complete primary, incomplete primary or no education and husband with educational attainment incomplete secondary belonging to middle, richer, richest, poorer wealth index, the adoption of sterilization observed 50.2% compared to 59.0% with educational attainment of husband as no education, incomplete primary, complete primary.

The women having one living children belonging to middle, richer, richest wealth index with incomplete primary, completed primary, no education and belonging to Hindu and other religion are found to be more likely adopt sterilization as method of contraception 17.4% as

compared to 5.4% women with Muslim and other religion.

The prevalence of Pill use as current method of contraception was found to be 20.1% among women with wealth index-poorer, poorest and education of husband as incomplete secondary, incomplete primary, complete primary or complete secondary level belonging to Muslim and other religion as compared to Christian and other religion 7.4% and 5.3% among those belonging to richer, richest wealth index.

Similarly, 11.7% of pill users were woman who has one living children and belonging to middle, poorer, poorest wealth index having educational attainment incomplete secondary, higher, incomplete primary, or complete secondary compared with 5.1% among women with no children or ≥ 2 children and 3.6% in richer, richest wealth index.

The prevalence of condom usage as current method of contraception was found to be higher 26.3% and 20.5% among women having one and ≥ 2 living children belonging to richest wealth index, education level completed secondary and higher, religion either Hindu, Muslim or other, comparing to 10.0% with no children and 6.1% in Christian, no religion, other religion group and among women with educational attainment as incomplete secondary, complete primary, incomplete primary, no education (11.8%) and husband education with incomplete secondary (12.0%) and complete primary, incomplete primary, no education(6.0%).

Whereas, the prevalence of condom use among the middle, richer, poorer, poorest wealth index group was found to be 2.4% among husbands' with education incomplete primary or having no education and women education level as incomplete secondary, complete primary, incomplete primary, no education belonging to Hindu, Christian, other religion compared to 9.6% among Muslim, Sikh religion.

CONCLUSION

The present study reveals that there are significant differences in the pattern of current use of contraceptives among the different population groups based on socio-demographic variables. The national family planning programme has evolved tremendously to the current status with availability of diverse methods of contraception and availability of services along with improvement in educational and socioeconomic condition of population has increased acceptance of different family planning methods as evidenced from all NFHS surveys. However, as per observation from National Population Policy (2000) document acceptance of sterilization alone will not induce a decline in fertility levels unless it is preceded by a substantial reduction in the achieved family size of couples as about 45% of population increase is contributed by births above two children per

family. Moreover, the use of traditional method of contraception in some of states especially in the North East India a north India needs further exploration. The adoption of appropriate method of contraception by couples made available through quality family planning services and empowering women by proper behavior change communication will help improve the present contraceptive prevalence rate especially among the vulnerable groups.

Limitation of the study

The prevailing associated factors of current pattern of contraceptive use at state level, the role of health communication, availability of services, reasons for unmet need of family planning was not considered in the present review. Moreover, IUCD, Injections, traditional methods of contraception etc. is not included while classifying the categories of population.

ACKNOWLEDGEMENTS

My sincere regards to Bridgette Wellington, Data Archivist, The Demographic and Health Surveys (DHS) Program and other officials in the team who has given permission for using the datasets for my work.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: Not required

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Cite this article as: Dey AK. Socio-demographic determinants and modern family planning usage pattern-an analysis of National Family Health Survey- IV data. *Int J Community Med Public Health* 2019;6:738-49.