



**Dissertation Training at Piramal Swasthya Management & Research  
Institute (PSMRI), BIHAR**

**PIRAMAL FOUNDATION**

**(26<sup>TH</sup> February 2024 to 31<sup>st</sup> May 2024)**

**Family planning practices among currently married women of  
reproductive age across India - A multi-state comparison of contraceptive  
use, its patterns (in delaying, spacing, and limiting) and predictors.**

**Mr. Saurabh Kumar**

**PG/22/105**

**Under guidance from**

**Dr. Vinay Tripathi**

**PGDM (Hospital and Health Management)**

**Health Stream**

**2022-2024**



**International Institute of Health Management Research,**

**New Delhi**



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**Health Stream**

**2022-2024**



**International Institute of Health Management Research,**

**New Delhi**

This certificate is awarded to

**Name: SAURABH KUMAR**

in recognition of having successfully completed his dissertation in the department of “RMLE” as “Research intern” and has successfully completed his project on

**“Family planning practices among currently married women of reproductive age across India – A multi-state comparison of contraceptive use, its patterns (in delaying, spacing and limiting) and predictors.”**

Date: 26<sup>th</sup> Feb 2024 to 31<sup>st</sup> May 2024.

**Organization: Piramal Swasthya Management and Research Institute**

He comes across as a committed, sincere and diligent person who has a strong drive and zeal for learning.



Dr Tanmay Mahapatra  
Director, Data and Learning  
Piramal Swasthya Management and  
Research Institute

**(Training and Development)**



Dr Anup G Nair  
Sr. Director, Hr & Admin  
Piramal Swasthya Management and  
Research Institute

**(Zonal Head-Human Resources)**

Annexure D

**TO WHOMSOEVER IT MAY CONCERN**

This is to certify that Mr. Saurabh Kumar student of PGDM (Hospital & Health Management) from International Institute of Health Management Research, New Delhi has undergone internship training at Piramal Swasthya from 26<sup>th</sup> Feb to 31<sup>st</sup> May.

The Candidate has successfully carried out the study designated to him during internship training and his/her approach to the study has been sincere, scientific and analytical.

The Internship is in fulfillment of the course requirements.

I wish him all success in all his/her future endeavors.



Dr. Sumesh Kumar  
Associate Dean, Academic and Student Affairs  
IIHMR, New Delhi

  
Mentor

IIHMR, New Delhi

### Certificate of Approval

Family planning practices among  
currently married women of reproductive age

The following dissertation titled " Across India. A multi stage comparison. " at "Pranav Swasthya " is hereby approved as a certified study in management carried out and presented in a manner satisfactorily to warrant its acceptance as a prerequisite for the award of **PGDM (Hospital & Health Management)** for which it has been submitted. It is understood that by this approval the undersigned do not necessarily endorse or approve any statement made, opinion expressed, or conclusion drawn therein but approve the dissertation only for the purpose it is submitted.

Dissertation Examination Committee for evaluation of dissertation.

Name

Dr. Puneet Chahal  
Dr. Sumant Swain

Signature


### Certificate from Dissertation Advisory Committee

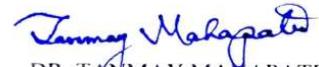
This is to certify that **Mr. SAURABH KUMAR**, a graduate student of the **PGDM (Hospital & Health Management)** has worked under our guidance and supervision. He is submitting this dissertation titled **“Family planning practices among currently married women of reproductive age across India - A multi-state comparison of contraceptive use, its patterns (in delaying, spacing, and limiting) and predictors”** at **“PIRAMAL SWASTHYA MANAGEMENT AND RESEARCH INSTITUTE”** in partial fulfillment of the requirements for the award of the **PGDM (Hospital & Health Management)**.

This dissertation has the requisite standard and to the best of our knowledge no part of it has been reproduced from any other dissertation, monograph, report or book.



VINAY TRIPATHI  
ASSOCIATE PROFESSOR,

IHMR, DELHI



DR. TANMAY MAHAPATRA  
DIRECTOR DATA AND LEARNING,

PIRAMAL SWASTHYA  
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Annexure E

**INTERNATIONAL INSTITUTE OF HEALTH MANAGEMENT RESEARCH,  
NEW DELHI**

**CERTIFICATE BY SCHOLAR**

This is to certify that the dissertation titled Family planning practices among CMWRA across India - A multi state comparison and submitted by (Name) Saurabh Kumar Enrollment No. PG/22/105 under the supervision of Vinay Tripathi for award of PGDM (Hospital & Health Management) of the Institute carried out during the period from 26<sup>th</sup> Feb 2023 to 31<sup>st</sup> May 2024 embodies my original work and has not formed the basis for the award of any degree, diploma associate ship, fellowship, titles in this or any other Institute or other similar institution of higher learning.

  
Signature

Dissertation Writing

24

## FEEDBACK FORM

**Name of the Student:** Saurabh Kumar

**Name of the Organization in Which Dissertation Has Been Completed:** Piramal Swasthya Management and Research Institute

**Area of Dissertation:** Family Planning (Family planning practices among currently married women of reproductive age across India - A multi-state comparison of contraceptive use, its patterns (in delaying, spacing, and limiting) and predictors.)

**Attendance:** The student's attendance was 100%, he was punctual, proactive, fully engaged and owned the tasks assigned and sessions offered.

**Objectives achieved:** Through this dissertation project engagement, Saurabh could achieve the desired objectives of learning detailed literature review and synthesis following the state of the art methods, contextualizing study findings with background literature, programmatic and contextual information, could become proficient in basic and advanced analytics, acquire excellent statistical analytical software skills and interpretation of findings into results and discussions to develop knowledge products.

**Deliverables:** Participating in analysis, interpretation and developing a synthesis on "Family planning practices among currently married women of reproductive age across India - A multi-state comparison of contraceptive use, its patterns (in delaying, spacing, and limiting) and predictors"

**Strengths:** Exceptional diligence, sincerity, proactiveness, commendable learning spree, good subject knowledge, excellent eye for detail, excellent interpersonal, oral and writing skills, excellent prowess in analytical skills

**Suggestions for Improvement:** Programmatic knowledge and scientific writing skills

**Suggestions for Institute (course curriculum, industry interaction, placement, alumni):**

Putting more statistical analytical practical sessions in the curriculum and exposing the students more to public health system and functions of India may be great.

**Date:** 26.06.2024

**Place:** Patna, Bihar



Signature of the Officer-in-Charge/ Organization Mentor (Dissertation)

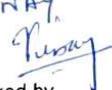


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**CERTIFICATE ON PLAGIARISM CHECK**

Name of Student (in block letter)	Dr/Mr./Ms.: SAURABH KUMAR		
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Course Specialization (Choose one)	Hospital Management	Health Management	Healthcare IT
Name of Guide/Supervisor	Dr/ Prof.: VINAY TRIPATHI		
Title of the Dissertation/Summer Assignment	Family planning practices among currently married women of reproductive age across India - A multi state comparison.		
Plagiarism detects software used	"TURNITIN"		
Similar contents acceptable (%)	Up to 15 Percent as per policy		
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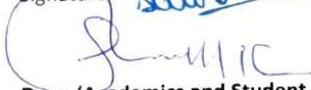
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## ABSTRACT

### **Introduction**

This study explores the intricate landscape of contraceptive use among married women of reproductive age (MWRA) in India, emphasizing regional variations and the multitude of factors influencing these practices. India, with its vast population exceeding 1.3 billion, stands at a critical juncture where effective family planning is essential for health, socioeconomic stability, and overall well-being. The study underscores the importance of contraception in fostering a balanced demographic structure and highlights the diverse patterns of contraceptive use across different states. Urban areas typically exhibit higher rates of contraceptive use due to better healthcare access, education, and awareness, whereas rural areas face challenges such as traditional beliefs and limited healthcare infrastructure. The influence of religious and cultural norms on family planning practices is also significant, shaping public perceptions and behaviors towards contraception.

### **Methods**

The study utilizes data from the fifth round of the National Family Health Survey (NFHS-5) conducted between 2019-2021, covering 707 districts, 28 states, and 8 union territories. This comprehensive survey provides insights into various factors such as age at first use, preferred methods, and current use of contraception. It reveals significant disparities in contraceptive practices, with southern states generally showing higher adoption rates compared to northern and eastern regions. Factors such as education, socioeconomic status, and marital age play crucial roles in these variations.

### **Results**

The findings indicate that knowledge about contraception is widespread among respondents, with high levels of awareness of modern spacing methods and permanent methods. Media sources and healthcare professionals play key roles in disseminating family planning information. Despite this, challenges remain, particularly in rural areas where traditional beliefs and lower educational levels hinder the adoption of family planning methods.

### **Discussion**

This research provides valuable insights for policymakers and healthcare providers to develop targeted interventions that address the specific needs and obstacles of different regions. By understanding the complex interplay of cultural, educational, and economic factors, strategies can be designed to enhance the uptake of contraceptives, improve reproductive health outcomes, and empower women to make informed choices about their reproductive health. Ultimately, the study aims to contribute to the broader goals of gender equity, maternal and child health, and sustainable social development.

## Acknowledgment

My internship with PSMRI in Bihar was a fantastic opportunity for learning and professional development. As a result, I consider myself fortunate to have been allowed to be a part of it. I'm also grateful for the opportunity to meet so many wonderful people and professionals who guided me through my internship term.

Keeping in mind the preceding, I would like to take this opportunity to express my heartfelt gratitude and special thanks to **Dr. Tanmay Mahapatra (Director, Data and Learning)** who, despite being extremely busy with his duties, took the time to hear, guide, and keep me on the right track, allowing me to carry out my project at their esteemed organization and extending during the training. His meticulous attention to detail and constructive criticism have greatly enriched the content and methodology of this dissertation.

I am equally indebted to **Dr. Shuchi Shree Akhouri** for her expertise in Family Planning and her subject knowledge and her invaluable feedback, which has significantly enhanced the depth and clarity of my research findings. Her commitment to academic excellence has been a constant source of inspiration. I would like to express my heartfelt gratitude to her for participating in useful decisions, providing necessary advice and guidance, and arranging all facilities to make my project easier.

It is my heartfelt pleasure to express my heartfelt appreciation to **Dr. Sutapa Bandyopadhyay Neogi (Director, IIHMR Delhi)**, **Dr. Sumesh Kumar (Associate Dean Academics and Students Affairs, IIHMR Delhi)**, and **my mentor Sukesh Bhardwaj (Assistant Professor, IIHMR Delhi)** for their careful and valuable guidance, which was extremely valuable for my study both theoretically and practically.

This opportunity strikes me as a turning point moment in my professional development. To achieve desired career objectives, I will attempt to apply acquired skills and knowledge as effectively as possible, and I will continue to work on their improvement. I want to continue working with you all in the future.

Sincerely,

Saurabh Kumar.

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**Acronyms/Abbreviations-**

**SDG:** Sustainable Development Goals

**UN:** United Nation

**ASHA:** Accredited Social Health Activist

**ANM:** Auxillary Nurse Midwives

**FP:** Family Planning

**LARC:** Long-Acting Reversible Contraceptives

**IUD:** Intrauterine Device

**CPR:** Contraceptive Prevalence Rate

**DHS:** Demographic and Health Surveys

**FP2020:** Family Planning 2020 Initiative

**RH:** Reproductive Health

**UNFPA:** United Nations Population Fund

**WHO:** World Health Organization

**MDG:** Millennium Development Goals

**SDG:** Sustainable Development Goals

**TFR:** Total Fertility Rate

**CPR:** Contraceptive Prevalence Rate

**EC:** Emergency Contraception

# Organization Profile

## **Introduction**

Piramal Swasthya, a flagship initiative of the Piramal Foundation, is dedicated to providing accessible and affordable healthcare solutions to underserved communities in India. Established with a vision to transform healthcare delivery through innovation and sustainability, Piramal Swasthya focuses on improving health outcomes and reducing disparities across the country.

## **Mission and Objectives**

- **Mission:** To ensure equitable healthcare access and quality for all, especially in remote and marginalized areas.
- **Objectives:**
  - Enhance maternal and child health services.
  - Combat communicable diseases through preventive measures.
  - Strengthen primary healthcare systems in underserved regions.

## **Organizational Structure**

- **Leadership:** Led by [Name of Key Leaders], Piramal Swasthya operates under the guidance of experienced healthcare professionals and strategic leaders.
- **Operational Framework:** The organization employs a decentralized operational model to effectively manage healthcare initiatives across diverse geographies.

## **Healthcare Services and Initiatives**

- **Service Offerings:**
  - **Telemedicine:** Providing remote consultation services through digital platforms.
  - **Mobile Health Units:** Delivering healthcare services directly to communities with limited access.
  - **Health Camps:** Organizing periodic health camps for screenings, vaccinations, and health education.
  - **Community Health Workers:** Training and deploying local health workers to promote health awareness and deliver basic healthcare services.

## **Technological Integration**

- **Innovative Solutions:**
  - Utilization of mobile technology and apps for remote diagnostics and health monitoring.
  - Development of telehealth solutions to bridge the gap in specialist healthcare access.
  - Implementation of data analytics for evidence-based decision-making and resource allocation.

## **Partnerships and Collaborations**

- **Strategic Alliances:**
  - Collaborations with state governments, NGOs, corporate sponsors, and international agencies.
  - Partnerships with academic institutions for research and capacity-building initiatives.

## **Impact and Success Stories**

- **Healthcare Impact:**
  - Improved maternal and child health indicators.
  - Decreased prevalence of diseases through vaccination and health awareness campaigns.
  - Enhanced healthcare access and utilization among disadvantaged communities.

## **Challenges and Strategies**

- **Operational Challenges:**
  - Addressing infrastructural limitations in remote areas.
  - Ensuring sustainability of healthcare interventions amidst funding fluctuations.
- **Strategies:**
  - Adaptation of technology to overcome geographical barriers.
  - Continuous engagement with local communities for sustainable healthcare practices.

## **Ethical Framework:**

- Upholding patient confidentiality and privacy in digital healthcare services.
- Ensuring informed consent and cultural sensitivity in healthcare delivery.

## **Expansion Plans:**

- Scaling existing programs to reach more underserved populations.
- Introducing innovative healthcare models to address emerging health challenges.
- Strengthening partnerships to leverage resources and expertise for sustainable growth.

## **Conclusion**

Piramal Swasthya exemplifies a commitment to improving healthcare equity through innovative solutions, strategic partnerships, and community-centric approaches. By focusing on sustainable development goals and leveraging technology, the organization continues to make significant strides in transforming healthcare access and outcomes across India.

## INTRODUCTION

In India, where modernity and tradition coexist in a vibrant tapestry, the necessity of contraception becomes apparent as a vital requirement for the country's overall growth. India, a country with a population of over 1.3 billion, is at a crossroads in terms of demographic concerns that call for a planned and proactive approach to family planning. Beyond a person's right to choose how they reproduce, contraception is extremely important since it influences the nation's health, socioeconomic environment, and general well-being. As India progresses in the twenty-first century, juggling the intricacies of an expanding populace, the necessity of efficient contraception becomes evident. In addition to protecting people's and families' health, maintaining demographic balance is essential to building a thriving and sustainable society. In examining the connections between health, education, gender equality, and economic advancement, this introduction explores the complex issues surrounding India's need for contraception as the country works toward a future of both prosperity and population.

As the second-most populous country in the world, India's demographic landscape is far from uniform, with each state contributing its unique hues to the canvas of family planning practices. The prevalence of using contraception might vary depending on how urbanized an area is. The adoption of family planning techniques is typically influenced by the greater availability of healthcare facilities, educational opportunities, and awareness campaigns in urban regions. Contraception prevalence statistics may be impacted by issues in rural areas with healthcare awareness and availability. Religious convictions frequently influence cultural customs and conventions, which in turn shapes public opinions toward family planning. Cultural circumstances have the power to shape people's beliefs and behaviors about contraception acceptability, impacting both individuals and groups. Certain religious doctrines may specifically address the topic of contraception, supporting or opposing particular techniques. Religious convictions may play a role in the stigma, or taboos associated with contraception.

Women with higher levels of education are probably in a better position to make decisions about their reproduction, including when and how many children to have. When women take an active part in family planning, this empowerment may result in a rise in the usage of contraceptives. Access to information, particularly that pertaining to family planning and reproductive health, is improved through education. People with higher levels of education are more likely to look for and understand information on contraceptive techniques, which puts them in a better position to make decisions regarding their reproductive health. Communities can benefit from education in a cascading manner. Increases in education frequently have a good impact on family planning practices and conventions in the community. This may foster an atmosphere that promotes and encourages the use of contraception.

In India, the disparity in contraceptive use between rural and urban settlements is influenced by a multitude of interrelated factors that are reflective of the different terrains in which these

surroundings are found. Urban locations frequently have greater rates of contraceptive usage because they offer better access to healthcare, educational opportunities, and economic development. Urban populations have a greater awareness and comprehension of family planning methods due in part to their higher exposure to information channels and close proximity to healthcare services. Furthermore, urban environments' greater diversity and cosmopolitanism tend to promote an atmosphere of greater openness, which lessens the impact of cultural taboos and stigmas related to contraception. On the other hand, issues in rural settlements include a higher commitment to traditional beliefs, a weaker healthcare infrastructure, and lower educational attainment levels. These elements may make it more difficult for people to obtain family planning services and may also diminish the prevalence of contraceptive use. The factors that make rural communities distinct when it comes to the dynamics influencing contraceptive practices are further highlighted by the importance of larger families and the impact of agriculture on labour contributions. Making targeted interventions that address the unique demands and problems presented by both rural and urban contexts in India requires an understanding of these distinctions.

Comparing and analyzing the use of contraceptives is crucial because it sheds light on the factors that influence reproductive health behaviours and helps academics, policymakers, and medical professionals create focused, successful interventions. Comprehending the discrepancies in contraceptive use among various demographic groups, geographical areas, and socioeconomic classes facilitates the detection of inequalities and the development of sophisticated approaches tailored to particular requirements. By illuminating the cultural, educational, and economic variables influencing family planning decisions, these analyses aid in the development of well-informed decisions. Furthermore, comparative studies provide a framework for assessing the effectiveness of current interventions, directing the improvement of public health policies to better meet the changing requirements of various populations. Societies can promote reproductive liberty, enhance maternal and child health outcomes, and advance more general sustainable development goals by conducting thorough studies on contraceptive usage.

A thorough understanding of population dynamics and reproductive health behaviors is provided by researching the use of contraceptives, which is essential for successful public health planning. Public health planners can determine particular requirements, gaps, and disparities in family planning methods by looking at patterns of contraceptive use across various populations, regions, and socioeconomic groups. This information serves as the foundation for creating focused interventions that deal with the particular difficulties that different populations experience. Furthermore, examining the use of contraceptives makes it possible to assess the effectiveness of current initiatives and regulations, which helps to improve and maximize public health tactics.

By addressing differences in family planning duties and offering insightful information about the dynamics of reproductive decision-making, research on the use of contraceptives is essential to advancing gender equity. Gender-based disparities may be evaluated thanks to

thorough data on the use of contraceptives, which highlights the degree to which women have access to and control over family planning options. Policymakers and campaigners can uncover hurdles that disproportionately affect women by studying patterns of contraceptive usage. These barriers may include inadequate access to healthcare or education, cultural norms that reinforce conventional gender roles, and economic inequities. This information is the basis for creating focused treatments that enable women to make decisions about their reproductive health with knowledge. Furthermore, researching the use of contraceptives helps to challenge societal norms that might restrict women's autonomy in family planning decisions, creating a setting where men and women are equally able to participate in and have an impact on decisions regarding the number and spacing of pregnancies. Examining the use of contraceptives is, in essence, a crucial first step in achieving gender equity by addressing the many issues that affect women's reproductive autonomy and decision-making authority.

Researching the use of contraceptives is essential for promoting social development, improving mother and child health, and reducing unwanted births. Policymakers and healthcare professionals can create tailored policies that correspond with the various needs and preferences of communities by having a sophisticated grasp of contraceptive practices. A key component of preventing unwanted pregnancies, which lowers maternal mortality rates and improves overall results for the health of mothers and children, is effective family planning, which is made possible by the promotion of easily accessible and culturally appropriate contraceptive techniques. Studies on contraceptive usage lead to healthier pregnancies, lower infant mortality, and better child well-being by giving people the ability to plan and spread out pregnancies. Furthermore, having control over one's family size has a good impact on socioeconomic variables and fosters social development by enabling people to pursue higher education, find lucrative jobs, and support vibrant communities. Essentially, researching the use of contraceptives becomes central to a comprehensive strategy for public health, guiding societies toward better general health and sustainable development.

## **RATIONALE**

Understanding the disparities in contraceptive utilization among married women of reproductive age in different regions of India is crucial for developing targeted reproductive health initiatives. Variances in the age at first use, preferred methods, ever use, and current use indicate each state's diverse socio-cultural and economic landscapes. Examining the trends in contraceptive usage, encompassing the decisions to delay, space, or limit pregnancies, highlights the regional distinctions in fertility preferences and the availability of family planning services. Additionally, the identification of factors such as undergoing sterilization at a young age provides valuable insights into the adoption of long-term contraceptive methods. This comparative analysis across multiple states facilitates the creation of evidence-based policies and the implementation of programs tailored to address the specific requirements and obstacles encountered in each locality. Ultimately, the primary

objective is to increase the uptake of contraceptives, enhance reproductive health outcomes, and empower women to make informed choices regarding their reproductive health throughout India.

## **LITERATURE REVIEW**

Contraceptive use among married women of reproductive age (MWRA) is a complex phenomenon influenced by various socio-cultural, economic, and geographical factors. In India, where diversity is inherent in its states, understanding how contraceptive practices differ across regions is imperative for effective family planning interventions. This literature review synthesizes existing research on the multi-state comparison of contraceptive use patterns and predictors among MWRA in India, with a focus on age at first use, method at first use, ever use, current use, and the role of sterilization. Studies have consistently highlighted substantial variations in contraceptive practices across different states of India. For instance, analysis of National Family Health Survey (NFHS) data reveals disparities in the prevalence of contraceptive use, with southern states generally exhibiting higher adoption rates compared to states in the northern and eastern regions<sup>i</sup>. These differences are attributed to varying levels of awareness, access to healthcare services, and cultural norms surrounding fertility control<sup>ii</sup>. Research indicates that the age at first use of contraceptives varies significantly among MWRA across states. While some states report an early initiation of contraceptive use, others exhibit delayed uptake, influenced by factors such as education, socio-economic status, and marital age. Moreover, method preference differs across regions, with traditional methods like female sterilization being more prevalent in certain states, while modern contraceptives gain popularity in others<sup>iii</sup>.

## **OBJECTIVES**

- To understand patterns (in delaying, spacing, and limiting) among Married women of reproductive age groups across states in India.
- To identify the key predictors and how they differ across states.

## **METHODOLOGY**

The study used data from the fifth round of the Demographic and Health Surveys (DHS), also known as the National Family Health Survey-5, which was conducted in India in 2019-2021 by the International Institute for Population Sciences in Mumbai, under the supervision of the Ministry of Health and Family Welfare (MoHFW), Government of India.

The survey was nationally representative and provides information for 707 districts, 28 states, and 8 union territories. It included 2,32,932 children born to 724,115 women in 636,699 households. The response rate was 98%.

The sample for the survey was selected in two stages from a sampling frame, with stratification achieved by separating each district into urban and rural areas. In the first stage, PSUs were selected, with probability proportional to the PSU size, and with independent selection in each sampling stratum. In the second stage, 22 households per cluster were selected with equal probability systematic selection from the newly created household listing. Overall, NFHS-5 selected 30,456 Primary Sampling Units from 707 districts as of March 31st, 2017, and data collection was finished in 30,198 of those PSUs.

Our study lays emphasis on the women married at the time of the study. The exposure variables used are listed as follows : year of marriage (before 2000/2001-2010/2011 onwards), religion (hindu/muslim/others), caste(general/SC/ST/Others), residence (rural/urban), education (illiterate/primary/secondary/higher), BMI (normal/obese), family size ( $\leq 4$ , 5-6,  $> 6$ ), wealth index (low/middle/high) , husband's education (illiterate/primary/secondary/higher), gender of first child (male/female) , type of delivery (normal/caesarean) , birth order (0/1/2/ $> 2$ ), place of delivery for child (non-institutional/institutional). Other exposure variables used were knowledge of any mode, any modern spacing method, any permanent method of contraception, hearing about family planning from media sources, having health insurance, currently breastfeeding, migration of husband and ever been told about FP by FLW. These variables were dichotomous and categorized as yes or no.

The outcome variables were designed keeping in mind the multi-faceted information that the NFHS provides us related to contraception and family planning. These variables were : age at which the respondent started using current delaying method ( $\leq 19/20-24/25-34/ \geq 35$ ) , age at which respondent started using current modern spacing method ( $\leq 19/20-24/25-34/ \geq 35$ ), age at which respondent started using current traditional method ( $\leq 19/20-24/25-34/ \geq 35$ ), age at sterilization ( $< 25/25-29/30-34/35-39/40-44/ > 45$ ), parity at sterilization (0/1/2/ $> 2$ ) , number of male children at sterilization (0/1/2/ $> 2$ ). The remaining outcome variables, ie, whether the respondent has ever used contraception, was using any traditional, permanent or modern method at the time of the study and if the respondent had future intention to use contraception were dichotomous and labelled as yes or no.

All variables involved in the study were expressed as frequency, percentages, and proportions with their subsequent confidence intervals. Multivariable logistic regression analyses were conducted to obtain the measure of association between various predictors and outcome of interest by adjusting potential confounders. SAS 9.4 was utilized for data processing, cleaning, and analysis.

## RESULTS

### (Descriptive results)

Across all zones, Hindus constitute the majority of respondents (80.2% Zone-1, 82.8% Zone-2, 80.7% Zone-4, 83.2% Zone-5) with the highest percentage in Zone 3 (87.49%) and the lowest in Zone 6 (56.22%). Muslims and others represent smaller proportions in each zone, with notable variations across regions. The caste distribution significantly varies, with General, SC (Scheduled Caste), ST (Scheduled Tribe), and Other castes being represented. General caste has higher proportions in Zones 1, 4, and 5 (27.1%, 22.3%, 32.5% respectively), whereas SC and ST populations were more prominent in Zones 4 (27.03%) and Zone 6 (33.2%) respectively, whereas others category ranged from 31.4% (Zone-6) to 61.14% (Zone-2). Urban populations were predominant in Zones 1 (27.3%), 2 (40.5%), and 5 (44.2%) while rural populations were higher in Zones 3 (75.18%), 4 (77.9%), and 6 (81.5%). Notably, Zone 5 reported the highest urban population (44.21%) while Zone 6 had the highest rural population (82.03%). Literate respondents constitute the majority in all zones, with Zone 2, 5, and 6, constituting the higher percentage (~75.0%) and Zone 3 the lowest (58.4%). The distribution of family size varied across zones, with a higher proportion of smaller families ( $\leq 4$  members) in Zones 2 (56.4%), 4 (42.5%) and 6 (49.2%), and larger families ( $> 6$  members) in Zones 1 (31.3%) and 3 (32.7%). The wealth index categories respondents into low, middle, and high-income groups, Zone 2 shows the highest proportion of respondents in the high-income group (81.7%), while Zone 4 has the highest proportion in the low-income group (37.1%). The proportion of literate husbands was widespread across all zones, ranging from (78.2%) in Zone 4 to (89.9%) in Zone 5. Most respondents reported no migration of their husbands, with percentages ranging from 84.19% Zone-4 to 97.31% Zone-5. Respondents with 0 living children showed a fairly even distribution of approximately (9.0%) across all Zones, for respondents having one living child the percentage ranged from 16.3% Zone-3 to 26.8% Zone-6, while among respondents with two living children Zone 3 recorded the lowest proportion (30.2%) and Zone 2 highest (49.5%). The proportion of respondents having three or more living children ranged from 21.2% Zone-2 to 43.7% Zone-3. The birth order distribution indicates variations across zones, with a higher proportion of respondents with birth order 2 in Zones 1 (35.76%), 2 (47.82%), and 5 (40.18%), and a higher proportion of respondents having more than 2 children in Zones 1 (37.51%), 3 (47.49%), and 4 (39.65%). The proportion of individuals with one or more sons and daughters ranged from 48.2% Zone-2 to 60.3% Zone-3. Most respondents reported no child loss, with percentages ranging from 85.52% Zone-3 to 92.83% Zone-2. Zone 3 has the highest percentage of respondents reporting child loss (14.48%).

Marriages that occurred before the year 2000 accounted for a significant proportion ranging from 29.3% Zone-6 to 36.8% Zone-2 and marriages that took place between 2001 and 2010 ranged from 30.6% Zone-3 to 35.1% Zone-6, while marriages occurred from 2011 onwards represented a considerable share ranging from 30.2% Zone-2 to 36.1% Zone-1. (Refer to annexure 1 for the descriptive result table)

The study found that most of the respondents from all zones had a high level of knowledge about contraceptives. Almost all of them were familiar with any mode of contraception, with percentages ranging from 99.27% Zone-5 to 99.93% Zone-1. Similarly, knowledge of modern spacing methods was widespread, with percentages ranging from 93.68% Zone-2 to 99.80% Zone-4. Knowledge of Permanent methods was also significantly high among respondents across zones, with percentages ranging from 96.19% Zone-6 to 99.48% Zone-3. The majority of respondents reported hearing about family planning through media sources, with percentages (67.81% Zone-1, 67.95% Zone-2, 66.08 Zone-3, 54.33% Zone-4, 67.05% Zone-5, 60.17% Zone-6). Health insurance coverage varied among respondents across different zones, while some zones showed relatively high percentages of individuals with health insurance 54.18% Zone-1, others reported lower coverage rates 19.33% Zone-3. FP-related advice received from FLW was reported to be less than 50% across all 6 Zones, (43.7% Zone-1, 45.4% Zone-2, 48.2% Zone-3, 39.6% Zone-4, 38.0% Zone-5, 42.2% Zone-6). The study found that a significant proportion of respondents reported ever used any contraception, with percentages ranging from 75.85% Zone-2 to 83.78% Zone-1. The proportion of respondents who reported currently using any contraception ranged from 59.3% Zone-6 to 71.4% Zone-1, while approximately 65.0% of respondents from other Zones reported currently using any contraception. A smaller proportion of individuals reported using traditional contraceptive methods, with percentages varying from 2.27% Zone-2 to 16.24% Zone-6, while usage of permanent contraceptive methods was observed to be relatively high, with percentages ranging from 8.82% to 59.68%. The proportion of respondents who were currently using the permanent method ranged from 28.3% Zone-3 to 59.2% Zone-2 across 5 Zones, while it was exceptionally lower in Zone 6 (9.1%). The usage of modern spacing methods varied among the population surveyed across all groups there was a significant percentage of individuals using modern spacing methods for contraception ranging from 6.2% Zone-2 to 33.8% Zone-6. Less than 15% of respondents across all the Zones started using modern contraceptives below the age of 20 years, while this percentage gradually increased with age reaching a peak of 56.4% Zone-3 among respondents aged 25-34 years whereas there was a decline in use of modern spacing methods with a maximum of 13.1% Zone-3 in older age group ( $\geq 35$  years). The proportion of respondents who started using the traditional spacing method below the age of 20 ranged from 2.6% Zone-3 to 9.8 Zone-4, whereas there was relatively high proportion of respondents who started using traditional spacing method in the age group 20-24 years ranged from 23.4% Zone-2 to 31.4% Zone-4, while there was a significantly higher proportion of respondents who started using traditional spacing method in the age group of 25-34 years ranged from 46.9% Zone-4 to 62.2% Zone-2, and a very low proportion of respondents started using traditional spacing method with

a maximum of 16.2% Zone-3. The proportion of respondents who started using the current delaying method below the age of 20 years was below 12.0% Zone-4 across 6 Zones, while a maximum of (34.9% Zone-4 and 56.8% Zone-3) of respondents started using the current delaying method in the age group of 20-24 years and 25-34 years respectively, and there was a relatively lower proportion of respondents who started using current delaying methods in the age group 35 & above years. Among those aged under 25, a significant proportion of (53.19% Zone-2) underwent sterilization, indicating a considerable uptake of permanent contraception at a relatively young age, among individuals aged 25 to 29 years 41.2% Zone-1 opted for sterilization which exhibited a significant preference for permanent contraception during the late twenties and this was reported across all the six Zones whereas there was relatively lower proportion of respondents opting for sterilization in older age groups. Around 50% of respondents from Zones 1 and 3 showed a positive intention towards future contraceptive use whereas the proportion of respondents in other Zones was relatively low (34.4% Zone-2, 44.0% Zone-4, 40.7% Zone-5, 26.5% Zone-6). (Refer to annexure 2 for the descriptive result table)

### **(Stratified results)**

Among Hindus, the majority started using the current delaying method between the age group of 25-34 (~50%), with a significant percentage adopted by the respondents between the age group of 20-24 (~30%), Muslims and Others showed similar patterns, with a notable proportion started using the current delaying method in the 25-34 age range (~55%) across all zones. General and SC categories showed higher percentages of individuals started using the current delaying methods between ages 25-34 (~59%), similarly, more than 40% of the ST respondents started using the current delaying method predominantly between age group 25-34. Among Urban residents ~ 60.0% of respondents started using the current delaying method in the age group of 25-34 years, similarly ~ 55% of rural respondents started using the current delaying method in the 25-34 years age group. Among Literate and Illiterate also (~50.0%) respondents started using the current delaying method in the age group of 25-34 years whereas there were the relatively low proportion of respondents who started using the current delaying in other age groups (15-24 and 35-49). Respondents having literate and illiterate husbands showed similar patterns, (~50.0%) who started using the current delaying method in the age group (25-34). Respondents with 4 or less family size, 5-6 family size and more than 6 family size showed a similar pattern where a higher proportion of them (~50.0% - 60.0%) started using the current delaying method in the age group of 25-34 years whereas Zone-4 showed a relatively low proportion of respondents (~45.0%). Among different SES (socio-economic status), respondents from higher SES showed a relatively higher proportion (~55.0%), whereas (~40.0% - 50.0%) of respondents from medium and low SES started using the current delaying method in age groups (25-34) across different zones. Among CMWRA whose husbands were migrants or non-migrants, nearly 50.0%-55.0% of women aged 25-30 years started using the current delaying method in Zone 1 and a similar proportion was found in other zones, notably, there was very little difference, but in Zone 5 there was a difference of ~20.0% in the proportion of CMWRA started using the current delaying method in the

same age group (25-34). A higher proportion of respondents having 0 living children started using current delaying method in the age group of 20-24 (~45.0%) across all zones, whereas Zone 4 showed variation in this proportion with 44.0% of respondents having 0 living children started using current delaying method in age group of <=19 years, while respondents having >=1 living children showed a higher proportion of >55.0% respondents started using the current delaying method in the age group of 25 - 34 years and there was no significant difference of this proportion among all zones. Respondents having at least 1 male child, or 1 or more female children showed similar patterns in the age at which they started using the current delaying method across all zones, while respondents having 1 or more male and female children show a higher proportion (~60.0%) as compared to respondents having 1 or more male child and no female child or 1 or more female child and no male child with (~50.0%) in the age group (25-34) years. The proportion of respondents who were married after the year 2010 showed a higher proportion (~45.0%) started using the current delaying method in the early age group of 20-24 years as compared to respondents who were married before 2000 or between 2001 to 2010 where a higher proportion of respondents (50.0%-60.0%) started using current delaying method in the age group 25-34 years. Respondents having knowledge of any mode of contraception showed a higher proportion (~50.0%) using the current delaying method for the first time in the age group of 25-34 years followed by (~30.0%) respondents who started using the current delaying method in the age group of 20-24 years and other zones showed similar patterns. Respondents having knowledge of any modern spacing method of contraception showed a higher proportion (~50.0%) using the current delaying method for the first time in the age group of 25-34 years whereas, respondents having knowledge of any permanent method of contraception showed similar patterns (~50.0%) respondents started using the current delaying method in the age group of 25-34 years, this proportion was slightly higher than the respondents who were not having the knowledge of any modern spacing and permanent method of contraception this distribution was similar across all zones. There were no major differences in the proportion of people who had ever heard about family planning from media sources and those who hadn't, a higher proportion of the respondents belonged to the age category of 25-34 years (55.0%) who had heard about the family planning from media sources and have started using the current delaying method similarly (~53.0%) of respondents who haven't heard about the family planning from media sources but started using in the same age group (25-34) years, these patterns were similar across all 6 Zones. More than 50.0% of respondents who had health insurance started using the current delaying method in the age group of 25-34 years whereas there was not much difference in the proportion of respondents who didn't have any health insurance, other zones showed a similar pattern for the same. Most of the respondents who were ever told about FP by the FLW used the current delaying method for the first time below the age of 25 years. In Hindus, the majority started using the current modern spacing method between the age group of 25-34 (~52%), followed by (~30.0%) of the respondents between the age group of 20-24, Muslims and Others showed similar patterns, with a notable proportion started using the current modern spacing method in the 25-34 age range (~55%) across all zones. General and SC categories showed higher percentages of individuals started

using the current modern spacing methods between ages 25-34 (~59%), similarly, more than 40% of the ST respondents started using the current modern spacing method predominantly between age group 25-34. Among Urban residents ~ 60.0% of respondents started using the current modern spacing method in the age group of 25-34 years, similarly ~ 50% of rural respondents started using the current modern spacing method in the 25-34 years age group. Among Literate and Illiterate, also (~50.0%) of respondents started using the current modern spacing method in the age group of 25-34 years whereas there were a relatively low proportion of respondents started using the current modern spacing in other age groups (15-24 and 35-49). Respondents having literate husbands showed a relatively higher proportion (~55.0%) of respondents who started using the current modern spacing method in the age group of 25-34 than the respondents whose husbands were illiterate (~45.0%). Respondents with 4 or less family sizes, 5-6 family sizes and more than 6 family sizes showed similar patterns where the higher proportion of them (~50.0% - 60.0%) started using the current modern spacing method in the age group of 25-34 years whereas Zone-4 showed a relatively low proportion of respondents (~45.0%). Among different SES (socio-economic status), respondents from higher SES showed a relatively higher proportion (~55.0%), whereas (~40.0% - 50.0%) of respondents from medium and low SES started using the current modern spacing method in age groups (25-34) across different zones. Among CMWRA whose husbands were migrants or non-migrants, nearly 50.0%-55.0% of women aged 25-30 years started using the current modern spacing method in Zone 1 and a similar proportion was found in other zones, notably, there was very less difference of this distribution but in Zone 5 there was a difference of ~20.0% in the proportion of CMWRA started using current modern spacing method in the same age group (25-34). A higher proportion of respondents having 0 living children started using current modern spacing method in the age group of 20-24 (~45.0%) across all zones, whereas Zone 4 showed variation in this proportion with 44.0% of respondents having 0 living children started using current modern spacing method in age group of  $\leq 19$  years, while respondents having  $\geq 1$  living children showed a higher proportion of  $>55.0\%$  respondents started using the current modern spacing method in the age group of 25 - 34 years and there was no significant difference of this proportion among all zones. Respondents having at least 1 male child, or 1 or more female child showed similar patterns in the age at which they started using the current modern spacing method across all zones, while respondents having 1 or more male and female children show a higher proportion (~60.0%) as compared to respondents having 1 or more male child and no female child or 1 or more female child and no male child with (~50.0%) in the age group (25-34) years. The proportion of respondents who were married after year 2010 showed a higher proportion (~45.0%) started using the current modern spacing method at the early age group of 20-24 years as compared to respondents who were married before 2000 or in between 2001 to 2010 where a higher proportion of respondents (50.0%-60.0%) started using current modern spacing method in the age group 25-34 years. Respondents having knowledge of any mode of contraception showed a higher proportion (~50.0%) using the current modern spacing method for the first time in the age group of 25-34 years followed by (~30.0%) respondents started using the current modern spacing method in the age group of 20-24 years

and other zones showed similar patterns. Respondents having knowledge of any modern spacing method of contraception showed a higher proportion (~50.0-55.0%) using the current modern spacing method for the first time in the age group of 25-34 years whereas, respondents having knowledge of any permanent method of contraception showed similar patterns (~55.0%) respondents started using the current modern spacing method in the age group of 25-34 years, this proportion was slightly higher than the respondents who were not having the knowledge of any modern spacing and permanent method of contraception this distribution was similar across all zones. There were no major differences in the proportion of people who had ever heard about the family planning from media sources and those who haven't, a higher proportion of the respondents belonged to age category of 25-34 years (60.0%) who had heard about the family planning from media sources and have started using the current modern spacing method similarly (~53.0%) of respondents who haven't heard about the family planning from media sources but started using in the same age group (25-34) years, these patterns were similar across all 6 Zones. More than 50.0% of respondents who had health insurance started using the current modern spacing method in age group of 25-34 years whereas there was not much difference in the proportion of respondents who didn't have any health insurance, other zones showed similar pattern for the same. Respondents who were ever told about FP by FLW started using modern spacing method in the age group 25-34 years, whereas those who were not told by FLW show a higher proportion started using the same in the age category 20-24years, similar patterns were seen across all the zones. Among Hindus, the majority started using the current traditional method between the age group of 25-34 ranging from (~58%), followed by (~30.0%) of the respondents between the age group of 20-24, Muslims and Others showed similar patterns, with a notable proportion started using the current traditional method in the 25-34 age range (~55%) across all zones. General and SC categories showed higher percentages of individuals started using the current traditional methods between ages 25-34 (~60%), similarly, more than 45% of the ST respondents started using the current traditional method predominantly between age group 25-34. Among Urban residents more than 60.0% of respondents started using the current traditional method in the age group of 25-34 years, similarly ~ 50% of rural respondents started using current traditional method in 25-34 years age group. Among Literate and Illiterate more than 50.0% or respondents started using the current traditional method in the age group of 25-34 years whereas there were relatively low proportion of respondents started using the current traditional in other age groups (15-24 and 35-49). Respondents having literate husbands showed a relatively higher proportion (~60.0%) of respondents who started using the current traditional method in the age group of 25-34 than the respondents whose husbands were illiterate (~50.0%). Respondents with 4 or less family size, 5-6 family size and more than 6 family size showed similar pattern where the higher proportion of them (~50.0% - 60.0%) started using current traditional method in age group of 25-34 years whereas Zone-4 showed relatively low proportion of respondents (~45.0%). Among different SES (socio-economic status), respondents from higher SES showed relatively higher proportion (~55.0%), whereas (~45.0% - 55.0%) of respondents from medium and low SES started using the current traditional method in age group (25-34) across

different zones. Among CMWRA whose husbands were migrants or non-migrants, nearly 50.0%-55.0% of women aged 25-30 years started using the current traditional method in Zone 1 and similar proportion was found in other zones, notably there was very less difference of this distribution but in Zone 5 there was a difference of ~15.0% in the proportion of CMWRA started using current traditional method in the same age group (25-34). A higher proportion of respondents having 0 living children started using current traditional method in the age group of 20-24 (~45.0%) across all zones, whereas Zone 4 showed variation in this proportion with 44.0% of respondents having 0 living children started using current traditional method in age group of  $\leq 19$  years, while respondents having  $\geq 1$  living children showed a higher proportion of >55.0% respondents started using the current traditional method in the age group of 25 - 34 years and there was no significant difference of this proportion among all zones. Respondents having at least 1 male child, or 1 or more female child showed similar patterns in the age at which they started using the current traditional method across all zones, while respondents having 1 or more male and female children show a higher proportion (~60.0%) as compared to respondents having 1 or more male child and no female child or 1 or more female child and no male child with (~50.0%) in the age group (25-34) years. The proportion of respondents who were married after year 2010 showed a higher proportion (~45.0%) started using the current traditional method at the early age group of 20-24 years as compared to respondents who were married before 2000 or in between 2001 to 2010 where a higher proportion of respondents more than 50.0% started using current traditional method in the age group 25-34 years. Respondents having knowledge of any mode of contraception showed a higher proportion (~55.0%) using the current traditional method for the first time in the age group of 25-34 years followed by (~30.0%) respondents started using the current traditional method in the age group of 20-24 years and other zones showed similar patterns. Respondents having knowledge of any modern spacing method of contraception showed a higher proportion (~50.0%-60.0%) using the current traditional method for the first time in the age group of 25-34 years whereas, respondents having knowledge of any permanent method of contraception showed similar patterns (~55.0%) respondents started using the current traditional method in the age group of 25-34 years, this proportion was higher than the respondents who were not having the knowledge of any modern spacing or permanent method of contraception and this distribution was similar across all zones. There were no major differences in the proportion of people who had ever heard about the family planning from media sources and those who haven't, a higher proportion of the respondents belonged to age category of 25-34 years (60.0%) who had heard about the family planning from media sources and have started using the current traditional method, similarly (~53.0%) of respondents who haven't heard about the family planning from media sources but started using in the same age group (25-34) years, these patterns were similar across all 6 Zones. More than 50.0% of respondents who had health insurance started using the current traditional method in age group of 25-34 years whereas there was not much difference in the proportion of respondents who didn't have any health insurance, other zones showed similar pattern for the same. Among all the religion (Hindus, Muslims, and Others) more than 70.0% of respondents adopted sterilization below the age of

30 years, this proportion was similar in all the six zones, while in Zone-6 this proportion was the lowest (~60.0%), to be specific the proportion of respondents adopting sterilization was highest in the age group 25-29 years (~45.0%). Among General caste more than 70.0% of the respondents adopted sterilization below the age of 30 years and this distribution was similar among other castes also (SC, ST, Others) across 5 zones, while in Zone 6 this distribution slightly varied with ~62.0% of the respondents adopting sterilization below 30 years of age. Rural and Urban residents showed similar pattern in age at which they adopted sterilization where more than 70.0% of them were below 30 years of age, across 5 zones, while this proportion varied in Zone 6 where ~60.0% of respondents adopted sterilization in the same age group. Among literate and illiterate respondents, a high proportion (~70.0%) adopted sterilization below the age of 30 years across 5 zones while in Zone 6 this proportion was ~60.0%. Below the age of 30 years illiterate respondents showed a slightly higher distribution as compared to literates whereas above the age of 30 years this pattern reversed, and literate respondents showed slightly higher proportion for the same. There were similar patterns among the respondents having literate or illiterate husbands adopting sterilization in different age groups across all the six zones. Among respondents having 4 or less family size or 5 to 6 or more than 6, the majority (~75.0%) of the respondents adopted sterilization below the age of 30 years, this pattern was similar across all zones. Respondents from different socio-economic statuses (low, medium, and high) showed similar pattern in age at which they adopted sterilization but in Zone 2 respondents belonging to age group of less than 25 years, more than 50.0% adopted sterilization whereas in other 5 zones this proportion was below 50.0%. Respondents having migrant or non-migrant husbands showed similar pattern in age at which they adopted sterilization, more than 70.0% of respondents adopted sterilization below the age of 30 years. Respondents having one or more male child and no female child showed a higher proportion adopting sterilization below the age of 25 (~50.0%) as compared to those who were having one or more female children and no female child or 1 or more female and male children (~25.0%-40.0%), while in other age categories the difference in this proportion is not very high among respondents having different combination of siblings, this pattern was similar across all the zones. Respondents who had ever lost any child showed a relatively lower proportion (~25.0%) adopted sterilization in age group of below 25 years as compared to those who did not have any child loss (~35.0%-40.0%) in 5 zones while in zone 2 this proportion is similar in both categories (~50.0%). In the age group of 25-29 years this proportion was similar in both categories (~40.0%) while in other age groups this proportion decreases, this pattern was similar in all the zones. Respondents who were married after 2010 showed a relatively higher proportion (40.0%-50.0%), adopting sterilization in the age group of below 25 whereas those who were married before 2010 were less (~35.0%-40.0%) across 5 zones while in Zone 2 all three categories(married before 2000, 2001-2010, 2011 onwards) showed no significant difference in their proportions, in other age categories there were no significant differences between the proportions of this distribution. More than 70.0% of the respondents who had knowledge of any mode of contraception adopted sterilization below the age of 30 years across 5 zones while in Zone 6 this proportion was slightly lower (~62.0%). There was no significant difference in the proportion of respondents

having knowledge of modern contraceptive methods and those who did not have in all the age groups across all the zones. More than 70.0% of respondents who had knowledge of permanent method of contraception underwent sterilization below the age of 30 years across 4 zones, while Zone 2 had the highest proportion (~82.0%) and Zone 6 having the lowest (~60.0%) for the same. Respondents who have heard about FP through media sources and who haven't, showed similar proportions and this was in all the age groups across all zones. There was no significant difference between respondents who had health insurance and who didn't have it in the age at which they adopted sterilization. This was similar across all the zones. Among Hindus more than 75.0% of the respondents had ever used any contraception, with Zone 3 having the highest 83.6% and Zone 2 having the lowest 76.1%, among Muslims more than 68.0% of the respondents had ever used any mode of contraception across all the 5 zones, with Zone 5 (70.5%) having the lowest this proportion was similar for Others religion also. Among different castes the proportion of respondents who had ever used any mode of contraception were similar ranging from 70.0% to 85.0%, this distribution was similar across 5 zones while zone 2 had the lowest (~73.0%) for the same. The proportion of urban respondents who had ever used any contraception showed a slightly higher proportion (~77.0% in Zone 2 and 5 and ~86.0% in Zone 1,3,4and 6) as compared to rural respondents.(~74.0% in Zone 2 and 5 and ~84.0% in Zone 1,3,4 and 6). Proportion of literate or illiterate respondents who had ever used any contraception were similar across 4 zones (~84.0%<sup>o</sup>Zone-1, 83.0%<sup>o</sup>Zone-3, 80.0%<sup>o</sup>Zone-4, 76.0%<sup>o</sup>Zone-5, 77.0%<sup>o</sup>Zone-6) while in Zone 2 literate respondents were 81.0% and illiterate were 73.0% who had ever used any contraception. Similar patterns were observed among respondents having literate or illiterate husbands and who had ever used any contraception across all zones (~70.0%). Respondents having 5-6 members in family showed a higher proportion (>75.0%) who had ever used any contraception as compared to those having less than 5 or more than 6 (~70.0%). Among respondents of different socioeconomic status highest proportion, who had ever used any contraception belonged to Higher SES (>80.0%) followed by respondents belonged to medium SES (~75.0%) while the lowest in low socioeconomic status (~70.0%). Respondents whose husbands were non-migrants and who had ever used any contraception showed a relatively higher proportion (75.0%-85.0%) as compared to respondents (60.0%-75.0%) across all zones, also the highest proportion of the same was in Zone 1, 85.0%. More than 85.0% of respondents who had 2 or more children had ever used any mode of contraception whereas respondents having 1 living child showed a relatively low proportion (~70.0%) across 5 zones while in Zone in Zone 2 this proportion was 56.0%. There were less than 40.0% of the respondents who had no living children and had ever used any contraception. More than 85.0% of respondents with birth order 2 or more and had ever used any mode of contraception whereas respondents having birth order 1 showed a relatively low proportion (~70.0%) across 5 zones while in Zone in Zone 2 this proportion was 56.0%. There were less than 40.0% of the respondents whose birth order was 0 and had ever used any contraception. Respondents having 1 or more male children with no female child and those who had one or more female children along with one or more male children showed relatively higher proportion of ever use of any contraceptive (~80.0%) and (~92.0%) respectively, as

compared to those who had one or more female children with no male child (75.0%). There was very less difference in the proportion of respondents who had ever lost any child and who had not and ever used any contraceptive, respondents who had lost any child showed proportion of (80.0%-85.0%) and those who had not (~75.0%-80.0%) across all the six zones. Proportion of respondents who were married before 2000, in between 2001 to 2010 and ever used any contraceptive were higher (~85.0%-90.0%) as compared to those who were married after 2010 (<70.0%). More than 75.0% of respondents who had knowledge of any mode of contraception and had ever used any method, across all zones, similarly there were more than 75% of respondents who had knowledge of any modern spacing method and ever used any contraception while this proportion among the respondents who didn't have knowledge was less than (~50.0%) across all zones. There were more than 75% of respondents who had knowledge of permanent method and ever used any contraception while this proportion among the respondents who didn't have knowledge was less than (~40.0%) across all zones. There was very less variation among the respondents who had heard about family planning from media sources and had ever used any contraception (~82.0%) than the respondents who had not heard about the same (~75.0%) this pattern was similar across all zones. The proportion of respondents who had health insurance and had ever used any contraception was (~80.0%) while this proportion among those who did not have any health insurance was (~75.0%) across all the 6 zones. The proportion of respondents who were ever told about FP by FLW and had ever used any contraceptive showed a higher proportion (~50.0%) as compared to those who didn't have any interaction with FLW regarding FP (~35.0%). The proportion of Hindus currently using any contraception was higher in Zone 1, 2, 4, 6 (~70.0%) as compared to Muslims and other religions, while in Zone 3 and 5 Other religions (Other than Hindus or Muslims) showed the higher proportion of the same. Among different castes the proportion of respondents who were currently using any mode of contraception were similar ranging from (60.0%-70.0%), this distribution was similar across 6 zones. The proportion of urban respondents who were currently using any contraception showed a slightly higher proportion (~70.0%) as compared to rural respondents. (~65.0%) across 5 zones, while in Zone 2 this proportion was higher among rural respondents. Respondents who were literate showed a higher proportion (~75.0%) as compared to illiterate respondents (~65.0%), this was similar across 4 zones, while in Zone 4 and 6 this proportion was higher among illiterate respondents. Similar patterns were observed among respondents having literate or illiterate husbands and who had ever used any contraception across all zones (~70.0%). Respondents having 5-6 members in family showed a higher proportion (>75.0%) who were currently using any contraception as compared to those having less than 5 or more than 6 (~70.0%). Among respondents of different socioeconomic status highest proportion, who were currently using any contraception belonged to Higher SES (>60.0%) followed by respondents belonged to medium SES (~60.0%) while the lowest in low socioeconomic status (~55.0%). Respondents whose husbands were non-migrants and who were currently using any contraception showed a relatively higher proportion (60.0%-70.0%) as compared to respondents whose husband were migrant (40.0%-50.0%) across all zones. Approximately 80.0% of respondents who had 2 or more children and currently using any mode of

contraception whereas respondents having 1 living child showed a relatively low proportion (~55.0%) across 6 zones. There were less than 25.0% of the respondents who had no living children and were currently using any contraception. More than 70.0% of respondents with birth order 2 or more and were currently using any mode of contraception whereas respondents having birth order 1 showed a relatively low proportion (~55.0%) across 5 zones while in Zone 2 this proportion was 34.0%. There were less than 25.0% of the respondents whose birth order was 0 and were currently using any contraception. Respondents having 1 or more male children with no female child and those who had one or more female children along with one or more male children showed relatively higher proportion of currently using any contraceptive (~75.0%) and (~80.0%) respectively, as compared to those who had one or more female children with no male child (60.0%). There was very less difference in the proportion of respondents who had ever lost any child and who had not and were currently using any contraceptive, respondents who had lost any child showed proportion of (70.0%-75.0%) and those who had not (~60.0%-65.0%) across all the six zones. Proportion of respondents who were married before 2000, in between 2001 to 2010 and currently using any contraceptive were higher (~75.0%-80.0%) as compared to those who were married after 2010 (<60.0%). More than 70.0% of respondents who had knowledge of any mode of contraception and were currently using any method, across all zones, similarly there were more than 70.0% of respondents who had knowledge of any modern spacing method and currently using any contraception while this proportion among the respondents who didn't have knowledge was less than (~50.0%) across all zones. There were more than 65% of respondents who had knowledge of permanent method and currently using any contraception while this proportion among the respondents who didn't have knowledge was less than (~40.0%) across all zones. There was very less variation among the respondents who had heard about family planning from media sources and were currently using any contraception (~70.0%) than the respondents who had not heard about the same (~65.0%), this pattern was similar across all zones. The proportion of respondents who had health insurance and were currently using contraception was (~75.0%) while this proportion among those who did not have any health insurance was (~65.0%) across all the 6 zones. The proportion of Hindus currently using any traditional method was lower in Zone 1, 2, 3, 4 (<10.0%) as compared to Muslims and other religions, while in Zone 5 and 6 Other religions (Other than Hindus or Muslims) showed the lower proportion for the same. Among different castes the proportion of respondents who were currently using any traditional mode of contraception were similar (<15.0%), this distribution was similar across 5 zones while in Zone 2 this proportion was the lowest (<5.0%). The proportion of urban respondents who were currently using any traditional method ranged from (10.0%-20.0%), while this proportion among rural residents ranged between (5.0%-15.0%). Respondents who were illiterate showed a slightly higher proportion (~15.0%) as compared to literate respondents (~10.0%), this was similar across all zones. Respondents with literate or illiterate husbands' similar patterns in the proportion of current use of any traditional method (~15.0%). Respondents with different family size (Up to 4, 5 to 6, more than 6 members) showed similar patterns in the current use of any traditional method of contraception (5.0%-15.0%) Different socioeconomic status group

(High, medium, and low) showed similar patterns in the current use of any traditional method of contraception (~15.0%) this pattern was similar across all six zones. Proportion of respondents whose husbands were non migrant ranged from (10.0%-15.0%), this proportion among respondents whose husbands were migrant were (5.0%-10.0%) across all zones. Respondents with 1 or 2 living children showed a higher proportion of currently using any traditional contraception (10.0%-15.0%) while this proportion among respondents with no living children or more than 2 were (5.0%-10.0%) across all zones, similar pattern of distribution were observed among different birth order categories (10.0%-20.0%). Respondent with one or more female children and no male child showed a relatively higher proportion of current traditional use (~15.0%) as compared to those having one or more male children and no female child and one or more male and female child. There was very less difference in the proportion of respondents who had ever lost any child and who did not have and currently using any traditional method (10.0%-15.0%) across all six zones. Respondents who were married before year 2000 showed a relatively low proportion of current use of any traditional method (~11.0%) while respondents who were married after 2000 showed a relatively higher proportion of the same (~16.0%) across all 6 zones. Respondents who had knowledge of any mode of contraception and currently using any traditional method ranged from (10.0%-15.0%) across all zones. Respondents who had knowledge of any modern spacing method and currently using traditional method ranged between (5.0%-15.0%), similarly respondents having knowledge of any permanent method and were currently using any traditional method ranged between (5.0%-15.0%). There was no difference in the proportion of respondents who had heard of the FP from media sources and currently using any traditional method across all the zones (10.0%-15.0%). Respondents who didn't have any health insurance showed a higher proportion of current use of any traditional method (15.0%) while respondents who had any health insurance showed a relatively lower proportion of the same (10.0%). The proportion of Hindus currently using permanent method was higher (~40.0%) as compared to Muslims and other religions where this proportion ranged between (20.0%-30.0%). Proportion of respondents who belonged to marginalized group (SC/ST) showed higher proportion or permanent method use (40.0%) while respondents who were non marginalized showed a relatively low proportion of permanent use (~30.0%). Proportion of respondents who were rural residents showed a higher proportion of current use of permanent method (~40.0%) while urban residents showed this proportion (~30.0%) this pattern was similar across 5 zones, while in zone 2 this proportion was (~50.0%). Literate respondents were seen currently using permanent method more (~50.0%) as compared to illiterate respondents where this proportion was (~40.0%) across all the six zones. Respondents having literate or illiterate husbands and currently using permanent method was similar across all zones (30.0%-40.0%). Respondents having 5-6 members in family showed a higher proportion (>60.0%) who were currently using permanent method as compared to those having less than 5 or more than 6 (~50.0%), while in zone 6 these proportions were 10.0% and 8.0% respectively. Respondents belonging to different SES showed similar proportion of current use of permanent method while in Zone 1 and 3 respondents from low SES showed slightly high proportion of the same. Respondents

whose husbands were non-migrants and who were currently using permanent method showed a relatively higher proportion (~50.0%) as compared to respondents whose husband were migrant (40.0%) across all zones. Approximately 60.0% of respondents who had 2 or more children were currently using permanent method whereas respondents having 1 living child showed a maximum of 15.0% across 6 zones. There were less than 1.0% of the respondents who had no living children and were currently using the permanent method. Approximately 60.0% of respondents with birth order 2 or more and currently using permanent method whereas respondents having 1 birth order showed a maximum of 15.0% across 6 zones. There were less than 1.0% of the respondents whose birth order was 0 and were currently using the permanent method. Respondents having more than 1 male and 1 female child showed a higher proportion who were currently using permanent method 60.0%, followed by respondents having at least one male child and no female child(~40.0%) while respondents having no male child and at least 1 female child was the lowest (~15.0%) across all zones. Respondents who had any child loss showed a higher proportion (40.0%) using permanent method as compared to respondents who had no child loss (30.0%) across all 6 zones. Proportion of respondents who were married before 2000 and currently sterilized was the highest (>50.0%) followed by respondents who were married in between 2001 to 2010 (40.0%), whereas proportion of respondents who were married after 2010 were the lowest (10.0%). ~40.0% of respondents who had knowledge of any mode of contraception and were currently using permanent method, across all zones, similarly there were ~40.0% of respondents who had knowledge of any modern spacing method and currently using permanent method while this proportion among the respondents who didn't have knowledge was less than (~30.0%) across all zones. There were ~40.0% of respondents who had knowledge of permanent method and were currently using permanent method, across all zones. Respondents who did not hear about FP from media sources showed a high proportion currently using permanent method (~45.0%) as compared to those who had heard about the FP from media sources (35.0%) across all zones. The proportion of respondents who had health insurance and were currently using permanent method was (>40.0%) while this proportion among those who did not have any health insurance was (~40.0%) across all the 6 zones. The proportion of Muslims currently using modern spacing method was higher (~35.0%) as compared to Hindus and other religions where this proportion ranged between (20.0%-30.0%). Proportion of respondents from general category and were currently using modern method was 30.0% whereas in other categories (SC/ST/OBC) it was relatively low (15.0%-25.0%). Proportion of respondents who were urban residents showed a higher proportion of current use of modern spacing method (~30.0%) while urban residents showed this proportion (~20.0%) this pattern was similar across 5 zones, while in zone 2 this proportion was very less (~6.0%). Illiterate respondents were seen currently using modern spacing method more (~25.0%) as compared to literate respondents where this proportion was (<20.0%) across all the six zones. Respondents having literate husbands showed a relatively higher proportion using modern spacing method(<40.0%) while respondents with illiterate husbands showed this proportion (<35.0%). Respondents with family size more than 6 showed a relatively higher proportion who were currently using modern spacing

method (<30.0%) while followed by respondent with 5-6 family members (~20.0%), while respondents with family size 4 or less showed this proportion (~10.0%). Respondents belonging to high SES showed higher proportion of current use of modern spacing method (~30.0%) followed by medium SES respondents (~25.0%), while respondents belonging to low SES showed the lowest proportion of the same (20.0%). Respondents whose husbands were non-migrants and who were currently using modern spacing method showed a relatively higher proportion (~20.0%) as compared to respondents whose husband were migrant (15.0%) across all zones. Approximately 30.0% of respondents who had 1 living child and were currently using modern spacing method followed by respondents having 2 living children (25.0%), while respondents who had no living children or more than 3 living children showed similar proportion of this (<20.0%). Approximately 30.0% of respondents with birth order 1 and were currently using modern spacing method followed by respondents with birth order 2 (~25.0%), while respondents with birth order 0 or more than 2 showed similar proportion of this (<20.0%) this proportion was similar across all six zones. Respondents who had one or more female child with no male child showed the highest proportion of current use of modern contraceptive use (~35.0%), while proportion respondents having one or more male children and currently using modern spacing method (~25.0%), whereas respondents having one or more male and female children showed the lowest proportion who were currently using modern spacing method (~15.0%). Respondents who had any child loss showed a lower proportion (~15.0%) who were currently using modern spacing method as compared to respondents who did not have any child loss (~25.0%) across all 6 zones. Respondents who were married after 2011 showed a higher proportion currently using modern spacing method (~30.0%) while respondents who were married before 2011 showed a relatively lower proportion of current use of modern spacing method (<30.0%). <25.0% of respondents who had knowledge of any mode of contraception and were currently using modern spacing method, across all zones, similarly there were <25.0% of respondents who had knowledge of any modern spacing method and currently using modern spacing method across all zones. There were ~25.0% of respondents who had knowledge of permanent method and were currently using modern spacing method, across all zones. Respondents who have hear about FP from media sources showed a high proportion of currently using modern spacing method (~25.0%) as compared to those who had not heard about the FP from media sources (15.0%) across all zones. The proportion of respondents who did not have health insurance and were currently using modern spacing method was (~25.0%) while this proportion among those who had any health insurance was (~15.0%) across all the 6 zones. Among different religions, Hindus showed a higher proportion of future intention to use contraceptive (>50.0%) while in Muslims this proportion was (~35.0%) and in other religions this proportion was (~45.0%), this pattern was similar across all the zones. Future intention to use any contraceptive was higher among marginalized (~50.0%) as compared to non-marginalized (~45.0%) this pattern was similar across all 5 zones while in zone 1 this proportion reversed with non-marginalized having the higher as compared to marginalized group. Rural respondents who had intention to use any contraceptive was higher in Zones 1,3,4 and (~40.0%) while in Zones 2 and 5 urban

respondents showed higher proportion of the same (~45.0%). Respondents who were illiterate showed a higher proportion who had intention to use any mode of contraception (~50.0%) while this proportion among literate respondents was (~40.0%) across all zones. Proportion of respondents whose husband were literate and had future intention to use any contraceptive was higher (~55.0%) as compared to those whose husbands were illiterate (~40.0%). Respondents whose family size in more than 6 had a higher proportion of future intention to use any contraceptive (~60.0%) while this proportion in respondents with 5-6 family members was (~55.0%) followed by respondents whose family size is less than 4 was (~40.0%). Respondents whose husbands were migrants and had future intention to use any contraceptive was (~65.0%) while this proportion among those whose husbands were non-migrants was (~50.0%) across all the zones. Respondents who had 0 or 1 living child showed the higher proportion of future intention to use any method (60.0%) as compared to those who had more than 1 (~40.0%). Respondents whose birth order was 0 or 1 showed the higher proportion of future intention to use any method (60.0%) as compared to those who had birth order more than 1 was (~40.0%) across all the six zones. Respondents who had one or more female children with no male child showed a higher proportion of future intention to use any contraception (~55.0%), while this proportion among respondents who had 1 or more male child and no female child was (50.0%) followed by the respondents who had one or more male and female children (~40.0%). More than 50.0% of respondents who did not have any child showed future intention to use contraceptive while this proportion among respondents who did have any child loss history was (<50.0%). Respondents married after 2010 showed the higher proportion of future intention to use any method (>65.0) while respondents who were married before 2011 showed this proportion as (~40.0%), across all zones. Respondents who had knowledge of any mode of contraception showed a higher proportion of future intention to use any method (~55.0%) while this proportion among respondents who did not have knowledge of any mode of contraception was <10.0% across all six zones, similarly respondents who had knowledge of any modern spacing method showed higher proportion of future intention to use any method (~55.0%) as compared to those who did not have knowledge of modern spacing method across all zones. Respondents who had knowledge of permanent method of contraception showed higher proportion of future intention to use any method (~50.0%) as compared to those who did not have any knowledge. Respondents who had heard about FP through media sources showed a higher proportion (~55.0%) of future intention to use any method as compared to those who have not heard about FP through media sources. Respondents who did not have health insurance showed a higher proportion (~45.0%) of future intention to use any method as compared to those who had health insurance (~40.0%). Respondents who were told about FP by FLW had higher proportion of future intention to use any method (>50.0%), while who were not told about FP by FLW was (<50.0%).

### (Stratified logistic regression results)

Logistic regression showed that odds of ever using any contraceptive was low among Muslims (aOR<sub>Muslims</sub> = 0.59<sub>Zone 1</sub>, 0.87<sub>Zone 2</sub>, 0.68<sub>Zone 3</sub>, 0.66<sub>Zone 4</sub>, 0.68<sub>Zone 5</sub>, 0.82<sub>Zone 6</sub>) and other religions with reference to Hindus. Odds of ever using any contraceptive among SC, ST and OBC is low (<1.0) as compared to General category this pattern was similar across all the zones. Urban residents showed a higher odd of ever using any contraceptive with highest odds in Zone 4 (aOR<sub>Urban</sub> = 1.29) and lowest in Zone 6 (aOR<sub>Urban</sub> = 1.06). Literate respondents showed a lower odd (aOR<sub>Literate</sub> <1.0) of ever use of any contraceptives with reference to illiterate respondents. Odds of ever using any contraceptive among respondents who had 5 to 6 members family size showed a slightly higher (aOR<sub>5-6 family size</sub> :-1.13 to 1.185 across 6 zones) with reference to respondents who family size was 4 or less. Respondents across 6 Zones whose husband were migrant (aOR<sub>Migrant husband</sub> ~1.5), belonged to medium and high socioeconomic status (aOR<sub>Medium</sub> ~1.3, aOR<sub>High</sub> ~1.5), had 1 or more living children (aOR<sub>1 Living child</sub> ~5.0, aOR<sub>2 Living children</sub> ~20.0), higher birth order (aOR<sub>1</sub> ~18.0, aOR<sub>2</sub> ~20.0), knowledge of any modern spacing method (aOR ~10.0), knowledge of any permanent method (aOR ~10.0), heard about family planning from media sources (aOR ~1.3), has health insurance (aOR ~1.5), ever told about FP by FLW (aOR ~2.5), were associated with higher odds of ever using any contraception. Among respondents, those who belonged to Non-Hindus religions (aOR<sub>Non-Hindus</sub> ~0.9), SC/ST/OBC (aOR ~0.8), were literate (aOR ~0.6), had no son and one or more daughters (aOR ~0.5), were married between 2001 to 2010 (aOR ~0.9) and married after 2010 (aOR ~0.3) were less likely to be currently using any contraception. On the other hand across all the zones respondents who belonged to urban residence (aOR<sub>Urban</sub> ~1.2), family size 5 to 6 or more than 6 (aOR<sub>5-6 family size</sub> ~1.2, aOR<sub>More than 6</sub> ~1.01), from SES medium and high (aOR<sub>Medium</sub> ~1.1 and aOR<sub>High</sub> ~1.2), had literate husband (aOR<sub>Literate Husbands</sub> ~1.1), whose husbands were migrants (aOR<sub>Migrant</sub> ~2.4), who had 1 or more living children (aOR<sub>1 living children</sub> ~5.0 and aOR<sub>2 living children</sub> ~13 and aOR<sub>3 or more children</sub> ~20), had birth order more than 1 (aOR<sub>1 Birth Order</sub> ~6 and aOR<sub>2 Birth Order</sub> ~15 and aOR<sub>>2 Birth Order</sub> ~18), had one or more son and daughter (aOR<sub>1 or more Sons & Daughters</sub> ~1.5), experienced any child loss (aOR<sub>Any child loss</sub> ~1.2), knowledge of any modern spacing method (aOR<sub>Modern Spacing Knowledge</sub> ~3.5), knowledge of any permanent method (aOR ~7.6), heard about family planning from media sources (aOR ~1.3), has health insurance (aOR ~1.5), ever told about FP by FLW (aOR ~1.7), were associated with higher odds of currently using any contraception. Among respondents, those who belonged to SC/ST/OBC (aOR<sub>SC</sub> ~0.9 and aOR<sub>ST</sub> ~0.8 and aOR<sub>OBC</sub> ~0.8), from SES medium and high (aOR<sub>Medium</sub> ~0.8 and aOR<sub>High</sub> ~0.9), had one or more sons and daughters (aOR ~0.7), heard about family planning from media sources (aOR<sub>Media Sources</sub> ~0.9), has health insurance (aOR<sub>Health insurance</sub> ~0.6) were less likely to be currently using any traditional method. On the contrary across all the zones respondents who belonged to Non-Hindu religion (aOR<sub>Muslim</sub> ~1.5 and aOR<sub>Others</sub> ~1.2), belonged to urban residence (aOR<sub>Urban</sub> ~1.2), were literate (aOR ~1.3), were married between 2001 to 2010 (aOR<sub>between 2001 to 2010</sub> ~1.4) and married after 2010 (aOR<sub>2011 Onwards</sub> ~0.3), had family size 5 to 6 or more than 6 (aOR<sub>5-6 family size</sub> ~1.1 and aOR<sub>More than 6</sub> ~1.2), had literate husband (aOR

Literate Husbands ~1.1), whose husbands were migrants (aOR<sub>Migrant</sub> ~1.6), who had 1 or more living children (aOR<sub>1 living children</sub> ~4.0 and aOR<sub>2 living children</sub> ~3 and aOR<sub>3 or more children</sub> ~2), had birth order more than 1 (aOR<sub>1 Birth Order</sub> ~4 and aOR<sub>2 Birth Order</sub> ~3 and aOR<sub>>2 Birth Order</sub> ~2), had no son and 1 or more daughters (aOR<sub>no son and 1 or more daughters</sub> ~1.2), experienced any child loss (aOR<sub>Any child loss</sub> ~1.1), knowledge of any modern spacing method (aOR<sub>Modern Spacing Knowledge</sub> ~2.4), knowledge of any permanent method (aOR ~1.6), ever told about FP by FLW (aOR ~1.8), were associated with higher odds of ever using any traditional method. Among respondents, those who belonged to Non-Hindus religions (aOR<sub>Muslims</sub> ~0.3 and aOR<sub>Others</sub> ~0.6), urban residence (aOR<sub>Urban</sub> ~0.7), were literate (aOR ~0.4), family size 5 to 6 or more than 6 (aOR<sub>5-6 family size</sub> ~1.09, aOR<sub>More than 6</sub> ~0.8), had no son and one or more daughters (aOR ~0.2), heard about family planning from media sources (aOR ~0.9), were married between 2001 to 2010 (aOR ~0.5) and married after 2010 (aOR ~0.1) were less likely to be currently using any permanent method. On the other hand across all the zones respondents who belonged to SC/ST/OBC (aOR<sub>SC</sub> ~1.06 and aOR<sub>SC</sub> ~1.07 and aOR<sub>Others</sub> ~1.18), from SES medium and high (aOR<sub>Medium</sub> ~1.1 and aOR<sub>High</sub> ~1.4), had literate husband (aOR<sub>Literate Husbands</sub> ~1.09), whose husbands were migrants (aOR<sub>Migrant</sub> ~1.5), who had 1 or more living children (aOR<sub>1 living children</sub> ~16.9 and aOR<sub>2 living children</sub> ~181 and aOR<sub>3 or more children</sub> ~372), had birth order more than 1 (aOR<sub>1 Birth Order</sub> ~23), had one or more son and daughter (aOR<sub>1 or more Sons & Daughters</sub> ~1.8), experienced any child loss (aOR<sub>Any child loss</sub> ~1.2), knowledge of any modern spacing method (aOR<sub>Modern Spacing Knowledge</sub> ~1.3), has health insurance (aOR ~1.6), ever told about FP by FLW (aOR ~1.3), were associated with higher odds of ever using any permanent method. Among respondents, those who belonged to SC/ST/OBC (aOR<sub>SC</sub> ~0.7 and aOR<sub>ST</sub> ~0.7 and aOR<sub>OBC</sub> ~0.7), had one or more sons and daughters (aOR ~0.8), has health insurance (aOR<sub>Health insurance</sub> ~0.8) and experienced any child loss (aOR<sub>Any child loss</sub> ~0.7) were less likely to be currently using any modern spacing method. On the contrary across all the zones respondents who belonged to Non-Hindu religion (aOR<sub>Muslim</sub> ~1.3 and aOR<sub>Others</sub> ~1.1), belonged to urban residence (aOR<sub>Urban</sub> ~1.4), from SES medium and high (aOR<sub>Medium</sub> ~1.4 and aOR<sub>High</sub> ~1.3), were literate (aOR<sub>Literate</sub> ~2.5), were married between 2001 to 2010 (aOR<sub>between 2001 to 2010</sub> ~2.6) and married after 2010 (aOR<sub>2011 Onwards</sub> ~2.8), heard about family planning from media sources (aOR<sub>Media Sources</sub> ~1.4), had family size 5 to 6 or more than 6 (aOR<sub>5-6 family size</sub> ~1.2 and aOR<sub>More than 6</sub> ~1.3), had literate husband (aOR<sub>Literate Husbands</sub> ~1.2), whose husbands were migrants (aOR<sub>Migrant</sub> ~1.7), who had 1 or more living children (aOR<sub>1 living children</sub> ~3.13 and aOR<sub>2 living children</sub> ~2.3 and aOR<sub>3 or more children</sub> ~1.5), had birth order more than 1 (aOR<sub>1 Birth Order</sub> ~3.5 and aOR<sub>2 Birth Order</sub> ~2.4 and aOR<sub>>2 Birth Order</sub> ~1.6), had no son and 1 or more daughters (aOR<sub>no son and 1 or more daughters</sub> ~1.2), knowledge of any permanent method (aOR ~1.3), ever told about FP by FLW (aOR<sub>told about FP by FLW</sub> ~4.5), were associated with higher odds of ever using any modern spacing method. Among respondents, those who belonged to Non-Hindus religions (aOR<sub>Muslims</sub> ~0.6 and aOR<sub>Others</sub> ~0.3), urban residence (aOR<sub>Urban</sub> ~0.8), from SES medium and high (aOR<sub>Medium</sub> ~0.8 and aOR<sub>High</sub> ~0.5), whose husbands were migrants (aOR<sub>Migrant</sub> ~0.6), who had 1 or more living children (aOR<sub>1 living children</sub> ~1.0 and aOR<sub>2 living children</sub> ~0.6 and aOR<sub>3 or more children</sub> ~0.4), had birth order more than 1 (aOR<sub>1 Birth Order</sub> ~1.1 and aOR<sub>2 Birth Order</sub> ~0.6 and aOR<sub>>2 Birth Order</sub> ~0.6)

~0.4), experienced any child loss (aOR<sub>Any child loss</sub> ~0.6),, had one or more sons daughters (aOR~0.5) were less likely to be currently using any permanent method. On the other hand across all the zones respondents who belonged to SC/ST/OBC (aOR<sub>SC</sub>~1.1 and aOR<sub>ST</sub>~1.4 and aOR<sub>Others</sub>~1.3), were literate (aOR~2.2), had literate husband (aOR<sub>Literate Husbands</sub> ~1.1), family size 5 to 6 or more than 6 (aOR<sub>5-6 family size</sub>~1.4, aOR<sub>More than 6</sub> ~1.6), had no son and one or more daughters (aOR<sub>no son and one or more daughters</sub> ~1.3), were married between 2001 to 2010 (aOR~4.5) and married after 2010 (aOR~9.2) heard about family planning from media sources (aOR~1.5), knowledge of any modern spacing method (aOR<sub>Modern Spacing Knowledge</sub>~3.1), has health insurance (aOR~1.6), ever told about FP by FLW (aOR~1.7), were associated with higher odds of ever using any permanent method. (Refer to annexure 3 to 8 for the logistic regression table)

## Discussion

Family planning is crucial for reproductive health and socio-economic development. It not only impacts individual and family health but also influences demographic and economic trends. This discussion focuses on the family planning practices of currently married women aged 15-49 in India, highlighting the variations in contraceptive use and its impact on birth timing, spacing, and limitation. By analyzing data from the National Family Health Survey (NFHS-5), this analysis aims to provide a comprehensive understanding of family planning practices across different states in India. The use of contraceptives among married women in India shows a considerable variation across states due to a lot of socio-cultural, economic, and demographic factors. The national average for the modern contraceptive prevalence rate (mCPR) is 56.5% (NFHS-5). However, this value differs across states in India due to significant regional disparities. For instance, states such as Kerala and Punjab exhibit higher usage rates, often exceeding 60%, while states like Bihar and Uttar Pradesh have much lower rates, sometimes below 30% (IIPS, 2020). Contraceptive use among women in India can be classified into three main patterns: delaying the first birth, spacing births, and limiting the number of children. Each of these patterns has specific socio-economic and cultural implications and is influenced by various factors.

The decision to delay the first childbirth is significantly linked to higher educational achievements and career ambitions among women. In regions like Maharashtra and Tamil Nadu, women often postpone their first pregnancy in order to pursue higher education and professional careers (IIPS, 2020). This tendency is supported by improved access to contraceptives and greater awareness of reproductive health. On the other hand, in states like Rajasthan and Madhya Pradesh, early marriage and lower levels of education among women result in reduced use of contraceptives to delay the first childbirth (UNFPA, 2020). Spacing births is crucial for the health of both the mothers and children. The NFHS-5 data indicates that shorter birth intervals are more common in states with lower mCPR. For example, Bihar and Uttar Pradesh, which have lower contraceptive use, report shorter birth intervals due to limited access to contraceptive methods and lower awareness (IIPS, 2020). On the other hand, states like Kerala and Himachal Pradesh, where contraceptive prevalence is higher, show longer birth intervals, contributing to better health outcomes for mothers and children (WHO, 2021). The practice of limiting the number of children, often through permanent methods like sterilization, is widespread in India, particularly after attaining the desired family size. Southern states such as Andhra Pradesh and Tamil Nadu have higher rates of sterilization, which reflects a cultural acceptance of family size limitation and a strong healthcare infrastructure supporting such procedures (FPAI, 2020). In contrast, northern states like Uttar Pradesh and Bihar show a higher preference for temporary methods, partly due to socio-cultural resistance to permanent methods and limited healthcare access (Population Council, 2020). Several factors influence contraceptive use among currently married women of reproductive age in India, such as socio-economic status, cultural beliefs, education, healthcare access, and government policies. The economic status of a household

plays a crucial role in determining the use of contraceptives. Wealthier households usually have higher contraceptive prevalence because they have better access to information and healthcare services. On the other hand, poorer households encounter barriers such as cost, lack of access, and limited awareness, which affects contraceptive use (IIPS, 2020). Cultural and religious beliefs have a significant impact on family planning practices. In states like Uttar Pradesh and Rajasthan, traditional norms that support large families and early marriages lead to lower contraceptive use (The Lancet, 2019). On the other hand, states with more progressive attitudes toward gender equality, such as Kerala and Tamil Nadu, show higher contraceptive use (Journal of Family Planning and Reproductive Health Care, 2020). Education is a powerful predictor of contraceptive use. Women with higher educational levels are more likely to use contraceptives effectively. They tend to marry at a later age, have better knowledge of reproductive health, and have more autonomy in making decisions about family planning (BMC Public Health, 2020). This relationship is observable in states like Kerala, where high female literacy rates are associated with increased contraceptive use. Access to healthcare services, including family planning, has a significant impact on contraceptive use. According to the World Health Organization's 2021 report, states with well-developed health infrastructure, such as Tamil Nadu and Maharashtra, have higher contraceptive prevalence (WHO, 2021). In contrast, states with inadequate healthcare facilities, such as Bihar and Jharkhand, report lower contraceptive use, as mentioned in the 2020 Journal of Global Health Reports (Journal of Global Health Reports, 2020). Government policies and family planning programs play a critical role in promoting the use of contraceptives. The effective implementation of programs such as the National Health Mission and the Pradhan Mantri Surakshit Matritva Abhiyan has improved access to family planning services in several states (Indian Journal of Public Health, 2020). States that have effectively implemented these programs, such as Himachal Pradesh and Karnataka, have shown higher contraceptive prevalence than states with weaker implementation mechanisms (Health Policy and Planning, 2020). The variations in contraceptive use across different regions emphasize the need for customized approaches to family planning programs. States such as Uttar Pradesh, Bihar, and Madhya Pradesh in the northern and central regions require increased efforts to enhance education, raise awareness about contraceptive methods, and improve healthcare infrastructure. These states should prioritize addressing cultural barriers and promoting gender equality to boost contraceptive use (Population Council, 2020). In contrast, southern states like Kerala, Tamil Nadu, and Andhra Pradesh, which already have higher contraceptive prevalence, should focus on sustaining and improving the quality of family planning services. These states can act as examples of best practices in family planning programs, demonstrating successful strategies in community engagement, education, and healthcare delivery (UNFPA, 2020). Male involvement in family planning is a crucial factor that affects the use of contraceptives. Historically, family planning has been seen as the sole responsibility of women, which has limited male participation. However, increasing male involvement can greatly enhance the use of contraceptives and the overall outcomes of family planning. Initiatives in states like Kerala to involve men in family planning decisions have led to better acceptance and usage of contraceptive methods

(Reproductive Health Matters, 2020). Despite making progress, family planning practices in India still face several challenges. Socio-cultural resistance, limited access to quality healthcare, and disparities in education and economic status continue to hinder contraceptive use. Addressing these challenges requires a multi-faceted approach such as, Tailored education campaigns that can improve awareness and acceptance of contraceptive methods, Promoting female education and gender equality can empower women to make informed family-planning decisions (BMC Public Health, 2020), Improving access to healthcare by strengthening healthcare infrastructure, particularly in rural and underserved areas, is essential. This involves training healthcare providers, ensuring the availability of contraceptives, and enhancing service delivery (Journal of Global Health Reports, 2020), Programs should be culturally sensitive and involve community leaders to change traditional norms and beliefs about family planning (The Lancet, 2019), Effective implementation of government policies and programs, along with monitoring and evaluation mechanisms, can enhance the reach and impact of family planning services (Indian Journal of Public Health, 2020), and lastly, Encouraging male engagement in family planning through targeted programs which can lead to shared responsibility and better outcomes (Reproductive Health Matters, 2020). There are notable regional differences in the patterns and predictors of contraceptive use among currently married women of reproductive age in India. These variations are influenced by various factors such as socio-economic status, cultural norms, educational levels, and access to healthcare. While certain states have significantly advanced family planning practices, others continue to face persistent challenges. To address these disparities, it is crucial to implement comprehensive and context-specific strategies that encompass multiple aspects including education, healthcare accessibility, cultural sensitivity, effective policy implementation, and male involvement. By adopting a holistic approach, India can improve its family planning outcomes, leading to better maternal and child health, gender equality, and socio-economic development.

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**Annexure 1**

Respondent's Characteristics	Categories	Zone 1			Zone 2			Zone 3		
		N	n	%(LCL-UCL)	N	n	%(LCL-UCL)	N	n	%(LCL-UCL)
Religion	Hindu	69514	54453	80.3%(79.96-80.64)	77271	65369	82.89%(82.55-83.23)	126425	113185	87.49%(87.26-87.71)
	Muslim		3716	5.96%(5.75-6.18)		7950	10.75%(10.48-11.02)		12099	11.76%(11.53-11.98)
	Others		11345	13.74%(13.45-14.02)		3952	6.36%(6.12-6.59)		1141	0.76%(0.7-0.81)
Caste	General	68976	20589	27.1%(26.72-27.49)	75975	7194	11.24%(10.95-11.54)	124874	22374	18.21%(17.94-18.48)
	SC		19740	27.77%(27.38-28.16)		16661	22.05%(21.66-22.43)		25218	21.85%(21.57-22.13)
	ST		6149	8.06%(7.83-8.29)		5240	5.57%(5.37-5.76)		16938	8.55%(8.4-8.71)
	Others		22498	37.08%(36.64-37.51)		46880	61.14%(60.69-61.59)		60344	51.39%(51.05-51.72)
Residence	urban	69514	16244	27.39%(26.97-27.8)	77271	24986	40.52%(40.06-40.97)	126425	23847	24.81%(24.48-25.14)
	rural		53270	72.61%(72.2-73.03)		52285	59.48%(59.03-59.94)		102578	75.19%(74.86-75.52)
education	literate	69514	46328	64.69%(64.27-65.11)	77271	54585	74.04%(73.66-74.42)	126425	73042	58.44%(58.12-58.77)
education	Illiterate	69514	19720	30.38%(29.97-30.79)	77271	18053	19.66%(19.33-20)	126425	44923	34.94%(34.62-35.25)
	Primary		10258	14.71%(14.4-15.02)		8588	11.57%(11.28-11.86)		18695	14.37%(14.14-14.61)
	Secondary		30144	41.17%(40.74-41.6)		38395	51.09%(50.64-51.54)		48782	38.19%(37.87-38.51)
	Higher		9392	13.74%(13.43-14.05)		12235	17.68%(17.32-18.04)		14025	12.5%(12.26-12.73)
Family size	<=4	69514	22344	30.61%(30.21-31.02)	77271	42506	56.42%(55.98-56.87)	126425	39756	30.01%(29.71-30.32)
	5-6		26517	38.07%(37.65-38.5)		24045	30.68%(30.27-31.09)		47295	37.2%(36.88-37.53)
	>6		20653	31.31%(30.9-31.73)		10720	12.9%(12.61-13.18)		39374	32.78%(32.47-33.1)
Wealth Index	low (poorest)	69514	5090	7.22%(7-7.43)	77271	3734	3.95%(3.79-4.11)	126425	33847	23.89%(23.62-24.16)
	Middle (poorer)		9603	13.97%(13.66-14.27)		12872	14.26%(13.98-14.54)		30859	23.21%(22.94-23.48)
	High (middle, richer, richest)		54821	78.82%(78.46-79.17)		60665	81.79%(81.47-82.11)		61719	52.91%(52.58-53.24)
Husband's Education	literate	20016	17785	89.5%(89.01-90)	21344	18484	87.15%(86.52-87.77)	35304	28766	81.74%(81.23-82.25)
Migration of husband	Non-Migrant	69514	64217	92.48%(92.25-92.71)	77271	71845	92.99%(92.77-93.21)	126425	113650	89.21%(89-89.42)
	Migrant		5297	7.52%(7.29-7.75)		5426	7.01%(6.79-7.23)		12775	10.79%(10.58-11)
Total No of living children	0	69514	6367	9.4%(9.14-9.66)	77271	7374	9.55%(9.29-9.82)	126425	12190	9.68%(9.48-9.87)
	1		13188	18.67%(18.33-19.01)		14656	19.71%(19.34-20.08)		20582	16.33%(16.08-16.58)
	2		26948	37.89%(37.46-38.31)		37338	49.51%(49.06-49.96)		39014	30.27%(29.96-30.58)
	3 or more		23011	34.05%(33.63-34.47)		17903	21.23%(20.88-21.58)		54639	43.72%(43.39-44.05)
Birth Order	0	69514	6117	9.05%(8.79-9.31)	77271	7082	9.19%(8.93-9.45)	126425	11397	9.07%(8.88-9.26)
	1		12464	17.67%(17.33-18)		13520	18.26%(17.91-18.62)		19112	15.2%(14.95-15.44)
	2		25445	35.76%(35.34-36.19)		35933	47.82%(47.37-48.27)		36365	28.24%(27.94-28.54)
	>2		25488	37.52%(37.09-37.95)		20736	24.72%(24.35-25.1)		59551	47.5%(47.16-47.83)
Birth Order(Snigdha ma'am)	0	58677	6117	10.8%(10.5-11.1)	71534	7082	9.83%(9.55-10.1)	94960	11397	12.18%(11.93-12.44)
	1		12464	21.08%(20.69-21.47)		13520	19.53%(19.15-19.91)		19112	20.41%(20.1-20.72)
	2		25445	42.67%(42.19-43.14)		35933	51.13%(50.67-51.6)		36365	37.93%(37.56-38.31)
	>2		14651	25.46%(25.04-25.88)		14999	19.51%(19.16-19.87)		28086	29.47%(29.12-29.83)
Combination of child	No daughter and 1 or more sons	63147	18672	29.22%(28.8-29.64)	69897	20032	29.11%(28.68-29.54)	114235	28838	24.86%(24.55-25.16)
	No son and 1 or more daughters		8744	13.86%(13.54-14.19)		15340	22.62%(22.22-23.02)		16692	14.82%(14.56-15.07)
	1 or more sons and daughters		35731	56.92%(56.46-57.38)		34525	48.27%(47.8-48.75)		68705	60.33%(59.98-60.67)
Any child loss	no	69514	62827	90.41%(90.15-90.67)	77271	71309	92.84%(92.62-93.06)	126425	108347	85.52%(85.28-85.75)
	yes		6687	9.59%(9.33-9.85)		5962	7.16%(6.94-7.38)		18078	14.48%(14.25-14.72)
Year of marriage	before 2000	69514	22335	32.16%(31.75-32.57)	77271	29079	36.87%(36.43-37.3)	126425	43241	34.07%(33.75-34.38)
	2001 - 2010		22398	31.7%(31.29-32.11)		24900	32.89%(32.47-33.32)		38800	30.6%(30.29-30.91)
	2011 onwards		24781	36.14%(35.72-36.57)		23292	30.24%(29.82-30.65)		44384	35.33%(35.01-35.65)

Annexure 2

Respondent's Characteristics	Categories	Zone 4			Zone 5			Zone 6		
		N	n	%(LCL-UCL)	N	n	%(LCL-UCL)	N	n	%(LCL-UCL)
Religion	Hindu		73345	80.71%(80.35-81.07)		43306	83.22%(82.71-83.74)		28092	56.22%(55.67-56.76)
	Muslim	87731	10767	17.25%(16.9-17.61)	50795	5002	11.13%(10.7-11.56)	70596	9591	28.3%(27.76-28.84)
	Others		3619	2.04%(1.95-2.13)		2487	5.64%(5.32-5.97)		32913	15.48%(15.2-15.76)
Caste	General		13904	22.36%(21.97-22.75)		11982	32.55%(31.88-33.22)		6033	17.71%(17.19-18.22)
	SC	83638	19978	27.04%(26.64-27.43)	48181	7036	15.7%(15.21-16.2)	60093	6272	17.58%(17.06-18.09)
	ST		13384	10.36%(10.14-10.57)		9214	14.14%(13.73-14.55)		37515	33.25%(32.72-33.78)
	Others		36372	40.24%(39.83-40.66)		19949	37.62%(36.99-38.24)		10273	31.47%(30.87-32.07)
Residence	urban	87731	14129	22.05%(21.65-22.44)	50795	15997	44.21%(43.54-44.88)	70596	12296	17.97%(17.53-18.42)
	rural		73602	77.95%(77.56-78.35)		34798	55.79%(55.12-56.46)		58300	82.03%(81.58-82.47)
education	literate	87731	48400	58.64%(58.23-59.05)	50795	36549	75.97%(75.47-76.48)	70596	51732	73.44%(72.95-73.93)
education	Illiterate		32326	32.94%(32.55-33.32)		10696	17.39%(16.95-17.83)		13883	19.27%(18.83-19.7)
	Primary	87731	12740	15.65%(15.33-15.96)	50795	6973	12.51%(12.12-12.9)	70596	12085	16.62%(16.21-17.03)
	Secondary		36730	43.87%(43.45-44.3)		27452	55.17%(54.52-55.82)		39760	57.36%(56.81-57.9)
	Higher		5935	7.54%(7.31-7.78)		5674	14.93%(14.36-15.5)		4868	6.75%(6.47-7.03)
Family size	<=4		35519	42.53%(42.1-42.95)		19301	40.23%(39.58-40.89)		36050	49.27%(48.72-49.82)
	5-6	87731	31045	34.47%(34.07-34.86)	50795	18704	35.84%(35.23-36.45)	70596	23925	34.55%(34.02-35.07)
	>6		21167	23.01%(22.66-23.35)		12790	23.93%(23.4-24.46)		10621	16.18%(15.77-16.6)
Wealth Index	low (poorest)		35836	37.19%(36.79-37.59)		5806	8.32%(8.05-8.59)		21327	33.33%(32.81-33.85)
	Middle (poorer)	87731	23066	26.43%(26.06-26.8)	50795	9543	15.3%(14.9-15.7)	70596	22946	32.6%(32.09-33.12)
	High (middle, richer, richest)		28829	36.38%(35.96-36.8)		35446	76.38%(75.91-76.86)		26323	34.07%(33.54-34.59)
Husband's Education	literate	24795	19643	78.23%(77.48-78.99)	14443	12674	89.93%(89.27-90.58)	20095	17099	82.9%(82.1-83.7)
Migration of husband	Non-Migrant	87731	73123	84.2%(83.91-84.48)	50795	49352	97.32%(97.11-97.52)	70596	67707	96.18%(95.96-96.39)
	Migrant		14608	15.8%(15.52-16.09)		1443	2.68%(2.48-2.89)		2889	3.82%(3.61-4.04)
Total No of living children	0		8545	9.77%(9.52-10.02)		5063	9.84%(9.45-10.24)		6294	9.8%(9.46-10.13)
	1	87731	17654	22.46%(22.09-22.83)	50795	9789	20.42%(19.86-20.97)	70596	17026	27.3%(26.81-27.8)
	2		26722	31.58%(31.18-31.98)		20568	41.84%(41.2-42.49)		21783	32.66%(32.14-33.18)
	3 or more		34810	36.19%(35.8-36.59)		15375	27.9%(27.34-28.46)		25493	30.24%(29.74-30.75)
Birth Order	0		8038	9.3%(9.05-9.54)		4881	9.48%(9.1-9.87)		6053	9.38%(9.05-9.71)
	1	87731	16526	21.17%(20.8-21.53)	50795	9269	19.58%(19.03-20.12)	70596	16378	26.07%(25.58-26.56)
	2		25071	29.88%(29.49-30.28)		19666	40.19%(39.55-40.83)		21235	31.9%(31.38-32.41)
	>2		38096	39.65%(39.25-40.06)		16979	30.75%(30.18-31.33)		26930	32.65%(32.14-33.16)
Birth Order(Snigdha ma'am)	0		8038	11.76%(11.45-12.07)		4881	10.72%(10.29-11.16)		6053	11.09%(10.7-11.47)
	1	67189	16526	26.78%(26.34-27.22)	44144	9269	22.14%(21.53-22.75)	57016	16378	30.81%(30.26-31.37)
	2		25071	37.81%(37.33-38.28)		19666	45.45%(44.75-46.15)		21235	37.7%(37.11-38.28)
	>2		17554	23.65%(23.26-24.05)		10328	21.69%(21.14-22.24)		13350	20.4%(19.92-20.88)
Combination of child	No daughter and 1 or more sons		20867	27.74%(27.34-28.15)		13705	30.57%(29.94-31.21)		16942	29.13%(28.6-29.66)
	No son and 1 or more daughters	79186	13929	18.84%(18.48-19.2)	45732	7535	17.13%(16.59-17.67)	64302	13026	22.38%(21.9-22.87)
	1 or more sons and daughters		44390	53.41%(52.97-53.86)		24492	52.3%(51.61-52.98)		34334	48.49%(47.91-49.07)
Any child loss	no	87731	75606	87.48%(87.21-87.74)	50795	46724	92.79%(92.48-93.09)	70596	65367	91.98%(91.67-92.28)
	yes		12125	12.52%(12.26-12.79)		4071	7.21%(6.91-7.52)		5229	8.02%(7.72-8.33)
Year of marriage	before 2000		29598	34.8%(34.4-35.21)		18378	35.31%(34.7-35.92)		20850	29.37%(28.86-29.88)
	2001 - 2010	87731	28105	31.75%(31.36-32.14)	50795	16846	33.74%(33.12-34.36)	70596	24797	35.2%(34.67-35.72)
	2011 onwards		30028	33.45%(33.05-33.85)		15571	30.95%(30.33-31.57)		24949	35.43%(34.9-35.96)

Annexure 3

Exposure and confounder variables	Category	Zone 1 (aOR, LCL UCL)	Zone 2 (aOR, LCL UCL)	Zone 3 (aOR, LCL UCL)	Zone 4 (aOR, LCL UCL)	Zone 5 (aOR, LCL UCL)	Zone 6 (aOR, LCL UCL)
Religion (ref:hindu)	Muslims	0.59(0.59-0.59), p-value <.0001	0.87(0.87-0.87) P-VALUE <.0001	0.69(0.69-0.69) P-VALUE <.0001	0.66(0.66-0.66) P-VALUE <.0001	0.68(0.68-0.68) P-VALUE <.0001	0.82(0.82-0.82) P-VALUE <.0001
	Others	0.73(0.73-0.73) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	1.05(1.05-1.05) P-VALUE <.0001	0.91(0.91-0.92) P-VALUE <.0001	1.1(1.1-1.1) P-VALUE <.0001	0.52(0.52-0.52) P-VALUE <.0001
caste (ref:general)	SC	0.73(0.73-0.73) P-VALUE <.0001	0.9(0.9-0.9) P-VALUE <.0001	0.84(0.84-0.84) P-VALUE <.0001	0.89(0.89-0.89) P-VALUE <.0001	0.88(0.88-0.88) P-VALUE <.0001	0.95(0.95-0.95) P-VALUE <.0001
	ST	0.81(0.81-0.81) P-VALUE <.0001	0.76(0.76-0.76) P-VALUE <.0001	0.64(0.64-0.64) P-VALUE <.0001	0.75(0.75-0.75) P-VALUE <.0001	1.03(1.03-1.03) P-VALUE <.0001	0.85(0.84-0.85) P-VALUE <.0001
	OBC	0.85(0.85-0.85) P-VALUE <.0001	1.03(1.03-1.03) P-VALUE <.0001	0.88(0.88-0.88) P-VALUE <.0001	0.72(0.72-0.72) P-VALUE <.0001	1.03(1.03-1.03) P-VALUE <.0001	0.91(0.91-0.91) P-VALUE <.0001
Residence (ref : rural)	urban	1.19(1.19-1.19) P-VALUE <.0001	1.17(1.17-1.17) P-VALUE <.0001	1.13(1.13-1.13) P-VALUE <.0001	1.29(1.29-1.29) P-VALUE <.0001	1.24(1.24-1.24) P-VALUE <.0001	1.06(1.06-1.06) P-VALUE <.0001
Wealth Index (ref : low)	Middle	1.02(1.02-1.02) P-VALUE <.0001	1.29(1.29-1.29) P-VALUE <.0001	1.15(1.15-1.15) P-VALUE <.0001	1.42(1.42-1.42) P-VALUE <.0001	1.12(1.12-1.12) P-VALUE <.0001	1.23(1.23-1.23) P-VALUE <.0001
	High	1.14(1.14-1.14) P-VALUE <.0001	1.63(1.63-1.63) P-VALUE <.0001	1.43(1.43-1.43) P-VALUE <.0001	1.81(1.81-1.81) P-VALUE <.0001	1.43(1.43-1.43) P-VALUE <.0001	1.19(1.19-1.19) P-VALUE <.0001
Husband's Education (ref: illiterate)	Literate	1.03(1.03-1.03) P-VALUE <.0001	1.07(1.07-1.07) P-VALUE <.0001	1(1-1) P-VALUE <.0001	1.12(1.12-1.12) P-VALUE <.0001	1.34(1.34-1.34) P-VALUE <.0001	0.86(0.86-0.86) P-VALUE <.0001
Migration of husband (ref :Migrant)	Non-Migrant	1.49(1.49-1.49) P-VALUE <.0001	1.55(1.55-1.55) P-VALUE <.0001	1.28(1.28-1.28) P-VALUE <.0001	1.68(1.68-1.68) P-VALUE <.0001	1.7(1.7-1.7) P-VALUE <.0001	1.38(1.38-1.38) P-VALUE <.0001
Knowledge of any modern spacing	yes	6.16(6.16-6.17) P-VALUE <.0001	1.7(1.7-1.7) P-VALUE <.0001	4.68(4.68-4.68) P-VALUE <.0001	10.29(10.28-10.29) P-VALUE <.0001	4.42(4.42-4.42) P-VALUE <.0001	16.99(16.98-17) P-VALUE <.0001

method (ref : no)							
Heard about family planning from media sources (ref: no)	yes	1.42(1.42-1.42) P-VALUE <.0001	1.24(1.24-1.24) P-VALUE <.0001	1.24(1.24-1.24) P-VALUE <.0001	1.51(1.51-1.51) P-VALUE <.0001	1.6(1.6-1.6) P-VALUE <.0001	1.28(1.27-1.28) P-VALUE <.0001
ever told about FP by FLW (ref:no)	yes	1.97(1.97-1.97) P-VALUE <.0001	2.96(2.96-2.96) P-VALUE <.0001	1.99(1.99-1.99) P-VALUE <.0001	2.46(2.46-2.46) P-VALUE <.0001	2.55(2.55-2.55) P-VALUE <.0001	2.55(2.55-2.55) P-VALUE <.0001

#### Annexure 4

Exposure and confounder variables	Category	Zone 1 (aOR, LCL UCL)	Zone 2 (aOR, LCL UCL)	Zone 3 (aOR, LCL UCL)	Zone 4 (aOR, LCL UCL)	Zone 5 (aOR, LCL UCL)	Zone 6 (aOR, LCL UCL)
Religion (ref:hindu)	Muslims	0.57(0.57-0.57) P-VALUE <.0001	0.73(0.73-0.73) P-VALUE <.0001	0.62(0.62-0.62) P-VALUE <.0001	0.68(0.68-0.68) P-VALUE <.0001	0.67(0.67-0.67) P-VALUE <.0001	0.79(0.79-0.79) P-VALUE <.0001
	Others	0.78(0.78-0.78) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	1.19(1.19-1.19) P-VALUE <.0001	0.93(0.93-0.93) P-VALUE <.0001	1.13(1.13-1.13) P-VALUE <.0001	0.54(0.54-0.54) P-VALUE <.0001
caste (ref:general)	SC	0.77(0.77-0.77) P-VALUE <.0001	0.9(0.9-0.9) P-VALUE <.0001	0.86(0.86-0.86) P-VALUE <.0001	0.92(0.92-0.93) P-VALUE <.0001	0.82(0.82-0.82) P-VALUE <.0001	0.93(0.93-0.93) P-VALUE <.0001
	ST	0.74(0.74-0.74) P-VALUE <.0001	0.72(0.72-0.72) P-VALUE <.0001	1(1-1) P-VALUE <.0001	0.79(0.79-0.79) P-VALUE <.0001	0.96(0.96-0.96) P-VALUE <.0001	0.9(0.9-0.9) P-VALUE <.0001
	OBC	0.83(0.83-0.83) P-VALUE <.0001	1(1-1) P-VALUE <.0001	0.94(0.94-0.94) P-VALUE <.0001	0.74(0.74-0.74) P-VALUE <.0001	0.94(0.94-0.94) P-VALUE <.0001	0.96(0.96-0.96) P-VALUE <.0001
Residence (ref : rural)	urban	1.13(1.13-1.13) P-VALUE <.0001	1.06(1.06-1.06) P-VALUE <.0001	1.24(1.24-1.24) P-VALUE <.0001	1.26(1.26-1.26) P-VALUE <.0001	1.13(1.13-1.13) P-VALUE <.0001	1.03(1.03-1.03) P-VALUE <.0001
Wealth Index (ref : low)	Middle	1.1(1.1-1.1) P-VALUE <.0001	1.26(1.26-1.26) P-VALUE <.0001	1.14(1.14-1.14) P-VALUE <.0001	1.32(1.32-1.32) P-VALUE <.0001	1.17(1.17-1.17) P-VALUE <.0001	1.13(1.13-1.13) P-VALUE <.0001

	<b>High</b>	1.2(1.2-1.2) P-VALUE <.0001	1.46(1.46-1.46) P-VALUE <.0001	1.45(1.45-1.45) P-VALUE <.0001	1.56(1.56-1.56) P-VALUE <.0001	1.33(1.33-1.33) P-VALUE <.0001	1.04(1.04-1.04) P-VALUE <.0001
<b>Husband's Education (ref: illiterate)</b>	<b>Literate</b>	1.1(1.1-1.1) P-VALUE <.0001	0.95(0.95-0.95) P-VALUE <.0001	1.03(1.03-1.03) P-VALUE <.0001	1.07(1.07-1.07) P-VALUE <.0001	1.26(1.26-1.26) P-VALUE <.0001	0.83(0.83-0.83) P-VALUE <.0001
<b>Migration of husband (ref: Migrant)</b>	<b>Non-Migrant</b>	2.42(2.42-2.42) P-VALUE <.0001	2.05(2.05-2.05) P-VALUE <.0001	2.49(2.49-2.49) P-VALUE <.0001	2.74(2.74-2.74) P-VALUE <.0001	2.58(2.58-2.58) P-VALUE <.0001	2.98(2.98-2.98) P-VALUE <.0001
<b>Knowledge of any modern spacing method (ref: no)</b>	<b>yes</b>	3.53(3.52-3.53) P-VALUE <.0001	1.29(1.29-1.29) P-VALUE <.0001	2.31(2.31-2.31) P-VALUE <.0001	5.5(5.5-5.5) P-VALUE <.0001	2.94(2.93-2.94) P-VALUE <.0001	9.76(9.76-9.77) P-VALUE <.0001
<b>Heard about family planning from media sources (ref: no)</b>	<b>yes</b>	1.22(1.22-1.22) P-VALUE <.0001	1.07(1.07-1.07) P-VALUE <.0001	1.16(1.16-1.16) P-VALUE <.0001	1.38(1.38-1.38) P-VALUE <.0001	1.42(1.42-1.42) P-VALUE <.0001	1.23(1.23-1.23) P-VALUE <.0001
<b>ever told about FP by FLW (ref: no)</b>	<b>yes</b>	1.78(1.78-1.78) P-VALUE <.0001	1.3(1.3-1.3) P-VALUE <.0001	1.52(1.52-1.52) P-VALUE <.0001	1.06(1.06-1.06) P-VALUE <.0001	1.31(1.31-1.31) P-VALUE <.0001	2.68(2.68-2.69) P-VALUE <.0001

#### Annexure 5

<b>Exposure and confounder variables</b>	<b>Category</b>	<b>Zone 1 (aOR, LCL, UCL)</b>	<b>Zone 2 (aOR, LCL, UCL)</b>	<b>Zone 3 (aOR, LCL, UCL)</b>	<b>Zone 4 (aOR, LCL, UCL)</b>	<b>Zone 5 (aOR, LCL, UCL)</b>	<b>Zone 6 (aOR, LCL, UCL)</b>
<b>Religion (ref:hindu)</b>	<b>Muslims</b>	1.48(1.48-1.48) P-VALUE <.0001	2.67(2.67-2.67) P-VALUE <.0001	1.59(1.59-1.59) P-VALUE <.0001	1.08(1.08-1.08) P-VALUE <.0001	1.01(1.01-1.01) P-VALUE <.0001	0.41(0.41-0.41) P-VALUE <.0001
	<b>Others</b>	1.29(1.29-1.29) P-VALUE <.0001	1.37(1.37-1.37) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	1.19(1.19-1.19) P-VALUE <.0001	0.49(0.49-0.49) P-VALUE <.0001	0.68(0.68-0.68) P-VALUE <.0001
<b>caste (ref:general)</b>	<b>SC</b>	0.91(0.91-0.91) P-VALUE <.0001	1.01(1.01-1.01) P-VALUE <.0001	0.98(0.98-0.98) P-VALUE <.0001	0.83(0.83-0.83) P-VALUE <.0001	0.93(0.93-0.94) P-VALUE <.0001	0.59(0.59-0.59) P-VALUE <.0001

	<b>ST</b>	0.85(0.85-0.85) P-VALUE <.0001	0.75(0.75-0.75) P-VALUE <.0001	0.4(0.39-0.4) P-VALUE <.0001	1.26(1.26-1.26) P-VALUE <.0001	1.09(1.09-1.09) P-VALUE <.0001	0.7(0.7-0.7) P-VALUE <.0001
	<b>OBC</b>	0.87(0.87-0.87) P-VALUE <.0001	1.18(1.18-1.18) P-VALUE <.0001	0.93(0.93-0.93) P-VALUE <.0001	0.86(0.86-0.86) P-VALUE <.0001	1.16(1.16-1.16) P-VALUE <.0001	0.86(0.86-0.86) P-VALUE <.0001
<b>Residence (ref : rural)</b>	<b>urban</b>	1.27(1.27-1.27) P-VALUE <.0001	1.67(1.67-1.67) P-VALUE <.0001	1.05(1.05-1.05) P-VALUE <.0001	1.22(1.22-1.22) P-VALUE <.0001	1.81(1.81-1.81) P-VALUE <.0001	1.18(1.18-1.18) P-VALUE <.0001
<b>Wealth Index (ref : low)</b>	<b>Middle</b>	0.85(0.85-0.85) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	0.96(0.96-0.96) P-VALUE <.0001	1.1(1.1-1.1) P-VALUE <.0001	0.74(0.74-0.74) P-VALUE <.0001	0.99(0.99-0.99) P-VALUE <.0001
	<b>High</b>	0.84(0.84-0.84) P-VALUE <.0001	1.26(1.26-1.26) P-VALUE <.0001	0.97(0.97-0.97) P-VALUE <.0001	1.38(1.38-1.38) P-VALUE <.0001	1.06(1.06-1.06) P-VALUE <.0001	0.98(0.98-0.98) P-VALUE <.0001
<b>Husband's Education (ref: illiterate)</b>	<b>Literate</b>	1.06(1.06-1.06) P-VALUE <.0001	1.49(1.49-1.49) P-VALUE <.0001	0.96(0.96-0.96) P-VALUE <.0001	0.88(0.88-0.88) P-VALUE <.0001	1.11(1.11-1.11) P-VALUE <.0001	0.89(0.89-0.89) P-VALUE <.0001
<b>Migration of husband (ref :Migrant)</b>	<b>Non-Migrant</b>	1.61(1.61-1.61) P-VALUE <.0001	1.17(1.17-1.17) P-VALUE <.0001	1.25(1.25-1.25) P-VALUE <.0001	1.97(1.97-1.97) P-VALUE <.0001	0.89(0.89-0.89) P-VALUE <.0001	2.01(2.01-2.01) P-VALUE <.0001
<b>Knowledge of any modern spacing method (ref : no)</b>	<b>yes</b>	2.41(2.41-2.41) P-VALUE <.0001	11.05(11.04-11.06) P-VALUE <.0001	2.4(2.4-2.4) P-VALUE <.0001	3.88(3.88-3.88) P-VALUE <.0001	4.83(4.83-4.83) P-VALUE <.0001	2.01(2.01-2.01) P-VALUE <.0001
<b>Heard about family planning from media sources (ref: no)</b>	<b>yes</b>	0.95(0.95-0.95) P-VALUE <.0001	1.2(1.2-1.2) P-VALUE <.0001	0.84(0.84-0.84) P-VALUE <.0001	1.22(1.22-1.22) P-VALUE <.0001	0.89(0.89-0.89) P-VALUE <.0001	1.02(1.02-1.02) P-VALUE <.0001
<b>ever told about FP by FLW (ref:no)</b>	<b>yes</b>	1.88(1.88-1.88) P-VALUE <.0001	<0.001(<0.001) P-VALUE <.0001	0.43(0.43-0.43) P-VALUE <.0001	0.52(0.52-0.52) P-VALUE <.0001	>999.999(>999.999) P-VALUE 0.0006	<0.001(<0.001) P-VALUE <.0001

Annexure 6

Exposure and confounder variables	Category	Zone 1 (aOR, LCL UCL)	Zone 2 (aOR, LCL UCL)	Zone 3 (aOR, LCL UCL)	Zone 4 (aOR, LCL UCL)	Zone 5 (aOR, LCL UCL)	Zone 6 (aOR, LCL UCL)
Religion (ref:hindu)	Muslims	1.32(1.32-1.32) P-VALUE <.0001	1.01(1.01-1.01) P-VALUE <.0001	1.44(1.44-1.44) P-VALUE <.0001	1.91(1.91-1.91) P-VALUE <.0001	1.28(1.28-1.28) P-VALUE <.0001	1.96(1.96-1.96) P-VALUE <.0001
	Others	1.13(1.13-1.13) P-VALUE <.0001	0.82(0.82-0.82) P-VALUE <.0001	1.1(1.1-1.1) P-VALUE <.0001	1.05(1.05-1.05) P-VALUE <.0001	1.12(1.12-1.12) P-VALUE <.0001	0.63(0.63-0.63) P-VALUE <.0001
caste (ref:generally)	SC	0.75(0.75-0.75) P-VALUE <.0001	1.22(1.22-1.22) P-VALUE <.0001	0.96(0.96-0.96) P-VALUE <.0001	0.97(0.97-0.97) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	1.37(1.37-1.37) P-VALUE <.0001
	ST	0.72(0.72-0.72) P-VALUE <.0001	1.58(1.58-1.58) P-VALUE <.0001	0.54(0.54-0.54) P-VALUE <.0001	1.09(1.09-1.09) P-VALUE <.0001	0.77(0.77-0.77) P-VALUE <.0001	1.18(1.18-1.18) P-VALUE <.0001
	OBC	0.75(0.75-0.75) P-VALUE <.0001	1.39(1.39-1.39) P-VALUE <.0001	0.88(0.88-0.88) P-VALUE <.0001	0.64(0.64-0.64) P-VALUE <.0001	1.08(1.08-1.08) P-VALUE <.0001	0.9(0.9-0.9) P-VALUE <.0001
Residence (ref : rural)	urban	1.47(1.47-1.47) P-VALUE <.0001	1.38(1.38-1.38) P-VALUE <.0001	1.33(1.33-1.33) P-VALUE <.0001	1.27(1.27-1.27) P-VALUE <.0001	1.6(1.6-1.6) P-VALUE <.0001	0.89(0.89-0.89) P-VALUE <.0001
Wealth Index (ref : low)	Middle	1.04(1.04-1.04) P-VALUE <.0001	0.84(0.84-0.84) P-VALUE <.0001	1.12(1.12-1.12) P-VALUE <.0001	1.11(1.11-1.11) P-VALUE <.0001	1.04(1.04-1.05) P-VALUE <.0001	1.06(1.06-1.06) P-VALUE <.0001
	High	1.32(1.31-1.32) P-VALUE <.0001	1.09(1.09-1.09) P-VALUE <.0001	1.43(1.43-1.43) P-VALUE <.0001	1.25(1.25-1.25) P-VALUE <.0001	1.86(1.86-1.86) P-VALUE <.0001	0.96(0.96-0.96) P-VALUE <.0001
Husband's Education (ref: illiterate)	Literate	1(1-1) P-VALUE <.0001	1.27(1.27-1.27) P-VALUE <.0001	0.97(0.97-0.97) P-VALUE <.0001	1.13(1.13-1.13) P-VALUE <.0001	1.37(1.37-1.37) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001
Migration of husband (ref :Migrant)	Non-Migrant	1.75(1.75-1.75) P-VALUE <.0001	0.94(0.94-0.94) P-VALUE <.0001	1.61(1.61-1.61) P-VALUE <.0001	2.04(2.04-2.04) P-VALUE <.0001	1.76(1.76-1.76) P-VALUE <.0001	2.39(2.39-2.39) P-VALUE <.0001
Heard about family planning from media	yes	1.46(1.46-1.46) P-VALUE <.0001	1.82(1.82-1.82) P-VALUE <.0001	1.47(1.47-1.47) P-VALUE <.0001	1.5(1.5-1.5) P-VALUE <.0001	1.48(1.48-1.48) P-VALUE <.0001	1.2(1.2-1.2) P-VALUE <.0001

sources (ref: no)							
ever told about FP by FLW (ref:no)	yes	4.211(4.202-4.22) P-VALUE <.0001	3.989(3.984-3.995) P-VALUE <.0001	4.164(4.159-4.168) P-VALUE <.0001	3.192(3.188-3.195) P-VALUE <.0001	3.899(3.893-3.906) P-VALUE <.0001	3.034(3.022-3.046) P-VALUE <.0001

### Annexure 7

Exposure and confounder variables	Category	Zone 1 (aOR, LCL UCL)	Zone 2 (aOR, LCL UCL)	Zone 3 (aOR, LCL UCL)	Zone 4 (aOR, LCL UCL)	Zone 5 (aOR, LCL UCL)	Zone 6 (aOR, LCL UCL)
Religion (ref:hindu)	Muslims	0.36(0.36-0.36) P-VALUE <.0001	0.65(0.65-0.65) P-VALUE <.0001	0.17(0.17-0.17) P-VALUE <.0001	0.34(0.34-0.34) P-VALUE <.0001	0.58(0.58-0.58) P-VALUE <.0001	0.25(0.25-0.25) P-VALUE <.0001
	Others	0.6(0.6-0.6) P-VALUE <.0001	0.94(0.94-0.94) P-VALUE <.0001	1.19(1.19-1.19) P-VALUE <.0001	0.74(0.74-0.74) P-VALUE <.0001	1.14(1.14-1.14) P-VALUE <.0001	0.93(0.93-0.93) P-VALUE <.0001
caste (ref:general)	SC	1.06(1.06-1.06) P-VALUE <.0001	0.87(0.87-0.87) P-VALUE <.0001	0.9(0.9-0.9) P-VALUE <.0001	1.09(1.09-1.09) P-VALUE <.0001	0.88(0.88-0.88) P-VALUE <.0001	0.94(0.94-0.94) P-VALUE <.0001
	ST	1.07(1.07-1.07) P-VALUE <.0001	0.65(0.65-0.65) P-VALUE <.0001	2.05(2.05-2.05) P-VALUE <.0001	0.67(0.67-0.67) P-VALUE <.0001	1.01(1.01-1.01) P-VALUE <.0001	0.98(0.98-0.98) P-VALUE <.0001
	OBC	1.18(1.18-1.18) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	1.12(1.12-1.12) P-VALUE <.0001	1.1(1.1-1.1) P-VALUE <.0001	0.87(0.87-0.87) P-VALUE <.0001	1.43(1.43-1.43) P-VALUE <.0001
Residence (ref : rural)	urban	0.7(0.7-0.7) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	0.76(0.76-0.76) P-VALUE <.0001	1.1(1.1-1.1) P-VALUE <.0001
Wealth Index (ref : low)	Middle	1.16(1.16-1.16) P-VALUE <.0001	1.32(1.32-1.32) P-VALUE <.0001	1.12(1.12-1.12) P-VALUE <.0001	1.21(1.21-1.21) P-VALUE <.0001	1.25(1.25-1.25) P-VALUE <.0001	1.2(1.2-1.2) P-VALUE <.0001
	High	1.09(1.09-1.09) P-VALUE <.0001	1.4(1.4-1.4) P-VALUE <.0001	1.18(1.18-1.18) P-VALUE <.0001	1.16(1.16-1.16) P-VALUE <.0001	1.04(1.04-1.04) P-VALUE <.0001	1.22(1.22-1.22) P-VALUE <.0001

<b>Husband's Education (ref: illiterate)</b>	<b>Literate</b>	1.06(1.06-1.06) P-VALUE <.0001	0.89(0.89-0.89) P-VALUE <.0001	1.09(1.09-1.09) P-VALUE <.0001	1.07(1.07-1.07) P-VALUE <.0001	1.05(1.05-1.05) P-VALUE <.0001	0.95(0.95-0.95) P-VALUE <.0001
<b>Migration of husband (ref :Migrant)</b>	<b>Non-Migrant</b>	1.43(1.43-1.43) P-VALUE <.0001	2.01(2.01-2.01) P-VALUE <.0001	2.08(2.08-2.08) P-VALUE <.0001	1.56(1.56-1.56) P-VALUE <.0001	2.21(2.21-2.21) P-VALUE <.0001	1.43(1.43-1.43) P-VALUE <.0001
<b>Knowledge of any modern spacing method (ref : no)</b>	<b>yes</b>	1.33(1.33-1.33) P-VALUE <.0001	0.99(0.99-0.99) P-VALUE <.0001	0.86(0.86-0.86) P-VALUE <.0001	2.27(2.27-2.27) P-VALUE <.0001	1.6(1.59-1.6) P-VALUE <.0001	4.16(4.15-4.16) P-VALUE <.0001
<b>Heard about family planning from media sources (ref: no)</b>	<b>yes</b>	0.94(0.94-0.94) P-VALUE <.0001	0.93(0.93-0.93) P-VALUE <.0001	0.97(0.97-0.97) P-VALUE <.0001	0.97(0.97-0.97) P-VALUE <.0001	1.17(1.17-1.17) P-VALUE <.0001	1.1(1.1-1.1) P-VALUE <.0001
<b>ever told about FP by FLW (ref:no)</b>	<b>yes</b>	1.353(1.352-1.355) P-VALUE <.0001	1.226(1.226-1.227) P-VALUE <.0001	1.26(1.259-1.261) P-VALUE <.0001	0.877(0.877-0.878) P-VALUE <.0001	1.102(1.101-1.102) P-VALUE <.0001	4.781(4.772-4.791) P-VALUE <.0001

Annexure 8

<b>Exposure and confounder variables</b>	<b>Category</b>	<b>Zone 1 (aOR, LCL UCL)</b>	<b>Zone 2 (aOR, LCL UCL)</b>	<b>Zone 3 (aOR, LCL UCL)</b>	<b>Zone 4 (aOR, LCL UCL)</b>	<b>Zone 5 (aOR, LCL UCL)</b>	<b>Zone 6 (aOR, LCL UCL)</b>
<b>Religion (ref:hindu)</b>	<b>Muslims</b>	0.64(0.64-0.64) P-VALUE <.0001	0.71(0.71-0.71) P-VALUE <.0001	0.97(0.97-0.97) P-VALUE <.0001	0.87(0.87-0.87) P-VALUE <.0001	0.71(0.71-0.71) P-VALUE <.0001	1.32(1.32-1.32) P-VALUE <.0001
	<b>Others</b>	0.37(0.37-0.37) P-VALUE <.0001	0.66(0.66-0.66) P-VALUE <.0001	0.82(0.82-0.82) P-VALUE <.0001	1.32(1.32-1.32) P-VALUE <.0001	1.19(1.19-1.19) P-VALUE <.0001	0.72(0.72-0.72) P-VALUE <.0001
<b>caste (ref:general)</b>	<b>SC</b>	1.2(1.2-1.2) P-VALUE <.0001	1.91(1.91-1.91) P-VALUE <.0001	1.24(1.24-1.24) P-VALUE <.0001	1.35(1.35-1.35) P-VALUE <.0001	0.99(0.99-0.99) P-VALUE <.0001	1.21(1.21-1.21) P-VALUE <.0001
	<b>ST</b>	1.41(1.41-1.41) P-VALUE <.0001	1.5(1.5-1.5) P-VALUE <.0001	1.4(1.4-1.4) P-VALUE <.0001	1.16(1.16-1.16) P-VALUE <.0001	1.27(1.27-1.27) P-VALUE <.0001	1.37(1.37-1.37) P-VALUE <.0001
	<b>OBC</b>	1.39(1.39-1.39) P-VALUE <.0001	1.69(1.69-1.69) P-VALUE <.0001	1.2(1.2-1.2) P-VALUE <.0001	1.5(1.5-1.5) P-VALUE <.0001	0.93(0.93-0.93) P-VALUE <.0001	1.48(1.48-1.48) P-VALUE <.0001

		VALUE <.0001	VALUE <.0001			VALUE <.0001	VALUE <.0001
<b>Residence (ref : rural)</b>	<b>urban</b>	0.86(0.86-0.86) P-VALUE <.0001	1.21(1.21-1.21) P-VALUE <.0001	0.81(0.81-0.81) P-VALUE <.0001	0.95(0.95-0.95) P-VALUE <.0001	1.08(1.08-1.08) P-VALUE <.0001	0.95(0.95-0.95) P-VALUE <.0001
<b>Wealth Index (ref : low)</b>	<b>Middle</b>	0.82(0.82-0.82) P-VALUE <.0001	1.17(1.17-1.17) P-VALUE <.0001	0.96(0.96-0.96) P-VALUE <.0001	0.92(0.92-0.92) P-VALUE <.0001	0.96(0.96-0.96) P-VALUE <.0001	0.87(0.87-0.87) P-VALUE <.0001
	<b>High</b>	0.6(0.6-0.6) P-VALUE <.0001	1.32(1.32-1.32) P-VALUE <.0001	0.85(0.85-0.85) P-VALUE <.0001	0.81(0.81-0.81) P-VALUE <.0001	1.02(1.02-1.02) P-VALUE <.0001	0.73(0.73-0.73) P-VALUE <.0001
<b>Husband's Education (ref: illiterate)</b>	<b>Literate</b>	1.12(1.12-1.12) P-VALUE <.0001	1.1(1.1-1.1) P-VALUE <.0001	0.94(0.94-0.94) P-VALUE <.0001	1.13(1.13-1.13) P-VALUE <.0001	1.36(1.36-1.36) P-VALUE <.0001	0.85(0.85-0.85) P-VALUE <.0001
<b>Migration of husband (ref :Migrant)</b>	<b>Non-Migrant</b>	0.68(0.68-0.68) P-VALUE <.0001	0.76(0.76-0.76) P-VALUE <.0001	0.57(0.57-0.57) P-VALUE <.0001	0.49(0.49-0.49) P-VALUE <.0001	0.71(0.71-0.71) P-VALUE <.0001	0.52(0.52-0.52) P-VALUE <.0001
<b>Knowledge of any modern spacing method (ref : no)</b>	<b>yes</b>	3.19(3.19-3.19) P-VALUE <.0001	2.95(2.95-2.95) P-VALUE <.0001	2.81(2.81-2.81) P-VALUE <.0001	3.25(3.25-3.25) P-VALUE <.0001	3.04(3.04-3.04) P-VALUE <.0001	4.89(4.89-4.9) P-VALUE <.0001
<b>Heard about family planning from media sources (ref: no)</b>	<b>yes</b>	1.69(1.69-1.69) P-VALUE <.0001	1.26(1.26-1.26) P-VALUE <.0001	1.3(1.3-1.3) P-VALUE <.0001	1.13(1.13-1.13) P-VALUE <.0001	1.77(1.77-1.77) P-VALUE <.0001	1.33(1.33-1.33) P-VALUE <.0001
<b>ever told about FP by FLW (ref:no)</b>	<b>yes</b>	1.67(1.67-1.67) P-VALUE <.0001	1.96(1.96-1.96) P-VALUE <.0001	1.73(1.73-1.73) P-VALUE <.0001	1.72(1.72-1.72) P-VALUE <.0001	2.27(2.27-2.27) P-VALUE <.0001	2.04(2.04-2.04) P-VALUE <.0001

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## Saurabh K D

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