

Inter- And Intra- Relationships between Fertility and Family Planning Indicators in India

Prem P. Talwar., and Y. P. Gupta

Y G Consultants & Services Pvt. Ltd., Delhi, India

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ABSTRACT

The demographic surveys routinely collect data of fertility and family planning indicators to assess population and family planning programme dynamics. But unfortunately, these indicators are generally analyzed individually and in isolation. This study explores the inter-and intra- relationships between the key indicators for fertility (Total Fertility Rate (TFR), Total Wanted Fertility Rate (TWFR) and Ideal Family Size) and family planning programme (Contraceptive Prevalence rate (CPR), Contraceptive Prevalence Rate of modern methods of family planning (m CPR), Percent Sterilization Rates, Unmet Need-Total, Unmet Need-Spacing and Unmet- Need-Limitation). The data used for this analysis was taken from National Family Health Survey -6 (NFHS-6) (2023-24) for 35 states and Union Territories of India. Two statistical measures, Coefficient of Variation (CV) and Pearson Correlation Coefficients between different indicators were deployed in the analysis of the inter- and intra- relationships. The CV of three fertility indicators was of similar level though one would have expected that it would be lower for the Ideal Family Size since two children in an ideal family size reported everywhere. In the case of India, some states are outliers in this reporting. In the case of relationships, all the fertility indicators were found to be related to the family planning indicators of CPR and Unmet- Need-Total. Strangely, m CPR, which is used more often than CPR, was not found to be related to fertility indicators. These results suggest that family welfare workers should assign priority to couples who report Unmet Need. Though fertility indicators are related to CPR and not with m CPR, it will be good if users of traditional methods should be offered the modern methods of family planning for greater effectiveness.

Keywords: Fertility indicators, TFR, TWFR, Ideal Family Size. Family Planning indicators, CPR, m CPR, Unmet Need. NFHS-6, India. Coefficient of variance and Correlation coefficient.

INTRODUCTION

In studies attempting to understand changing levels of fertility, information is collected on different fertility and family planning indicators. The objectives are (i) each indicator tells slightly different picture of the status of fertility and family planning programme, and (ii) to relate levels of fertility and family planning indicators to understand the situation in regard to the levels of fertility and family planning, and to relate these indicator levels to better understand fertility dynamics (1,2). This understanding helps orient family planning services to maximize its impact on fertility levels. In large scale studies like National Family Health Surveys (NFHS) in India and Demographic and Health Surveys (DHS) in several developing countries, information is collected on the following fertility indicators

(3,4), Total Fertility Rate (TFR), Total Wanted Fertility Rates (TWFR) and Ideal Family Size (IFS) though TFR remains the key indicator around which most of the analysis centers. The family planning indicators on which information is collected are Contraceptive Prevalence Rate (CPR), Contraceptive Prevalence Rate of modern family planning methods (m CPR), Use of Sterilization as percent of Users of all family planning methods, Unmet Need-Total, Unmet Need -Spacing and Unmet Need- Limitation though CPRs, whether based on all methods or modern methods, remains the key indicator. All these surveys have collected information on these indicators and attempted to relate fertility levels with the levels of the family planning programme indicators. Various research studies have used and analysed this data to get insights into fertility dynamics (5,6).

Unfortunately, all these indicators of fertility and family planning are looked at individually and in isolation to see the trends in surveys which are conducted on regular intervals. In other words, while studying the levels of fertility, levels of TFR, TWFR or “Ideal family Size” are studied, mostly, at individual levels with very little or no effort to study their intra-group relationships or their direct correlations and with various family planning indicators, except sometimes with CPR. Similarly, indicators of family planning have been studied individually to get information on acceptance of family planning programme performance. No attempt is made to understand the inter- and intra- relationships of the two groups of indicators. The authors of this paper feel that significant insights remain untapped when inter-and intra-relationships are studied between these two groups of indicators. Analyzing these inter-relationships can improve will suggest fertility and family planning programme interlinkages and thus help to further improve the family planning programme performance and in achieving the fertility goals.

It might also help in improving the understanding of the fertility and family planning dynamics and help the researchers on the choice of indicator (s) while drawing inferences on the fertility and family planning programme interlinkages. This study, therefore is an attempt to explore what additional information could be extracted by looking at the inter- and intra- relationships between these fertility and family planning programme indicators which are routinely collected in any survey related to fertility and family planning programme.

Data and Methods

This study has used data from the National Family Health Survey -6, conducted in 2023-24. This survey was sponsored by the Ministry of Health & Family Welfare, Government of India and conducted by the International Institute for Population Sciences (IIPS), Mumbai, India. This is a very large survey covering 27 out of 28 states in the country (State of Manipur was not covered), all the 8 Union Territories and 715 districts of the country. It had a sample size of 6.79 lakh (0.679 million) households, 71.6,397

¹ Former Professors at the National Institute of Health & Family Welfare, New Delhi-110067. The first author is currently associated with Indian Association of Parliamentarians for Population and Development (IAPPD). For query related to the paper, please contact drpremtalwar@gmail.com or 91-9871181504

² Former Associate Professor at the National Institute of Health & Family Welfare, New Delhi-110067.

Also associated with CARE India as Director, Population and Reproductive Health Sector.

women of reproductive age group 15-49 years and 100,977 men ¹ making it one of the largest demographic surveys globally.

The Demographic surveys, NFHS-6, collected data on three indicators of fertility, Total Fertility Rate (TFR), Total Wanted Fertility Rate (TWFR) and Ideal Family Size (IFS) and six indicators of family planning programme, Contraceptive Prevalence Rate (CPR), Contraceptive Prevalence Rate of modern family planning methods (_mCPR), Percent sterilization out of total family planning acceptors, Unmet Need-Total, Unmet Need-Limitation and Unmet Need-Spacing. (Definitions of these indicators are shown in Annexure 2) from 35 administrative units (27 states and 8 Union Territories). Names of the indicators are shown below in Table 1. Their levels by state/UTs are shown in Annexure 1. (This is our raw data for analysis)

Table 1: Indicators of Fertility and Family Planning programme

Fertility Indicators	Family Planning Indicators
Total Fertility Rate (TFR)	Contraceptive Prevalence Rate

¹ Coefficient of variation is computed using the formula $(\sigma / \mu) \times 100$ where σ is the Population standard deviation and μ is = Population mean.

Total Wanted Fertility Rate (TWFR)	Contraceptive Prevalence Rate of Modern methods of FP
Ideal Family Size (IFS)	% Sterilized (male+female) out of total number of FP users
	Unmet Need - Total
	Unmet Need - Limitation
	Unmet Need - Spacing

In this paper, the analysis of inter-and intra-relationship of fertility and family planning indicators, is based on two main computations; one is coefficients of variation of each indicatorⁱ and the second is Pearson Correlation coefficient to understand the degree of correlation between fertility and family planning programme indicators.

Findings

Inter-state variation of the indicators

The level of nine indicators for 35 administrative territories of India (States and UTs) is shown in Annexure 1. The mean, standard deviation and coefficient of variation (CV) for all the nine indicators are shown in Table 2. The levels of inter-state coefficients of variation (CV) for all the three fertility indicators are almost similar. This is surprising as one would expect the coefficient of variation of the indicator “Ideal Family Size” to be lower as it is expected that reported ideal family size would be two or close to two by most of the respondents. It is obvious when one looks at the average value of the reported ideal family size for most of the states is two or close to two children. (Annexure 1). Only states like Bihar, Uttar Pradesh, Chhattisgarh, Jharkhand, Jammu & Kashmir and Uttarakhand, which have reported higher (than two) family size. The state of Punjab has reported it as low as 1.7. Some of the Union Territories have also reported very low levels of ideal family size—Lakshadweep (1.2), Puducherry (1.4), Chandigarh (1.6) and Andaman & Nicobar Islands (1.3).

In other words, a few large states and UTs are creating higher coefficient of variation for the variable/indicator “ideal family size” of children from the norm of two children. These states need some media publicity for two children. Even a low intensity of publicity for two children will make people accept this number as ideal family size as this will be appealing. One could easily justify this number by thinking of the family of one girl and one boy as ideal. Such acceptance would reduce the variation in this indicator. Even without such publicity, the value of the indicator “Ideal Family Size” for all the states will come to about two children when women --respondents get better empowerment. This situation of an average family size of two children for all/most of the states, including Southern states, should alleviate concerns in Southern states of India regarding shrinking workforce and low political representation. A quick look at the data of some developed countries, globally, suggests that these countries had come closer to two children after going to a very small family size.

Among the family planning programme indicators, the lowest coefficient of variation is for CPR, followed by mCPR, Unmet Need –Total, Unmet Need-Limitations, % Sterilized out of Total Acceptors and Unmet Need-Spacing. When one looks at the range of the indicators in the raw data of 35 administrative areas of India, the range of CPR is 37.7 (42.1 to 79.8) and 49.3 (23.8 to 73.1) for mCPR. This large range of mCPR was expected as the family planning programme in India in its 75 years of operation have made couples to plan their family size by modern methods of family Planning or even traditional methods. They are planning their family by one method (modern) or the other (traditional). The latter, perhaps, because of either their non-access to the modern methods of family planning or their dis-liking (bad experience while using) of the modern methods of family planning. It may be added here that the couples using the traditional methods are, perhaps, more motivated group as they are planning their family despite the fact they did not have access to the family planning methods propagated by the programme. If this motivated group is given access to more effective (modern) FP methods of choice, they will be able to plan their family better in spacing and limitation.

A very large variation ($CV = 54.32$) exists in the percentage of sterilization users. This reflects the historical reliance on female sterilization in Southern states to rapidly reduce fertility compared to other states that utilize a wider basket of contraceptives. For example, the use of female sterilization is emphasized among the Southern states in India, compared to the most other states in the country. It is true that “female sterilization” as a method of family planning is very effective in reduction of fertility, particularly if this service is accepted at lower birth orders. This was the reason that the southern states in India could bring their fertility level down much faster and earlier than most of the other states in India. This pattern of achieving smaller families has created concern among these states of sharp reduction in family size, which would reduce their political representation and leave smaller work force affecting their economic development. It is desirable that the couples be given an open choice to select contraceptives for themselves. It might help them to achieve their ideal family size of about two children by spacing them. This may also help the states in their expressed concern of lower representation and smaller of work force.

The indicators “Unmet Need (for family planning)” show relatively larger inter-state variations because, perhaps, of the fact that it is negatively associated with the contraceptive prevalence rate-- larger the contraceptive prevalence rate, the smaller is the Unmet Need for family planning.

Table 2: Mean, Standard Deviation and Coefficient of variation (Relative standard error) and the sample size

Indicators	Mean	SD	Coefficient of Variation* [SD/Mean]X100	N
TFR	1.79	0.34	19.02	35
TWFR	1.53	0.31	20.42	35
Ideal No. of Children	2.04	0.39	19.36	35
CPR	68.61	7.41	10.80	35
mCPR	51.53	11.26	21.85	35
% Sterilized (male+female) out of total number of FP users	31.24	16.97	54.32	35
Unmet Need-total	8.11	3.18	39.15	35
Unmet Need-Limitation	3.40	1.51	44.39	35
Unmet Need-Spacing	4.71	2.80	59.35	35

Correlation between different fertility and family planning indicators

Several studies have tried to discuss the individual or isolated indicators of fertility and individual indicator of family planning to see the trends in the performance of the family planning programme; this situation could help in the study of trends. But no effort has been made to study the inter-and intra-relationships between fertility and family planning indicators. This study has attempted to cover this gap in research. Table 3 presents a correlation matrix (Pearson) for the nine indicators (three fertility and six family planning indicators).

Table 3: Pearson Correlation Coefficient matrix (with Significance levels)

Variable	TFR	TWFR	Ideal Children	CPR	mCPR	% Sterilized	Unmet Need Total	Unmet Need Limiting	Unmet Need Spacing
TFR	1.000	0.730***	0.589***	-0.490**	-0.222	0.103	0.551***	0.528**	0.345*



TWFR	0.730***	1.000	0.697***	-0.669***	-0.286	0.053	0.720***	0.366*	0.686***
Ideal Children	0.589***	0.697***	1.000	-0.493**	-0.198	-0.063	0.555***	0.283	0.536***
CPR	-0.490**	-0.669***	-0.493**	1.000	0.537***	0.170	-0.803***	-0.329	-0.825***
mCPR	-0.222	-0.286	-0.198	0.537***	1.000	0.781***	-0.445**	-0.104	-0.505**
% Sterilized	0.103	0.053	-0.063	0.170	0.781***	1.000	-0.252	-0.046	-0.298
Unmet Need Total	0.551***	0.720***	0.555***	-0.803***	-0.445**	-0.252	1.000	0.518**	0.902***
Unmet Need Limiting	0.528**	0.366*	0.283	-0.329	-0.104	-0.046	0.518**	1.000	0.082
Unmet Need Spacing	0.345*	0.686***	0.536***	-0.825***	-0.505**	-0.298	0.902***	0.082	1.000

Significance levels: * $p < 0.001$, ** $p < 0.01$, * $p < 0.05$**

The indicator TFR is negatively correlated with CPR (-0.490, $p < 0.01$) but surprisingly lacks a statistically significant correlation with mCPR (-0.222). This discrepancy suggests that mCPR excludes a highly motivated group of traditional method users who successfully avoid pregnancy despite lacking access to, or preference for, modern methods of family planning. It may seem that the couples using the traditional methods of family planning were really a motivated group, but they were not using modern contraceptives because either they did not like them, or these methods were not accessible to them. They were really motivated clients who did not want to have a child either at that time or ever. They were practising some other methods of family planning (probably traditional methods of family planning) to avoid pregnancy. The family planning programme managers or researchers in this field had been assuming that TFR should have higher association with mCPR because modern contraceptive methods were more effective. Therefore, it suggests that while attempting to explain the value of TFR, one should relate it with CPR (rather than mCPR).

It is also seen that its (TFR) correlation with the indicator “Unmet Need-Total” is the highest (0.551, $p < 0.001$), higher than even CPR, indicating that couples with Unmet Need would be willing to accept contraceptives if they are counselled and given family planning method of their choice. These couples need priority attention of the family planning programme workers—they are ready to get converted into family planning user category provided they get right advice on the choice of the method by considering their family and family planning status. The indicator of fertility, “Ideal Family Size”, has correlation coefficient quite similar to that of the TFR with both the indicators of family planning, namely CPR and Unmet Need-Total.

The indicator, TWFR has higher correlation coefficients with CPR and “Unmet Need – Total” (-0.669, and 0.720) than TFR (-0.490, and 0.551) and Ideal Family Size (-0.493, and 0.555). This relationship is in the expected direction because this indicator, though computed like TFR, excludes children who were in excess of their reported ideal family size. In other words, all the three indicators of fertility, TFR, TWFR and “Ideal family Size”, were correlated with the family planning indicators CPR and “Unmet Need-Total”, but the highest correlation is with TWFR, followed by TFR and “Ideal Family Size”, the latter two are of the similar level. Correlation amongst three fertility indicators, as expected, is quite high and thus any one of them can be related to two family planning indicators (CPR and Unmet Need-Total), preferably the latter.

DISCUSSION

The findings of this study offer crucial insights into the dynamics of fertility and family planning indicators. By shifting the analytical focus from individual and isolated indicators of fertility and family planning programme, this study, by looking at the inter- and intra-relationships between fertility and family planning variables, suggests looking at both sets of indicators together to interpret the focus of family planning programme for affecting the level of fertility. In this regard, this paper has uncovered the following nuanced patterns:

- The exceptionally high variation in the percentage of sterilization users ($CV = 54.32$) highlights regional imbalances. Southern states like Andhra Pradesh (70.3%) and Telangana (66.1%) remain heavily reliant on female sterilization, a method that historical data proves brought down regional fertility rapidly when accepted at lower birth orders. Conversely states in the Northeast and north-central regions show drastically lower reliance on sterilization, pointing to an uneven structural landscape of contraceptive choices. There is a need that couples should be given a choice of the methods so that use of spacing and terminal methods is evenly distributed. There is need to bring vasectomy at the forefront because it is much easier and less risky than female sterilization. This will help improve the spacing between births, which can help in improving infants and maternal mortality rates also.
- Two of the six family planning programme indicators (see Table 1) are important for all the three fertility indicators. These indicators are CPR and “Unmet Need-Total”. Therefore, fertility indicators TFR, TWFR and Ideal Family Size should be jointly looked at along with CPR and “Unmet Need-Total”. The former one is based on the couples using some method of family planning and the other one is based on the number of couples who want to plan their family but are not using any family planning methods because either they do not like the existing ones or the methods are not accessible to them. The latter indicator of family planning has higher correlation (than CPR) with the fertility indicators and thus suggest what needs to be done to improve the performance of family planning programme.
- Two family planning indicators, CPR and “Unmet Need-Total”, are significantly related with the fertility indicators (considered in this paper), the latter has higher correlation with the fertility indicators. Therefore, it is important to identify the couples who report that family planning programme is not meeting their needs to control/plan their fertility/family size. These are the couples who should get emphasis from the programme workers as they are ready to get converted into family planning programme users.
- The family planning indicator CPR has higher statistically significant correlation coefficient with fertility indicators than mCPR (where correlation coefficient is not significant) because CPR considers all users of the modern and traditional family planning methods. Perhaps users of the latter methods of family planning are higher committed users but are excluded in mCPR. It will be desirable that couples using traditional methods should have easy access to modern and effective methods so that they can better plan and achieve their ideal family size.
- Among three fertility indicators, TFR, TWFR and Ideal Family Size, TWFR has higher correlation with two family planning indicators, CPR and Unmet Need-Total, more with the latter. Thus, this indicator should be computed and considered along with TFR and Ideal Family Size while looking at the performance of the family planning programme. It may also be seen that the indicator TWFR is highly correlated with other two indicators of fertility ($p < 0.001$). Its relationship with Unmet Need-Total should indicate dynamics of the family planning programme; This strong relationship underscores that areas with high fertility are not necessarily lacking the desire to limit or space births; rather, they lack the structural system to translate that desire into active contraceptive practice.

Policy Implications

Based on the empirical inter- and intra- relationships between fertility and family planning indicators identified from the NFHS-6 data, the following strategic reorientations are recommended for India's family welfare programme.

1. Target "Unmet Need" group of couples as a Priority group

Because Unmet Need is the single strongest correlate of all the three fertility indicators, TFR, TWFR and Ideal Family Size, family planning program managers should consider field operations to prioritize this segment of couples. Frontline healthcare workers (like ASHAs, AWWs and ANMs) should treat households reporting an unmet need (for family planning) as immediate priority clients who are ready to convert into active contraceptive users.

2. Need shift from "Sterilization-Heavy" to "Basket-of-Choice" family planning methods with emphasis on spacing methods

The massive inter-state variation in sterilization usage reveals an over-reliance on permanent methods in the South, juxtaposed against low modern method adoption in high-fertility states like Bihar and Uttar Pradesh. Policies must move away from sterilization-driven targets and aggressively market spacing methods. This will help maternal and infant/children's rates also. The government has recently enlarged this basket by bringing methods such as PPIUCDs, injectables and single rod implants.

3. Localized Behavioral Change Campaigns for the Two-Child Norm

To reduce the high coefficient of variation in the "Ideal Family Size" indicator, low-intensity, targeted media and behavior change communication (BCC) campaigns should be deployed specifically in the states like Bihar, UP, Jharkhand and Chhattisgarh to popularize two-child family norm. Such message will have greater appeal because a family of one girl and one boy will have greater appeal. Even in the southern states where fertility level has been declining, this message of "one girl and one boy makes a complete family" will have appeal for the couples. This will help alleviate concern among the southern state administrators of falling family size and its consequences. Promoting the structural advantages of a two-child family ideal in the country will bring decline in states like Bihar, UP, Jharkhand and other such states where replacement level fertility has not been reached as well as in southern states where family size has been declining fast.

4. Engage and Convert Traditional Method Users to modern effective family planning methods users

It may be understood that users of traditional methods is a highly motivated group who are planning their family size but do not practice modern effective family planning methods. The policy initiatives should focus on bringing a change among such couples by understanding why these couples are not using modern methods of family planning. The goal should be to bring such couples in the fold of modern effective contraceptive methods.

REFERENCES

1. A Comprehensive Analysis of family Planning, Fertility and Maternal Health Trends in India: Projections for NFHS-6. Dr. Ankit Bhojak, June 2025, Pramana 15(4), 74-89
2. Srinivas Goli and K. S. James. India's Fertility Decline story is not yet a crisis. It is a policy story. The Indian Express, 30 July 2026
3. National Family Health Survey – 5 (NFHS-6). International Institute of Population Sciences, Ministry of Health & Family Welfare, Mumbai, India. 2019-21
4. National Family Health Survey – 6 (NFHS-5). International Institute of Population Sciences, Ministry of Health & Family Welfare, Mumbai, India. 2023-24



5. Longitudinal examination of young married women's fertility and family planning intentions and how they relate to subsequent family planning use in Bihar and Uttar Pradesh India. Ilene S. Speizer, et. Al. BMJ Open, 2022, July 21; 12(7)
6. Measuring Effectiveness of Family Planning Programme in India.: A Statistical Analysis. Ankit Goyal, IJRTI, Vol. 10(12) Dec. 2025.

ANNEXURE 1

Levels of various fertility and family planning indicators for 27 states and 8 Union Territories, NFHS-6

No.	States/UTs	TFR	TWFR	Ideal No. of Children	CPR	mCPR	% Sterilized (male+female) out of total number of FP users	Unmet Need-total	Unmet Need-Limitation	Unmet Need-Spacing
1	Andhra Pradesh	1.8	1.6	2.1	74.7	73.1	70.30	4.4	1.6	2.8
2	Assam	1.6	1.6	2.1	71	53.4	8.00	7.4	3.3	4.1
3	Bihar	2.7	2.2	2.5	59.3	44.7	37.80	14.4	7.1	7.3
4	Chhattisgarh	1.9	1.6	2.3	64.1	53.9	43.80	10.8	5.2	5.6
5	Delhi	1.6	1.3	1.9	67.4	51.2	15.10	7.3	4.6	2.7
6	Goa	1.3	1.5	1.9	72.8	39	23.50	5.1	1.7	3.4
7	Gujarat	1.9	1.5	2	74	51.6	34.10	6	2.8	3.2
8	Haryana	1.9	1.5	2.1	74.5	53.1	29.40	6	3.3	2.7
9	Himachal Pradesh	1.7	1.4	1.8	76.1	58.3	34.50	6.3	3.7	2.6
10	Jammu & Kashmir	1.8	1.3	2.3	61.2	39.4	18.20	8.2	3.6	4.6

No.	States/UTs	TFR	TWFR	Ideal No. of Children	CPR	mCPR	% Sterilized (male+female) out of total number of FP users	Unmet Need-total	Unmet Need-Limitation	Unmet Need-Spacing
11	Jharkhand	2.3	1.9	2.4	63.7	44.7	33.30	12.6	6.2	6.4
12	Karnataka	1.8	1.4	1.9	64.8	63.2	56.90	8.8	3.5	5.3
13	Kerala	1.8	1.7	2.2	66.9	54.6	42.50	10.2	3.2	7
14	Madhya Pradesh	2.1	1.6	2.2	76.4	62.1	48.70	6.2	2.6	3.6



15	Maharashtra	1.8	1.4	1.9	76.7	66.7	50.10	6.9	2.8	4.1
16	Odisha	1.7	1.5	1.9	66.2	40.8	26.40	10	5.3	4.7
17	Punjab	1.6	1.3	1.7	69.5	48.1	22.30	6.7	3.9	2.8
18	Rajasthan	2.1	1.6	2.1	74.4	57.1	37.60	7.9	3.5	4.4
19	Tamil Nadu	1.7	1.6	2	68.5	65.1	56.70	6.4	3	3.4
20	Telangana	1.9	1.6	2.1	68.8	67.6	66.10	7	3.2	3.8
21	Uttar Pradesh	2.2	1.8	2.4	62.4	33.2	17.10	10.8	6	4.8
22	Uttarakhand	1.9	1.5	2.3	71.1	50.4	24.40	8.9	5.3	3.6
23	West Bengal	1.6	1.4	1.9	79.8	54.9	27.70	5	1.8	3.2

No .	States/UTs	TFR	TWFR	Ideal No. of Children	CPR	mCPR	% Sterilized (male+female) out of total number of FP users	Unmet Need-total	Unmet Need-Limitation	Unmet Need-Spacing
24	Andaman & Nicobar Islands	0.9	1.3	1.3	78.3	66.3	41.5	4.6	1.1	3.5
25	Chandigarh	1.8	1.2	1.6	70.9	48.1	17.0	7.6	4.3	3.3
26	Tripura	1.7	1.5	1.7	71.0	40.0	11.7	8.5	5.0	3.5
27	Puducherry	1.6	1.3	1.4	67.9	62.9	53.9	6.2	2.7	3.5
28	Lakshadweep	2.2	1.2	1.2	53.7	23.8	12.6	8.7	1.2	7.5
29	Arunachal Pradesh	1.5	1.5	2.6	65.3	47.9	21.2	8.9	2.4	6.5
30	Ladakh	1.6	1.1	2.2	66.4	57.1	13.6	8.4	3.2	5.2
31	Nagaland	2	1.6	2.7	73.6	47.8	11.1	5.7	1.8	3.9
32	Dadar & Nagar Haveli and Daman & Diu	1.7	1.6	1.6	67.5	50.1	36.4	8.6	4.4	4.2
33	Mizoram	1.6	1.8	2.5	64.2	61	29.1	8	0.9	7.1



34	Meghalaya	2.2	2.7	3	42.1	30.2	7.2	21	2.6	18.4
35	Sikkim	1	0.9	1.6	76	42.2	13.5	4.5	2.3	2.2
* India has 28 states and 8 Union Territories, but no survey was conducted in Manipur state due to operational reasons in NFHS 6. Thus, data in this study is for 35 administrative units. .										
** TWFR and Ideal number of children data for all states and UTs are taken from NFHS 5 since data file for NFHS 6 has not been released										

ANNEXURE 2

Definitions of the Fertility and Family Planning Indicators

Total Fertility Rate (TFR): The average number of children a woman bears in her total reproductive life if she bore children at the current age-specific fertility rates

Total Wanted Fertility rate (TWFR): The average number of children would have by the end of her childbearing years if she bore children at the current age-specific fertility excluding unwanted births. (Unwanted birth is defined as any birth in excess of the number of children a woman reported as her ideal number).

Ideal Family Size (IFS): Female respondents with no children were asked: If you could choose exactly the number of children to have in your whole life, how many would that be. Female respondents with children were asked: If you could go back to the time when you did not have children and could choose exactly the number of children to have in your whole life, how many would that be.

Contraceptive Prevalence Rate (CPR): Percent couples in reproductive ages using any family planning methods. (Couples include all married women and sexually active unmarried women, ages 15-49)

Contraceptive Prevalence Rate of modern contraceptives ($mCPR$): Percent couples in reproductive ages using modern family planning methods. (Modern family planning methods are all those methods other than Rhythm, Withdrawal and other traditional methods)

% Sterilized (male+female) out of total number of FP users: Percent of couples using sterilization out of the total contraceptive users.

Unmet Need for family planning (Total): Proportion of women who (1) are not pregnant and not postpartum amenorrhoeic are considered fecund and want to postpone their next birth for two or more years or stop childbearing altogether, but are not using a family planning method, (2) have a mistimed or unwanted pregnancy, or (3) are post-amenohoeic and their last birth in the last two years was mistimed or unwanted.

Unmet Need for family planning (spacing): Proportion of women who (1) are not pregnant and not postpartum amenorrhoeic are considered fecund and want to postpone their next birth for two or more years, but are not using a family planning method, (2) have a mistimed or unwanted pregnancy, or (3) are post-amenohoeic and their last birth in the last two years was mistimed or unwanted.

Unmet Need for family planning (limitation): Proportion of women who (1) are not pregnant and not postpartum amenorrhoeic are considered fecund, and want to stop childbearing altogether, but are not using a family planning method, (2) have a mistimed or unwanted pregnancy, or (3) are post-amenohoeic and their last birth in the last two years was mistimed or unwanted.